AIDS 1988: AAAS Symposia Papers
Edited by Ruth Kulstad
Foreword by C. Everett Koop

This volume contains many of the ground-breaking papers on AIDS presented at the 1988 AAAS Annual Meeting.

The wide variety of the papers presented here reflects the current thinking about AIDS research today—that control over the AIDS epidemic must be achieved through a collaborative, multi-disciplinary effort that includes not only the medical and biological sciences, but the social and behavioral sciences as well.

This fully indexed volume is organized into five major sections: The first explores the epidemiology and natural history of AIDS and the HIV infection both in the United States and internationally. It also looks at the difficulty of predicting the course of the virus—statistical issues; patterns of HIV-1 incubation, infectiousness, and transmission; and approaches to demographic impact modeling.

Section two discusses the social consequences of AIDS as they relate to gender, intravenous drug users, and public policy, and it examines the dilemmas that AIDS presents to the medical community.

The third section focuses on the AIDS prevention strategies currently employed around the world.

Section four considers the economic, political, ethical and legal issues surrounding the epidemic.

The final section presents several recent medical and biological studies on AIDS and HIV.

AIDS 1988 is a timely, authoritative source of information on the growing body of AIDS research being conducted around the world. It is essential for medical, biological, social, and behavioral scientists, and for everyone who is professionally or personally concerned about the AIDS epidemic.

1988; 478 pp.; softcover
index; 12 appendices
#88-19S - $29.95 (members $23.95)
ISBN #0-87168-335-0

AIDS: Papers from Science, 1982-1985
Edited by Ruth Kulstad

This collection includes frequently cited research papers and news reports on AIDS that were published in Science between August 1982 and September 1985.

Many of the papers relate directly to AIDS research, while others touch on relevant aspects of the immune system. The news stories help to explain the ongoing research, while focusing on some of the sociological questions raised by the disease. The book is arranged chronologically, enabling the reader to trace the history of the AIDS epidemic through September 1985—a history that is of great sociological interest.

This fully indexed collection is valuable not only for the experimental data and conclusions, but also as an excellent bibliographic reference of AIDS work in major journals worldwide.

1986; 654 pp.; softcover
detailed indexeses and illustrations
#85-235 - $29.95 (members $23.95)
ISBN #0-87168-281-8

American Association for the Advancement of Science
Assessing Higher Order Thinking in Mathematics
Edited by Gerald Kulm

Teaching higher order thinking is essential in today's world. And what is taught must be tested. Unfortunately, most mathematics tests focus primarily on rote computational skills and memorized facts rather than on higher order thinking. This book addresses such concerns. The authors explore new approaches to mathematics assessment, provide directions for reforming mathematics testing, and give examples of innovative test items. It is especially valuable for teachers, test publishers, researchers, and federal and state educational policy makers.

Topics include: A new world view of assessment in mathematics; power items and the alignment of curriculum and assessment; assessing student growth in mathematical problem-solving; computer-based mathematics assessment; calculators and mathematics assessment; students' theories about mathematics and their mathematical knowledge; assessing schema knowledge for arithmetic story problems; critical evaluation of quantitative arguments; investigation of structured problem-solving items; and new directions for mathematics assessment.

The Liberal Art of Science
Agenda for Action

This report presents the conclusions and recommendations of the AAAS Project on Liberal Education and the Sciences. It discusses the level of scientific understanding necessary for optimal participation in 21st century life and the type of undergraduate science education required to achieve such a level of understanding. In addition, this volume supports the idea that science is a liberal art and should be taught as such. It recommends goals for liberal education in the sciences, outlining the multidisciplinary curriculum and teaching strategies necessary to achieve them.

An appendix includes descriptions of existing courses and programs, offered at institutions nationwide, that are consistent with the project's recommendations. This report is of particular interest to undergraduate science educators as well as to all people committed to quality science education.

Topics include: Agenda for action; faculty responsibility; resource commitment; teaching materials and technologies; assessment instruments; the nature of scientific explanation; historical context; pedagogical techniques; integrating multidisciplinary content; programmatic approaches to liberal education in science; and liberal education for special groups such as future science teachers, the underrepresented in science, people with disabilities, and science and engineering majors.
ECOLOGIST. The Department of Ecology and Evolution at the University of Chicago seeks to hire an ecologist with interests in evolutionary biology working on plant, animal or microbial species for a faculty position at the ASSISTANT PROFESSOR level. To apply, please send curriculum vitae, reprints, and a statement of research interests and have three letters of recommendation sent to: storefront, Department of Ecology and Evolution, The University of Chicago, 940 East 57th Street, Chicago, IL 60637. Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK JOINT APPOINTMENT WOMEN'S STUDIES/BIOLOGICAL SCIENCES

The Women's Studies Program, University of Georgia, invites applications for a tenure-track position at the ASSISTANT PROFESSOR level to be jointly appointed between women's studies and an appropriate field. Speciality field must be biologically related and must include women or gender-related topics. Research interests, such as animal behavior, ethnography, (biological, nutritional, and theory of research plans) and have psychology, and zoology are appropriate. Ph.D. degree, promise in research and teaching, and a strong commitment to the development of women's studies are required. Send a statement of research interests, evidence of women's studies commitment, and names of three referees by 15 November 1991 to: Search Committee, Women's Studies Program, University of Georgia, 230F Main Library, Athens, GA 30602. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

SUNY HEALTH SCIENCE CENTER SYRACUSE

FACULTY POSITION IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

We invite applications for a tenure-track position. While we expect to make the appointment at the ASSISTANT PROFESSOR level, candidates at higher levels also will be considered. Outstanding candidates in all areas of biotechnology and molecular biology are encouraged to apply. Applicants must have a Ph.D. or equivalent degree in biochemistry or related field, postdoctoral experience, demonstrated research productivity and a commitment to excellence, in teaching medical and graduate students. Send letter of application (with curriculum vitae and summary of research plan) and three letters of recommendation forwarded to: Dr. Harvey S. Parent, Chair, Search Committee, Department of Biochemistry and Molecular Biology, State University of New York Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210. Review of applications will begin 6 December 1991 and continue until the position is filled. An Affirmative Action/Equal Employment Opportunity Employer.

FACULTY POSITIONS UNIVERSITY DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF ARIZONA

The University Department of Biochemistry, which serves the Colleges of Agriculture and Medicine, and the Faculty of Science, the University of Arizona, invites applications for two tenure-track faculty positions at the ASSISTANT PROFESSOR level. Applications from candidates with research interests in any area of contemporary biochemistry are welcome. For one position, special consideration will be given to candidates interested in x-ray crystallography of macromolecules. Candidates should have a Ph.D. or equivalent degree and postdoctoral experience. Applications from women and minorities are especially encouraged. Applicants should send curriculum vitae, a statement of past research experience and future research plans, and arrange to have three letters of recommendation sent to: Michael A. Wells, University Department of Biochemistry, Biologics Sciences West University of Arizona Tucson, AZ 85721

Review of applications will begin 15 October 1991, but applications will be accepted until the positions are filled. An Affirmative Action/Equal Opportunity Title IX/Section 504 Employer.

MADISON, WISCONSIN

University of Wisconsin-Madison invites applications for a tenure-track position in biochemistry. The new faculty member will be located in the Department of Biochemistry, which is part of the School of Medicine and Public Health and the Wisconsin Carbone Cancer Center. The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) DEPARTMENT OF BIOLOGY

Candidates are sought for two tenure-track faculty positions at the level of ASSISTANT PROFESSOR. Candidates should have significant research experience in molecular, cellular biology or developmental biology. Approaches should stress genetics, molecular biology, cell biology, or biochemistry. The responsibilities of this position include conducting an active research program and participation in the teaching program of the department.

Applications should send curriculum vitae and a summary of proposed research, and arrange to have letters sent from at least three scientists who can provide an evaluation of the candidate's past and future potential for both research and teaching. Applications will not be processed until all letters of reference have been received. Applications should be sent to: Chairman, Biology Search Committee c/o Room 56-511, Department of Biology Massachusetts Institute of Technology 77 Massachusetts Avenue Cambridge, MA 02139

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**Oligonucleotide Analytical Chemists**
- Experience in chromatographic and spectroscopic techniques related to nucleic acids is necessary

**Oligonucleotide Scale-up Chemists**
- Experience in solid phase synthesis of oligonucleotides is necessary, knowledge of computer software applications to production is desirable

**Oligonucleotide Purification Chemists**
- Experience in chromatographic techniques related to oligonucleotides is necessary

**BIOLOGICAL SCIENCES (PhD's)**

**Virologists**
- Three years' experience in viral infectivity assay, evaluation of anti-viral agents, immuno-chemical and chemical assays in virology and retrovirology

**Pharmacokineticist**
- Experience in biopharmaceutics, biochemical pharmacology or related drug kinetics and at least five years in pharmacokinetics, pharmacodynamics modeling and drug metabolism

**Biochemist**
- Must have experience to establish protocols and manage assays of biological and enzymatic activity and analytical bioassays.

**Toxicologist/Pharmacologist**
- Five years' experience in GLP drug toxicology/pathology evaluations. This is a hands-on and administrative position.

**Cell Biologists**
- Cell biologists or immunologists preferably with three years' experience for in vitro and in vivo assays of effects of oligonucleotides on cell dynamics and kinetics.

**RESEARCH ASSOCIATES**

We have a number of positions available for applicants with BS or MS degrees and experience in molecular biology, biochemistry, bioanalytical chemistry, virology, statistics and chemistry.

Hybridon offers highly competitive salaries and benefits, a relocation package, new laboratories and equipment in the modern Massachusetts Biotechnology Research Park. To apply, please send your resume to: Human Resources Manager, Hybridon, Inc., One Innovation Drive, Worcester, MA 01605. An Equal Opportunity Employer.
ASSISTANT PROFESSOR IN PLANT MOLECULAR BIOLOGY AT UNIVERSITY OF ILLINOIS AT CHICAGO

Applications are invited for a tenure-track position available beginning fall of 1992 at the assistant professor level in the Department of Biological Sciences at the University of Illinois at Chicago. Candidates with postdoctoral experience and expertise in either higher or lower plants will be considered. The successful applicant will be expected to develop a strong research program in plant molecular biology and to participate in the developmental coursework offerings. Please send curriculum vitae, a statement of research goals and the names and addresses of three references to: Molecular Plant Biology Search Committee, c/o Dr. Sidney B. Simpson, Jr., Head Department of Biological Sciences (MC 066) The University of Illinois at Chicago Box 4348 Chicago, IL 60680

Applications will be accepted until 21 October 1991. The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR MEMBRANE BIOLOGY UNIVERSITY OF CALIFORNIA SANTA BARBARA

Applications are invited for a tenure-track position in the Department of Biological Sciences, effective 1 July 1992. An integrative approach to membrane biology using experimental biology, structural biology, and molecular biology approaches is desired. Areas of interest include, but are not limited to: membrane-cytoskeletal interactions, membrane turnover and biogenesis, protein trafficking (sorting, targeting, secretion), transmembrane receptors, ion channels, or membrane transport. Only applicants with a strong research record and the potential to develop extramurally supported research programs will be considered. Teaching responsibilities will include undergraduate teaching in cell biology and an advanced graduate course in membrane biology. Ph.D. degree is required. Interested candidates should send curriculum vitae, a statement of research interests, and the names of three references to: Chairman, Department of Biological Sciences, University of California, Santa Barbara, CA 93106, by 15 November 1991. The University of California is an Affirmative Action/Equal Opportunity Employer. Proof of U.S. citizenship or eligibility for U.S. employment is required.

The Seattle Biomedical Research Institute (SBRI) invites applications for the position of SENIOR SCIENTIST (Full Professor level) or STAFF SCIENTIST (Assistant Professor level). The successful candidate should have an externally funded research program that is within or complementary to the area of infectious disease, and that employs molecular, biochemical, and/or immunological approaches. SBRI is a private, nonprofit research institute near the University of Washington that conducts basic biomedical research in a cooperative, scientist-oriented environment. Current programs include research on molecular parasitology, hematozoa, and immunology. Please send curriculum vitae, a brief statement of proposed research, and three letters of reference, by 15 October 1991 to: Search Committee, Seattle Biomedical Research Institute, 4 Nickerson Street, Seattle, WA 98109-1651. Equal Opportunity Employer.

FACULTY/BIOCHEMISTRY

Faculty position in biochemistry available 1 July 1992, at rank of ASSISTANT PROFESSOR or higher dependent upon qualifications. Major responsibility is teaching molecular, cellular, and physiological sciences to pre-medical and physician assistant students. Development of an independent research program is encouraged. Ph.D. in biochemistry required, background in one or more of the other basic medical sciences desirable. Prior teaching experience at college or professional school level desirable. Send curriculum vitae and the names and addresses of three references to: Biochemistry Search Committee, Department of Biochemistry, University of Osteopathic Medicine and Health Sciences, 3200 Grand Avenue, Des Moines, IA 50312.

FACULTY POSITION IN PHARMACOLOGY

Applications are invited for a tenure-track position at the rank of ASSISTANT PROFESSOR. The successful candidate should do research in pharmacology that involves investigation of biochemical mechanisms and pharmacological properties of pharmacological agents. The candidate will have the opportunity to do collaborative research with other faculty members. Minimum qualifications include an M.D. or Ph.D. degree with postdoctoral training in pharmacology. The candidate must have a strong background in either pharmacology or biochemistry. Send curriculum vitae and the names of three references to: Pharmacology Search Committee, Department of Pharmacology, School of Medicine, University of California, San Diego, La Jolla, CA 92093. Please include a statement of research interests and plans for future research. The University of California is an Affirmative Action/Equal Opportunity Employer.
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Energy Sciences Department

Battelle, Pacific Northwest Laboratories, has been developing solutions to complex problems for over 60 years. Last year alone, we conducted over 1,700 research programs, valued over $350 million, for more than 94 federal agencies, 302 industry clients, 9 foreign countries and several U.S. states.

The staff of our Energy Sciences Department focuses its expertise on the design and operating efficiencies of energy utilizing and producing systems. Our mission is to develop new and novel approaches that improve the efficiency of energy conversion, transmission, storage, and end use. To do this, we require world-class capabilities in:

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- Thermodynamic Systems
- Energy System Design and Operation
- Building Thermo-physics and Evaluation
- Performance Measurement and Evaluation
- Demand-Side Management Optimization
- Alternative Energy Concepts

Our location in the Tri-Cities area of southeastern Washington provides an outstanding quality of life, excellent schools, low cost of living, and numerous recreational opportunities. If you’d like to contribute to our exciting work in Energy Sciences, send your resume to: Battelle, Pacific Northwest Laboratories, Staffing Center, P.O. Box 1406, Dept. #1170, Richland, WA 99352. FAX (509) 376-9099. We are an Equal Opportunity Employer. U.S. citizenship is required.

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The Cancer Group is seeking a Ph.D. scientist with a minimum of 2 years postdoctoral experience to be part of a multi-disciplinary approach to drug discovery. The candidate should have demonstrated skills in biochemical pharmacology or biochemistry with some experience in tumor or cell biology. The candidate will work as part of a team to define mechanisms of actions of novel therapeutic agents and participate in the discovery of new mechanism-based agents. Candidates with more experience will also be considered.

BIOLOGIST/PHARMACOLOGIST
Cardiovascular Diseases Research Group

In this role, you will be involved in drug discovery and will execute and analyze cardiovascular, pulmonary and renal experiments. Candidates will have an M.S./Ph.D. in biology and experience with in vitro preparation and in vivo techniques. Must be willing to learn new skills. Both strong communication and interpersonal skills are also required.

Our location, near Wilmington, DE, offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities of the Eastern Seaboard. The Du Pont Merck Pharmaceutical Company can offer you an excellent compensation and benefits package. Qualified candidates should send a resume to: Manager of Human Resources, The Du Pont Merck Pharmaceutical Company, Dept. SCI-0913, Barley Mill Plaza, Bldg. 25, Wilmington, DE 19899. An Equal Opportunity Employer M/F.
ASSISTANT PROFESSOR POSITIONS
DUKE UNIVERSITY
MEDICAL CENTER
SECTION OF CELL GROWTH,
REGULATION AND ONCogenesis
DUKE COMPREHENSIVE CANCER CENTER

Duke University Comprehensive Cancer Center invites applications for tenure-track positions in the Section of Cell Growth, Regulation and Oncogenesis at the level of ASSISTANT PROFESSOR. Research within the section is focused on the genes and biochemical pathways that regulate cell growth and the molecular analysis of the disruption of such controls in cancer cells. Investigators in the section work on the molecular level on signal transduction, oncogenes/antioncogenes, angiogenesis, metastasis, and apoptosis are especially encouraged to apply. Minimally, applicants must have a doctorate, and 2 years of postdoctoral training. Candidates must have demonstrated high potential for imaginative, substantial independent research. Successful candidates will also be appointed into a basic science department within the Medical Center.

Applicants should send curriculum vitae and a brief description of research and proposed research to: Dr. Robert M. Bell, Head, Section of Cell Growth, Regulation and Oncogenesis, Duke Comprehensive Cancer Center, Box 3034, Durham, NC 27710. Applicants should arrange for three or more letters of recommendation to be forwarded to the same address.

To be assured of full consideration, the applications should be received by December 15, 1991.

Duke University is an Equal Opportunity/Affirmative Action Employer.

DEPARTMENT OF PHYSIOLOGY—ASSISTANT PROFESSOR—FACULTY POSITION, celluar and molecular physiology. The Department of Physiology, University of Washington, invites applications for a tenure-track, junior level faculty position with emphasis on cardiovascular physiology. The search will favor individuals whose research, in areas of physiological or molecular biological probes of cellular and molecular processes. Opportunities for participation in campus-wide interdisciplinary research and training programs are excellent. Women and minorities are especially encouraged to apply.

Applicants should send curriculum vitae, a summary of research interests and plans, and three letters of reference to: Dr. Rind Foster, University of Washington, 1300 University Avenue, Madison, WI 53706. Deadline for application is 1 November 1991. Women and minorities are especially encouraged to apply.

WATERSHED MANAGEMENT RESEARCH ASSISTANT PROFESSOR

Candidates sought with demonstrated expertise in environmental, ecological, biological models and geographic information systems to natural resource issues. Earned doctorate with emphasis on interdisciplinary training relevant to issues in watershed management (e.g., ecology, geology, hydrology, or quantitative sciences). Three-year, nontenured-track position. Send letter of application, transcripts, resume, a statement of how modeling skills can address water-water interactions and three references to: Dr. Robert J. Naiman, Director of Center for Streamside Studies, College of Agriculture, University of Illinois, URB-10, Urbana, Illinois 61801. Closing date: 29 October 1991.

ASSISTANT OR ASSOCIATE PROFESSOR, Harvard Medical School. The Department of Anatomy and Cellular Biology at Harvard Medical School invites applications for two positions at the Assistant or Associate Professor level. Applicants should have an active research program, demonstrated record of productivity, and the potential for a distinguished career. Successful candidates will be primarily involved in teaching and research in the Division of Molecular Cancer Biology and Neuroscience at the Harvard Medical School.

Applicants should send a curriculum vitae, a statement of research interests and plans, and three letters of recommendation to: Dr. Robert B. King, Harvard Medical School, 220 Longwood Avenue, Boston, MA 02115. Israel University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSISTANT/ASSOCIATE PROFESSOR: To work on research project in sheep. For information, contact: Animal, Dairy and Veterinary Science Department, Utah State University (USU), Dr. James E. Allen, Box 8090, Logan, UT 84322. Deadline for application is 1 November 1991. USU is an Equal Opportunity/Affirmative Action Employer.
The Swiss Federal Institute of Technology Zurich (ETHZ) invites applications for a

Faculty Position in Organic Chemistry

Research will focus on the preparative aspects of organic chemistry, either methods-based or target-oriented. Teaching duties comprise courses in organic chemistry at all university levels.

Candidates must have worked successfully in research for several years. They are further expected to be skilled teachers and should be willing to interact with colleagues within and outside the ETHZ.

Please submit your application together with a detailed résumé and a list of publications to the President of ETH Zurich, Prof. Dr. J. Nüesch, ETH Zentrum, CH-8092 Zurich, no later than October 15, 1991. In its effort to increase the number of women in academic top positions, the ETHZ specifically invites applications from women.

FACULTY POSITIONS

Plant Molecular Biologist

The Department of Molecular Genetics and Cell Biology invites applications for new faculty positions in the field of molecular biology of plants at the assistant professor level, although exceptional candidates at any level will be considered. We are especially interested in candidates using developmental genetic approaches to understand pattern formation, but the quality of the research program and its relationship to existing strengths in the Department will be the most important considerations. Complete applications with three letters of recommendation should be sent by November 1, 1991 to:

Dr. Anthony P. Mahowald
Chairman, Department of Molecular Genetics and Cell Biology
THE UNIVERSITY OF CHICAGO
920 E. 58th St.
Chicago, IL 60637

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Physical Scientist, GS-15

$61,643–$80,138

The U.S. Arms Control and Disarmament Agency is seeking an outstanding nuclear scientist or engineer to serve as a national/international authority in the development and implementation of nuclear nonproliferation policy. This policy is designed to decrease the likelihood of additional countries or of subnational groups acquiring nuclear explosives. The successful candidate for this senior position should combine a strong scientific background with an interest in foreign policy applications. Ideally, applicants will combine an understanding of scientific and engineering principles and of political decision-making, especially in the area of arms control. U.S. citizenship and Top Secret level security clearance by ACDA are required before entry on duty. Applicants should contact Mr. Wiles at (202) 647-2034 for a vacancy announcement and submit form SF-171 before September 30, 1991.

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An opportunity has been created for an experienced Scientist to serve as the Assistant Director of Ophthalmic Pharmaceutical Research responsible for the development of a research/screening program to identify product candidates for the treatment of glaucoma and ocular infections.

Your qualifications must include a Ph.D. in pharmacology, biochemistry or a related field and 5-10 years' experience in ophthalmic research, preferably dealing with glaucoma or anti-infective research. Related industry experience as well as experience with animal models of glaucoma is preferred.

This position offers excellent opportunities for growth along with a competitive salary and comprehensive benefits. For consideration, send resume with salary history to: Director, Personnel, Room 3098F, American Cyanamid Company, One Cyanamid Plaza, Wayne, NJ 07470. Equal opportunity/affirmative action employer.

POSTDOCTORAL FELLOW POSITIONS
University of Minnesota
Army High Performance Computing Research Center (AHPCRC)

The AHPCRC runs an interdisciplinary research program that focuses on the high performance computational aspects of engineering, physical sciences, computer science and mathematics. The primary computational system is a 32K Connection Machine, CM-2 with 1,024 64-bit Vector Floating Point units and 4 gigabytes of memory. Other computational resources include a Graphics and Visualization Laboratory and access to a Cray-2/4-512, a Cray X-MP/E4/I-64, and a Cray X-MP/E2-64. The Center is currently emphasizing research activities in four focus areas:

- Computational Continuum Mechanics, including computational fluid dynamics and solid mechanics with finite volume and finite element techniques;
- High Performance Computing Issues in Nonlinear Dynamics, with special emphasis on long-time dynamical issues arising in fluid flows, convective flows, and reacting flows;
- Computer Science, including parallel algorithms for matrix computations and optimization, systems environment tools, and performance evaluations;
- Emerging Focus Areas, covering computational biomedical sciences, computational chemistry, and modern materials.

We are inviting applications for appointments beginning in September 1992, but alternative starting dates may be requested. All requirements for a doctorate must be completed prior to the starting date. The materials listed below must be received by January 15, 1992:

1. Description (maximum two pages) of research background and plans for participating in one of the AHPCRC focus areas. (A description of project opportunities in these focus areas is available from the AHPCRC; please refer to "Research Opportunities for AHPCRC Postdoctoral Fellows.")
2. Curriculum vitae including a list of publications.
3. Three letters of recommendation, to be sent directly to the AHPCRC.

All correspondence should be directed to:
Tayfun E. Tekduyar, Director of Fellows Program
AHPCRC/University of Minnesota
1100 South Washington Avenue
Minneapolis, Minnesota 55415

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Coriell is currently under long-term contract to maintain the NIGMS Mutant Cell Repository, the NIA Aging Cell Repository, and the NHM National Mental Health Cell Repository which serve as resources to research scientists worldwide. The major research program focuses on cancer, genetic defects, heart, infectious diseases, and diseases of aging.

Candidates should contact:
Chairman, Search Committee
Coriell Institute for Medical Research
461 Eton Avenue, Camden, NJ 08103
Telephone: 609-787-9486
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POSITIONS OPEN

CHAIR DEPARTMENT OF BIOLOGY
HOWARD UNIVERSITY

Applications and nominations are invited for the position of chairperson of the Department of Biology, which will be established upon the merger of the existing Departments of Botany and Zoology on 1 July 1992. The new chairperson will have 38 faculty members, approximately 600 undergraduate majors, and 50 graduate students. Candidates should have a distinguished record of accomplishment in teaching and extramural support, a commitment to teaching, and a willingness to exercise innovative and resourceful leadership in building the undergraduate and graduate programs. The area of concentration is open. Applicants should qualify for the rank of full professor. Salary is commensurate with qualifications and experience. Applicants should send, by 15 October 1991, curriculum vitae, names and addresses of three references, and a statement of educational and administrative philosophies to:

Dr. Theodore A. Brenner, Chairman
Biological Sciences Committee
P.O. Box 619, Administration Building
Howard University
Washington, D.C. 20059

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POSITIONS OPEN

NATIONAL SCIENCE FOUNDATION (NSF)

NSF is accepting Intergovernmental Personnel Act Mobility (IPA) nominations from colleges, universities, and non-profit and for an assignment as PROGRAM ASSOCIATE in the Latin America Programs of the Division of International Programs. Assignments are for 1 year, starting 1 July 1992. Applicants should have a Ph.D. or equivalent training in an area of science or engineering supported by the Latin America programs. These programs include: Project Mesoamerica to support, with a commitment to, academic programs in the region; AND ACTION to investigate the opportunities of postdoctoral research in a basic research laboratory. Applicants must have a Ph.D. or be able to demonstrate the opportunity to pursue an independent career in the basic research laboratory. Opportunities are available for a Ph.D. or M.S. in the areas of molecular biology, physiology, and cell biology. Applications should be submitted by 15 November 1991.

University of California, San Diego, TENURE/ TENURE-TRACK POSITION IN ORGANIC CHEMISTRY. The University of California, San Diego, is recruiting for a position in the area of organic chemistry. Candidates must have a Ph.D. or a demonstrated ability for creative research and for teaching at the undergraduate and graduate levels. Applicants are encouraged to apply by 15 October 1991. The University of California is an Equal Opportunity/Affirmative Action Employer.

University of Wisconsin–Madison. The Department of Psychiatry is seeking TWO FACULTY MEMBERS (M.D. or Ph.D.) for positions in the area of addiction and abuse. Responsibilities include developing an independent research program in the area of drug abuse that involve preclinical or clinical research and developing a training or teaching program for residents and medical students. Candidates will be expected to obtain outside grant funding for his/her research. Send curriculum vitae and cover letter to: Dr. Ned Kalm, Chairman, Department of Psychiatry, University of Wisconsin Medical School, 600 Highland Avenue, Madison, WI 53792. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

SABBATICAL REPLACEMENT. The Department of Biology of Illinois Wesleyan offers a one-year sabbatical position for the academic year of Fall 1992 through Fall 1993. Teaching load and two laboratory sections in vertebrate developmental biology, 12-contact hours. Send letter of application, résumé, and three letters of recommendation to: Dr. Bruce Criley, Chair, Biology Department, Illinois Wesleyan University (IWU), P.O. Box 2900, Bloomington, IL 61702. IWU is an Equal Opportunity Employer and applications from women and minorities are strongly encouraged.

MOLECULAR AGING

Two POSTDOCTORAL POSITIONS now available for persons with a Ph.D. or M.D. in this area. Relevant to cell senescence. [Science 249, 1129-33 (1990); Molecular and Cellular Biology 11, 3904-15]. NIH salary scale. Send curriculum vitae and names of four references to: Dr. S. Goldstein, University of Arkansas Medical School and Veterans Hospital, 151/Research, Little Rock, AR 72205. Telephone: 501-660-2069; FAX: 501-660-2034.

POSTDOCTORAL POSITION. Available for research on the role of the inositol phosphate cascade in visual transduction in laboratory using electrophysiological and pharmacological techniques. Send short curriculum vitae and names of four references to: Dr. Alan Fein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06080.

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NUCLEAR WASTE TECHNICAL REVIEW BOARD

Geochemist and/or Hydrogeologist

The U.S. Nuclear Waste Technical Review Board (NWTRB) is seeking a senior staff geochemist and/or hydrogeologist to assist in the evaluation of radionuclide transport and retardation, water/rock interactions, and unsaturated/saturated groundwater flow in the vicinity of Yucca Mountain, Nevada. A site at Yucca Mountain is being considered by the Department of Energy (DOE) for the potential location of a high-level waste repository.

The NWTRB is an independent federal agency in the executive branch, whose purpose is to advise the Congress and the Secretary of Energy on the technical and scientific validity of the DOE’s repository site-characterization activities and on activities relating to the packaging and transport of civilian high-level radioactive waste. The individual selected will join a small, full-time professional staff located in Arlington, Virginia, who assist the Board’s Presidential appointed members.

Applicants should have a Ph.D., and a minimum of ten years’ experience in geochemistry or hydrogeology, and can not be currently employed by the DOE. Starting annual salary will be commensurate with qualifications and experience. Interested individuals should send a cover letter together with a resume or completed Standard Form 171 by October 1, 1991, to:

Dr. William Barnard
Executive Director
U.S. Nuclear Waste Technical Review Board
1100 Wilson Boulevard, Suite 910
Arlington, VA 22209

Chemical/Metallurgical Engineer

The U.S. Nuclear Waste Technical Review Board (NWTRB) is seeking a senior staff chemical/metallurgical engineer with background in chemical kinetics, engineering economy, and/or statistics to assist in the evaluation of the effects of repository conditions on the engineered barrier system’s ability to contain radionuclides. This evaluation is part of the NWTRB’s technical and scientific review of the Department of Energy’s (DOE) civilian high-level radioactive waste management program. A site at Yucca Mountain, Nevada, is being considered by the DOE for the potential location of a high-level waste repository.

The NWTRB is an independent federal agency in the executive branch, whose purpose is to advise the Congress and the Secretary of Energy on the technical and scientific validity of the DOE’s site-characterization activities and on activities relating to the packaging and transport of civilian high-level radioactive waste. The individual selected will join a small, full-time professional staff located in Arlington, Virginia, who assist the Board’s Presidential appointed members.

Applicants should have a Ph.D., and a minimum of ten years’ experience in chemical or metallurgical engineering and can not be currently employed by the DOE. Starting annual salary will be commensurate with qualifications and experience. Interested individuals should send a cover letter with a resume or completed Standard Form 171 by October 1, 1991, to:

Dr. William Barnard
Executive Director
U.S. Nuclear Waste Technical Review Board
1100 Wilson Boulevard, Suite 910
Arlington, VA 22209

The University of Oklahoma Health Sciences Center
College of Public Health
Center for Epidemiologic Research

The newly established Center for Epidemiologic Research in the College of Public Health, University of Oklahoma Health Sciences Center, invites applications for a fellowship/visiting professor position. As the primary research unit of the college, the Center is a multidisciplinary, multiprofessional, interdepartmental and interinstitutional program in research, training and continuing education. The overall objectives of the Center are to provide comprehensive biometric and epidemiologic resources for the Southwestern United States, to perform research on determinants of morbidity and mortality and health care monitoring, and to advance methods and technologies for data management and statistical analysis. The University of Oklahoma Health Sciences Center offers a stimulating research environment and a variety of excellent research and computational facilities.

The successful candidate for this position will have an earned doctorate with a strong interest in epidemiology, a demonstrated record of successful research and the ability to provide biometric or epidemiologic consultation in a multidisciplinary environment. Applications from individuals who plan to take a one-year sabbatical leave from their current positions are welcome.

The University of Oklahoma is committed to the principles and practices of equal opportunity.

A statement of interest and curriculum vitae should be submitted by November 30, 1991 to:

Elias T. Lee, Ph.D.
Co-Director, Center for Epidemiologic Research
College of Public Health
The University of Oklahoma Health Sciences Center
P.O. Box 26901
Oklahoma City, OK 73190
(405) 271-3090

Chair, Committee on Comparative Medicine and Pathology
and Director, Animal Resources Center

The Division of the Biological Sciences of the University of Chicago solicits applicants to lead an academically based Committee on Comparative Medicine and an Animal Resources Program. The successful candidate will be a nationally recognized veterinarian, and will have a proven research record and a background in animal resources management. The candidate selected will be appointed to a senior level faculty position, Board certification in Laboratory Animal Medicine, Veterinary Pathology, or equivalent is expected.

The Committee on Comparative Medicine and Pathology is the academic base for the veterinary faculty. At present, the Committee includes 6 veterinary faculty, and it would be expected to grow substantially under the new leadership. The faculty are appointed in appropriate academic departments and are expected to pursue independent scholarly work, in addition to clinical and teaching activities. The Animal Resources Center is a 60,000 sq ft operation and is undergoing major renovations. Candidates should have a solid understanding and hands-on experience in the management and operations of an extensive animal facility. The reorganized Animal Resources Center is key to the activities of the Committee and to a prestigious general research program of the University’s faculty in the Division of the Biological Sciences.

Please address nominations and letters of interest, along with a current curriculum vitae, to: Dr. Harry Fozard, Chair, ARC Search Committee, The University of Chicago, 5841 S. Maryland Ave., Box 440, Chicago, IL 60637.

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Schering

Toxicologist

THE SCIENCE OF SUCCESS.

As a highly recognized division of a $3 billion health care company, we've maintained our leadership role by developing life saving and life enhancing pharmaceuticals for both humans and animals. To help us achieve continued success, we look for talented professionals who share our goals.

Working in our Safety Evaluation Center, you will be involved with the drug safety program supporting Schering-Plough's product registrations. This will entail ensuring the timely planning, execution, reporting and interpretation of appropriate animal and environmental toxicology studies and integration of study results with information from other functions, such as drug metabolism and pharmacokinetics.

To be successful, you should possess a Ph.D. in Toxicology or related field with up to 3 years' experience in inhalation or immunotoxicology. We offer a very attractive salary and benefits package, with the opportunity to make a significant contribution to our organization. For immediate consideration, please forward your resume with salary requirements to: Mr. W. Decker, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

DEPARTMENT HEAD OF BIOCHEMISTRY AND BIOPHYSICS
TEXAS A&M UNIVERSITY

Applications and nominations are invited for the position of Head of the Department of Biochemistry and Biophysics at Texas A&M University. The Department of Biochemistry and Biophysics, with a faculty of 26, is in the College of Agriculture and Life Sciences, offers B.S., M.S. and Ph.D. degrees in Biochemistry and Genetics, and is a unit of the Texas Agricultural Experiment Station. The Department occupies a new 90,000 sq. ft. research and teaching building and will be a key component of the new Institute of Biosciences and Technology.

Candidates for the position must have a Ph.D. or equivalent degree, a record of research excellence in Biochemistry and/or Molecular Biology, demonstrated leadership in scholarly activities and a strong commitment to excellence in academic and research programs. The successful candidate will have a major influence in filling several vacant faculty positions, including one endowed Chair.

The position is expected to be filled by September 1, 1992. Nominations and applications should include resumes and names and telephone numbers of at least three references. Review of applications will begin on October 1, 1991; however applications will be accepted until a suitable candidate is identified. These materials should be submitted to: Dr. Robert D. Wells, Department Head Search Committee, Department of Biochemistry and Biophysics, Texas A&M University, College Station, Texas 77843-2128.

The Texas A&M University System is an Affirmative Action/Equal Opportunity Employer.

Senior Scientist
Pharmaceutical Development

Excellent opportunity for Ph.D. in pharmacology, immunology or biochemistry with 2+ years of postdoctoral experience or equivalent to investigate recombinant receptor protein and/or monoclonal antibody based therapeutics. Candidate should have solid background in the human immune system. Hands-on experience with animal modeling, receptor-ligand interaction, immunoassays and bioassays required. Experience in autoimmune and tumor experimental models in an industrial environment a plus. Position offers key project responsibility as part of a multidisciplinary team for preclinical development of human therapeutic products.

Senior Associate Scientist
Molecular Biology

Growth position for BS/MS with minimum 2 years in molecular biology. Requires demonstrated proficiency in enzymatic manipulations of DNA, plasmid constructions, DNA sequencing, site-directed mutagenesis, RNA isolation and analysis, and mammalian tissue culture. Should be organized, strongly motivated and eager to work in a fast-paced lab for development of human therapeutics.

T Cell Sciences, Inc. is utilizing proprietary T cell receptor and soluble receptor technology to develop pharmaceutical products to treat heart disease, inflammatory diseases, autoimmune diseases and cancer. We offer competitive compensation, comprehensive benefits and the opportunity for career advancement. Please forward C.V. to Paula R. Freeman, T CELL SCIENCES, INC., 38 Sidney Street, Cambridge, MA 02139. An Equal Opportunity Employer M/F/H

Molecular Biologist

The Department of Cellular and Molecular Biology at Merck, Sharp and Dohme Research Laboratories in Rahway has an opening for a highly motivated Ph.D. or M.D. with at least 3 years post-doctoral experience interested in pursuing a career in drug discovery.

The successful candidate will be involved in the application of state-of-the-art molecular and cellular biological tools to ongoing drug discovery programs within a multi-disciplinary environment. Responsibilities will include gene cloning, expression of proteins in mammalian cells and analysis of function. Current programs include research in immunology, virology and cardiovascular regulators. The candidate should have a demonstrated ability to find creative solutions to a broad range of biological problems. Excellent communication abilities and interpersonal skills are essential.

Please send curriculum vitae with cover letter and the names of three references to Ms. Susan Jenkins, RB0-A3, AD #93, Merck Sharp & Dohme Research Laboratories, P.O. Box 2000, Rahway, NJ 07065. EEO/AA/VH Employer

RESEARCH OPPORTUNITIES IN PLANT BIOTECHNOLOGY.

ICI Seeds Research is looking for an individual with a BS/MS in plant science to join the maize Doubled Haploid project. Applicants should have a strong interest in the use of tissue culture techniques for crop improvement. Experience in cytology, histology, biochemistry, molecular biology and transformation techniques would also be advantageous. The position is at our recently completed research facility in Slater, IA. (30 miles north of Des Moines). Salary and benefits will be competitive. Please send a letter of application and resume by October 4, 1991 to:

Pam Tweed
Bioscience Secretary,
ICI/Garst Seed Company
PO Box 500
Slater, IA 50244

ICI/Garst Seed Co. is an E.O.E.

World Problems, World Solutions, World Class
1992

PREDCTORAL FELLOWSHIPS IN BIOLOGICAL SCIENCES

66 Fellowships will be awarded by the Howard Hughes Medical Institute for study toward a Ph.D. or Sc.D. degree in the biological sciences listed below. Awards, based on an international competition each year, focus on research directed to an understanding of basic biological processes and disease mechanisms. Fellowships may be held at any academic or research institution with appropriate degree programs.

■ Fellowship Terms
- Full-time study toward the Ph.D. or Sc.D.
- Up to five years of support possible
- $14,000 annual stipend, effective June 1992
- $11,700 annual cost-of-education allowance

■ Fields of Study
- Continuing as eligible fields:
  - biochemistry
  - biophysics
  - cell biology
  - developmental biology
  - genetics
  - immunology
  - microbiology
  - molecular biology
  - neuroscience
  - pharmacology
  - physiology
  - structural biology
  - virology
- New eligible fields:
  - biostatistics
  - epidemiology
  - mathematical biology

■ Eligibility
- Beginning graduate study (prior study toward an M.P.H. or a medical degree does not rule out eligibility)
  - college seniors
  - first year graduate students
  - medical students and physicians (M.D., D.O., D.D.S., or D.V.M.) not past the first year of a Ph.D. or Sc.D. degree program
- Not in a funded M.D./Ph.D. program
- No citizenship requirements: U.S. citizens may study abroad, but others must study in the United States

■ Schedule
- Application deadline: November 8, 1991
- Awards announced: early April 1992
- Fellowships start: June 1992 - January 1993

For 1992 Program Announcements, Eligibility Guidelines, and Applications
Hughes Fellowship Program • The Fellowship Office
National Research Council • 2101 Constitution Avenue, N.W.
Washington, D.C. 20418 • United States of America
Telephone (202) 334-2872

The Howard Hughes Medical Institute welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.
POSTDOCTORAL POSITION IN ENVIRONMENTAL STRESS MOLECULAR BIOLOGY

The position is immediately available to participate in a multi-year collaborative project on the DNA cloning of cold responsive genes and RFLP mapping of cold and salt tolerance loci in citrus. Experience in genetics and/or molecular plant biology is desirable, but not essential. Send curriculum vitae and the names of three references to: Dr. Charles Gay, Department of Environmental Horticulture, University of Florida, Gainesville, FL 32611. Telephone: 904-392-7934; Fax: 904-392-3870.

POSTDOCTORAL POSITION IN EXPERIMENTAL PATHOLOGY

A position is available to study receptors and signal pathways in the cerebral vasculature. Experience in biochemistry/molecular biology is required. Applicants should submit curriculum vitae, statement of research interests and a list of three references to: Paula Grammas, Ph.D., Department of Pathology, University of Oklahoma Health Sciences Center, Post Office Box 26901, Oklahoma City, OK 73190. The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.

HAHNEMANN UNIVERSITY

GRADUATE PROGRAM IN EXPERIMENTAL PATHOLOGY OFFERS RESEARCH TRAINING LEADING TO A PH.D.

In MOLECULAR GENETIC AND IMMUNOLOGIC APPROACHES TO PATHOLOGIC PROCESSES

A core curriculum consisting of courses in biochemistry, molecular genetics, immunology, and pathology is followed by specialty courses and research in the student's chosen area of concentration. State-of-the-art research facilities are available.

Send Curriculum Vitae and brief description of research interests to: Ms. Delia M. Matherly, Department of Cell Biology, Hahnemann University, 3300 Market Street, Philadelphia, PA 19104.

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

To study coronary microvascular and cardiomyocyte interactions using triply labeled methods to model collagen diseases. Techniques include CD, NMR and molecular modeling. Send curriculum vitae and three letters of reference to: Dr. Barbara Brodsky, Department of Biochemistry, University of Medicine and Dentistry of New Jersey (UMDNJ)-Robert Wood Johnson Medical School, 675 Hoos Lane, Piscataway, NJ 08854-5635. The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.

POSTDOCTORAL POSITION

WALTHER ONCOLOGY CENTER

DOMINION UNIVERSITY

SCHOOL OF MEDICINE

Available immediately to study the interactions between ras p21 and proteins involved in the ras mitogenic pathway [Mol. Cell. Biol. 11, 3897–4006 (1991)]. Experience in molecular biology is preferred. Send curriculum vitae and three references to: Dr. Mark Marshall, Walshe Oncology Center, Indiana University School of Medicine, 725 West Wqian Street, Room 501, Indianapolis, IN 46202-5121. Walshe Oncology Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

WALTHER ONCOLOGY CENTER

DOMINION UNIVERSITY

SCHOOL OF MEDICINE

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HAHNEMANN UNIVERSITY

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Equal Opportunity/Affirmative Action Employer.
FACULTY POSITIONS
Developmental and Cell Biologists

The Department of Molecular Genetics and Cell Biology invites applications for new faculty positions in the fields of developmental and cell biology at the assistant professor level, although exceptional candidates at any level will be considered. The quality of the research program and its relationship to existing strengths in the Department will be the most important considerations. Complete applications with three letters of recommendation should be sent by November 1, 1991 to:

Dr. Anthony M. Mahowald
Chairman, Department of Molecular Genetics and Cell Biology
THE UNIVERSITY OF CHICAGO
920 E. 58th St
Chicago, IL 60637

An Affirmative Action Equal Opportunity Employer
(Women and members of minority groups are strongly encouraged to apply)

Managers, Scientists and Postdoctoral Fellows in Pharmacology and Toxicology

Mallinckrodt Medical, Inc. is a leading company in the healthcare industry, providing innovative diagnostic products for the fields of radiology, cardiology, and nuclear medicine. Continued strong growth of the company in these medical markets has allowed for several new positions in its Pharmacology and Toxicology Department.

Research Managers must have a Ph.D. in Pharmacology, Toxicology or a related field and at least five years of industrial or contract laboratory experience in drug development. They will manage a staff of four to six scientists and research/senior research scientists, and will administer preclinical pharmacology, GLP toxicology, and ADME programs, including the preparation of nonclinical summaries for FDA submissions and clinical investigator’s brochures.

Candidates for senior research scientists will have a Ph.D. in toxicology, pharmacology, biopharmaceutics or a related field and at least two years of industrial or contract laboratory experience in drug development. Duties entail preclinical evaluation of diagnostic and therapeutic drugs/radiopharmaceuticals, including supervising one or two technologists and staff scientists, and serving as study director on internal nonclinical laboratory studies and as scientific monitor of contract laboratory work.

The area of research for the first of two postdoctoral fellows involves the biochemical toxicology of transition metal and lanthanoid complexes used in diagnostic medicine. Requirements for this position include a recent Ph.D. in biochemical toxicology or a related field and research experience in the biochemistry of transition metals or lanthanides. The second postdoctoral fellow will assess the receptor pharmacology of peptide receptor-imaging radiopharmaceuticals useful in the diagnosis of cancer. Candidates for this position will have a recent Ph.D. in biochemical pharmacology or a related field and research experience in receptor techniques.

Excellent salary, benefits programs and relocation package accompany each of these positions at our modern research facilities on a large campus in suburban St. Louis, Missouri. Please send curriculum vitae with cover letter to:

Sara E. Hamlin
Manager, Human Resources

MALLINCKRODT MEDICAL, INC.
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In the scientific world, “R & D” stands for Research and Development. It’s an important part of your professional life. But when it comes to your personal life, “R & D” could stand for Responsibilities and Dreams. And in this day and age, it takes a lot of both to see a family through.

That’s why the American Association for the Advancement of Science makes the AAAS Term Life Insurance Plan available to you. It’s an easy and affordable way to protect your family’s future. The Plan provides benefits that can be used to help with basic living expenses and can enable your family to follow through with the plans you made together. You can request up to $240,000 of coverage for yourself. And generous protection is available for your family too.

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Toll-Free: 1 800 424-9863
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MALLINCKRODT MEDICAL, INC.
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VIROLOGY RESEARCH OPPORTUNITIES

Research associates will participate in virology research programs emphasizing either in vitro assay development or in vivo model development for the discovery of agents effective in the treatment of human viral diseases. Qualified candidates must have a bachelor's or master's degree and several years experience in virology, which may include HIV and/or other viruses.

Successful candidates should have either:

• a strong background in molecular virology, cell culture, molecular biology, and in vitro virology and experience with immunological assays, biochemical and genetic techniques, or

• a good foundation in cell culture, viral propagation and assay methods with experience in evaluating antiviral agents using PCR, molecular virology, immunological and animal handling techniques.

The Upjohn Company is located in Kalamazoo, Michigan, a medium-sized university city, midway between Chicago and Detroit, offering varied cultural events, reasonable housing costs and numerous lakes and recreational advantages. For confidential consideration please send your cover letter and resume to: THE UPJOHN COMPANY, POSITION CODE 910563-073, 7000 PORTAGE ROAD, KALAMAZOO, MI 49001. An Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues...
POSTDOCTORAL FELLOWSHIPS

THE GOLDA MEIR FELLOWSHIP FUND
THE HEBREW UNIVERSITY OF JERUSALEM
JERUSALEM, ISRAEL

The Hebrew University of Jerusalem invites applicants for Postdoctoral Fellowship in Humanities, Social Sciences, Natural and Applied Sciences, Agriculture and Medicine for the 1992-93 academic year.

Candidates may apply at an early stage of their professional career (not later than 3 years after completion of their doctoral dissertation).

The fellowships are tenable for one academic year and may be extended for another year. The fellowship provides a 12-month stipend (with COL adjustments), rent allowance, and round-trip return ticket to Israel.

Application forms may be obtained from the University Grants Office, P.O. Box 1258, Jerusalem, 91904, Israel.

Completed application forms must be returned by 1 December 1991.

POSTDOCTORAL FELLOW

Postdoctoral position available immediately to study the effect of dietary fat on the immune response in humans. The candidate should have a Ph.D. in nutrition, immunology, or related fields. Research experience in immunology and/or fatty acid metabolism especially as it relates to eicosanoid production is highly desirable. Send curriculum vitae and three references to: Dr. Simin Meydani, Chief of Nutritional Immunology Laboratory, USDA HNRC at Tufts University, Boston, MA 02111. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS
GLADSTONE INSTITUTE OF VIROLOGY AND IMMUNOLOGY

The Gladstone Institute of Virology and Immunology at the San Francisco General Hospital and University of California, San Francisco, invites applications from individuals seeking postdoctoral fellowship training in human virology and immunology. A primary focus of this institute will be the study of the molecular biology, biochemistry and immunology of the type I human immunodeficiency virus (HIV-1). The institute occupies 27,000 square feet of new laboratory space and offers an excellent compensation and benefits package from the Gladstone Foundation. Interested candidates should send their curriculum vitae and the names of three references to:

Warner C. Greene, M.D., Ph.D., Director
Gladstone Institute of Virology and Immunology
c/o Emily J. C. Belanger
P.O. Box 40608
San Francisco, CA 94140-0608

The Gladstone Foundation is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

Available immediately to study the mechanistic basis of increased clearance of drugs in Cystic Fibrosis. Background in molecular biology is desirable. Experience with molecular biology techniques (e.g., Southern and Northern analysis, DNA sequencing, cDNA, PCR) and isolation and characterization of hepatic metabolic enzymes (e.g., P-450), is preferred. Send curriculum vitae and three letters of reference to: Dr. Arnold Smith, Division of Infectious Diseases, c/o J. A. Unadkat, Ph.D., Department of Pharmaceutics, BG-20, University of Washington, Seattle, WA 98195. Telephone: 206-685-2869. Equal Opportunity Employer.

Position available for a POSTDOCTORAL FELLOW (M.D., Ph.D.) interested in experimental carcinogenesis, and having experience with molecular biology. Please submit curriculum vitae and three letters of reference to: Ms. A. Roman-Koller, Administrative Director, University of Pittsburgh, Department of Pathology, School of Medicine, 3501 Scaife Hall, Pittsburgh, PA 15261. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer.
**Postdoctoral Fellowship**

**Molecular Pathology**

Genentech, Inc., a leader in biotechnology research, currently has the following exceptional opportunity.

This unique postdoctoral research position offers you the opportunity to investigate a transgenic mouse model of diabetes to determine the molecular pathogenesis and its relevance to the human disease. You will work closely with scientists of both the pathology and transgenic groups, in state-of-the-art facilities. This position requires a Ph.D. with emphasis in pathology. A D.V.M. or M.D. with advanced training in pathology will also be considered.

Our extensive benefits package includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities, free health club membership, and an employee stock purchase plan. For immediate consideration, please send your resume to Yvonne Davino, Genentech, Inc., Human Resources Dept. YSNG, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

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**THE SCIENCE RECRUITMENT**

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Now you can see your ad in *Science* four days after submission

Scientific recruiters can now advertise positions almost as soon as the need arises. Instead of reserving space a month or more in advance, you can now place your ad four days before the magazine mailing date. *Science* is mailed on the cover date.

Film (right-reading, emulsion face down) or full camera-ready art and insertion order must reach: *Science*, Short Close Desk, 1515 Broadway, New York, NY 10036 by NOON Mondays (except for legal holidays when material must reach New York by NOON Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis, at a 15% premium. 1/4, 1/2 or full page only.

Now you don't have to wait to find the researchers you need immediately, nor must you advertise in a Sunday paper that pans a lot of sand but not much gold. Scientific employers know that *Science* ads fill the job better. Now they fill it faster too.

You can call it "INSTANT RECRUITMENT."

For further information, telephone Ed Keller, Recruitment Advertising Manager, or Gwen Cantor, Advertising Traffic Manager at *Science*: 212-730-1050, or write to:

*Science*, 1515 Broadway, NY, NY 10036

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Staff Scientists

Immunex Corporation, a Seattle-based biopharmaceutical company focused on the discovery, development, manufacture and marketing of products to treat immune system disorders, has created two challenging new positions in our Protein Chemistry Department:

■ Protein Chemist, 2D-PAGE

This is an exciting opportunity to develop a program in 2-D polyacrylamide gel electrophoresis (2-D PAGE). Our successful candidate will use this 2-D program to analyze proteins from tissues and cell lines for use in the discovery of new factors involved in the functioning and regulation of the immune system. 2-D PAGE databases will also be established for the identification of proteins which play a role in cytokine signal transduction events and cell surface proteins involved in cell-cell communication. Techniques used for analyzing polypeptides isolated by 2-D PAGE will include micro sequencing, capillary electrophoresis, capillary HPLC and mass spectrometry.

Applicants should possess a Ph.D. or a BS/MS with several years laboratory experience in biochemistry or a related discipline. Additional requirements include proven competence in the manipulation of small samples, radiolabeling cell cultures, complex data analysis using micro-computers, and excellent communication skills. Preference will be given to candidates with experience running a 2-D PAGE program.

■ Biophysical Protein Chemist

This position was created to enhance our understanding of the structure-to-function relationships between cytokines and their cognate receptors and to explore new areas of investigation in cytokine signal transduction. In addition to using spectroscopy, chemical modification and other classical methods of analysis, our successful candidate will apply modern techniques including mutagenesis and molecular modeling. Additional responsibilities will include purification and analysis of protein reagents for outside collaborations in structural analysis via X-ray crystallography and heteronuclear, multidimensional NMR.

Candidates should possess a Ph.D. in biochemistry or a related discipline and 2+ years post-doctoral experience. Additional qualifications include a working knowledge of modern protein biochemistry and excellent communication skills.

Immunex Corporation offers a fast-paced, stimulating environment, competitive salaries and an excellent benefits package. For consideration, please send or fax resume to:

 IMMUNEX CORPORATION
 Attn: Human Resources Dept.
 51 University Street
 Seattle, WA 98101
 Fax: (206) 621-7977
 Equal Opportunity Employer

Research Opportunities in Biotechnology

Amgen is an innovative and creative leader in the biotechnology industry pioneering the discovery and development of human therapeutic products through applied biotechnology. We have the following research opportunities available immediately.

Molecular Biology
Dept. #609

Several positions are available for individuals at the BS or MS level with experience in molecular biology (basic molecular biology skills including cDNA cloning and gene expression), mammalian cell culture, and some experience with in vivo assays. Experience in hematopoietic systems and transgenic animals is highly desirable.

Biochemistry
Dept. #610

These positions require a BS or MS in Biochemistry or a related discipline and a minimum of two years’ relevant experience. Candidates should have experience in the purification and characterization of proteins, including polyacrylamide gel electrophoresis and column chromatography. Experience with HPLC, FLPC and RIA is highly desirable and required for some positions.

Assay Development
Dept. #611

This position requires a BS in Biochemistry or a related field and a minimum of one year’s experience in SDS-PAGE, IEF, and Western Blotting. Prior background in methods development and assay validation is particularly desirable.

Amgen offers a stimulating and challenging environment on the leading edge of biotechnology as well as an excellent compensation and benefits package. 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 resume, in confidence, to:

Amgen, INC.
Recruitment, Dept. # (please specify)
Amgen Center
Thousand Oaks
CA 91320-1789

Equal Opportunity Employer
POSTDOCTORAL/RESEARCH ASSOCIATE

POSTDOCTORAL POSITIONS are immediately available in the area of molecular and cellular biology of growth factors and their roles in the control of hepatocyte growth factor expression of growth factor gene activation, receptor-ligand interaction, site-directed mutagenesis, and transgenic mouse production. The current curriculum vitae to: George Michalopoulos, M.D., Ph.D., Professor and Chairman, Department of Pathology, University of Pittsburgh, School of Medicine, 720 Scaife Hall, Pittsburgh, PA 15261. Telephone: 412-648-8657; FAX: 412-648-1916.

POSTDOCTORAL RESEARCH ASSOCIATE. To study the gene-specific actions of synthetic oligonucleotides in the modulation of a collection of enzymes gene expression. A background in molecular biology and/or medicine and pharmacology would be useful. Send curriculum vitae and the names of three references to: Patrick Iversen, Ph.D., Department of Pharmacology, University of Nebraska Medical Center, 600 The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Position available for recent Ph.D. to study the regulation of dihydrodiol dehydrogenases involved in the detoxification of polycyclic aromatic hydrocarbons. Previous experience with recombinant DNA techniques is required. Send curriculum vitae and names of three references to: Dr. Trevor M. Penning, Department of Pharmacology, University of Colorado School of Medicine, Philadelphia, PA 19104-6084.

POSTDOCTORAL RESEARCH ASSOCIATE, NEUROCHEMISTRY/MOLECULAR BIOLOGY. Position available immediately in established laboratory. Salary commensurate with experience, annual renewal. Send curriculum vitae, description of laboratory experience, and names of three references to: Dr. Dennis Drescher, Laboratory of Bio-otology, Wayne State University, 540 East Canfield Avenue, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA)

ASSISTANT RESEARCH IMMUNOLOGIST

Immediate opening for assistant research immunologist to perform research on the correlation of the HLA- DP antigen with kidney and bone marrow transplantation outcome. Requires M.D. or Ph.D. with minimum of 3 years of experience in HLA-DP serology and genetics and in molecular biology required. Salary: $41,600 per year, plus. Send curriculum vitae, description of research interests, and names of three references to: Paul I. Terasaki, Ph.D., UCLA Tissue Typing Laboratory, 950 Veter- ans Avenue, Los Angeles, CA 90024-1662. UCLA is an Equal Opportunity/Affirmative Action Employer.

RESEARCH POSITIONS

RESEARCH POSITIONS

POSTDOCTORAL/RESEARCH ASSOCIATE

RESEARCH POSITIONS

POSSESS...
POSTDOCTORAL POSITION is available to study the regulation of macrophage growth by CSF-1 and cAMP. Recent Ph.D.'s interested in joining a multidisciplinary group applying techniques of molecular biology and biochemistry to investigate the mechanism by which signal transduction pathways coordinate membrane phospholipid synthesis with the cell cycle should send their curriculum vitae and names of three references to: Dr. Charles O. Rock, Department of Biochemistry, St. Jude Children's Research Hospital, Memphis, TN 38105. An equal opportunity/affirmative action employer.
POSITIONS OPEN

RESEARCH

Myocen Corporation, a progressive agricultural biotech company located in San Diego, California, currently has the following openings:

FERMENTATION RECOVERY

Entry-level research assistant is needed to assist in development, scale-up and validation of recovery processes for bioprocess products. B.A./B.S. in food science, microbiology or engineering. Some laboratory experience and knowledge of manual processing/sterilization equipment preferred. Coursework in microbiology and math necessary.

DOWNSSTREAM PROCESS DEVELOPMENT

Entry-level research position is available in implementing methods to stabilize microbial cells for use as bioprocesses and in the scale-up of methods to manufacturability. Will help develop methods for characterization and evaluate product stability. B.A./B.S. in microbiology, biochemistry, or food science. Some laboratory experience and knowledge of computer programming and statistics classes preferred.

BIOANALYTICAL CHEMIST

Develop and validate analysis methods for recombinant proteins and fatty acids; research fundamental chemistry of protein and fatty acid products. Experience with SDS-PAGE, HPLC and GC. Team-oriented, excellent communicator required. Ph.D. in analytical chemistry or biochemistry; 2 to 3 years of experience in development/validation of analytical methods.

We offer a competitive compensation and benefits package, including medical/dental, stock purchase plan, 401k, and a fitness center. Please send resume identifying position applied for and salary requirements to: Myocen Corporation, Human Resources Department, 5451 Oberlin Drive, San Diego, CA 92121. Equal Opportunity Employer.

ASSOCIATE RESEARCH SCIENTIST/BIOTHERAPIST

To conduct independent investigation of pulmonary surfactant proteins and protein-lipid interactions by various biochemical means, including chromatography, electrophoresis, electroblotting, immunostaining and protein sequencing. M.D. or Ph.D. in life sciences plus 2 years of experience required. Salary: $46,000 per year. Place of employment/interview: Los Angeles, California. Send this ad and your resume to: NOF #311, P.O. Box 9560 Sacramento, CA 95823-0560 no later than 28 September 1991.

POPULATION BIOLOGIST

The Department of Biology at Davidson College plans to appoint a population biologist with strong quantitative and computer teaching skills. The rank of the appointment is open. The successful applicant will teach in an introductory biology course and will develop courses in quantitative biology and in his/her specialty. The appointment is expected to start 1 July 1992. Interested persons should send curriculum vitae, a statement of research interests, a bibliography, selected reprints and three letters of reference to: Dr. John H. Williamson, Department of Biology, Davidson College, Davidson, NC 28036, by 15 October 1991. Women and minorities are encouraged to apply.

SOMATIX THERAPY CORPORATION

Somatix Therapy Corporation is a leading biotechnology company utilizing gene transfer and cellular transplantation technologies to develop cell-based protein delivery system therapeutics. Positions are available immediately for highly motivated and qualified individuals.

RESEARCH SCIENTIST (MOLECULAR BIOLOGY)

Should have experience in techniques of gene expression in mammalian cells. Ph.D. plus postdoctoral experience required.

RESEARCH SCIENTIST (CELL BIOLOGY)

Position requires experience studying the role of extra-cellular matrices, cell-cell interactions and/or cell adhesion molecules in mammalian cell growth and differentiation. Ph.D. plus postdoctoral experience required.

We offer a competitive salary and compensation package. Please submit curriculum vitae to: Department #2, Somatix Therapy Corporation, 850 Martin Village Parkway, Alameda, CA 94501. Equal Opportunity Employer.

POSITIONS OPEN

MICROBIOLOGIST

AMVAX, Inc., a human vaccine research, development, and manufacturing company, has these positions available:

Ph.D./masters in microbiology/biochemical engineering with 2 to 6 years of industrial experience. The selected candidate will be responsible for bacterial fermentation process development and improvement.

PROCESS/VALIDATION ENGINEER

M.S./B.S. chemical or biochemical engineering with 3 to 7 years of pharmaceutical GMP experience. Proven validation track record is essential. Scale-up work, process transmittals, technology innovations and computerized process control experience required.

PROTEIN CHEMIST

Ph.D./masters in biochemistry with 2 to 6 years of industrial experience. The selected candidate will be responsible for GMP purification process development/improvement and assay development. Hands-on experience in protein downstream processing, immunoassay development (ELISA, FPLC and large-scale LC) is desirable.

An Equal Opportunity Employer. Mail or fax resume to: AMVAX, Inc., Personnel Director, 12040 Indian Creek Court, Beltsville, MD 20705. FAX: 301-470-6198.

HERITAGE BIOLOGICALS

Agricultural United States Department of Agriculture

MOLECULAR GENETICIST

The U.S. Department of Agriculture (USDA), ARS, Avian Disease and Oncology Laboratory, East Lansing, Michigan, is seeking a molecular geneticist (permanent, full time, GS-12/13) to lead research to develop a model of the chicken genome and to identify and map genes that determine disease resistance and other economic traits. This is a base-funded, high priority ARS program conducted in cooperation with Michigan State University. Knowledge of genetics and molecular biology required. U.S. citizenship required. A Ph.D. and experience in mapping eukaryotic genes desirable. Salary commensurate with experience (range: $37,294 to $57,650). For information about application procedures, call 517-387-6825. Incomplete applications will not be accepted. Applications must be marked 1N072 and must be postmarked by 15 October 1991. Information for position, call Dr. R. 1. Witter at 517-387-6828. An Equal Opportunity Employer.

STATISTICIAN

Position available for a Ph.D. level statistician, preferably with experience in an academic biomedical setting, to head an academic biostatistics facility at the University of Connecticut Health Center. Responsibilities include consultative support for ongoing research programs. Opportunities exist for interaction with federal research centers, participation in academic programs, collaborative research efforts and independent research. Salary and possible faculty appointment (leading to tenure) will be commensurate with experience. Applications should be sent to: Leonard P. Papalaskas, Assistant Vice President for Research, University of Connecticut Health Center, Farmington, CT 06030. Include curriculum vitae, description of relevant experience, and names of at least three references. An Affirmative Action/Equal Opportunity Employer, M/F./W./H.

STATISTICAL BIOSTATISTICIAN

To develop statistical techniques for analysis of Human Retrovirus, including the use of high input databases, localization and topographic analyses. A Ph.D. is required for faculty appointment. Knowledge of nonlinear optimization techniques as well as UNIX quite essential.

Send resume to:

Dr. Henri Begleiter
SUNY Health Science Center
450 Clarkson Avenue, Box 1203
Brooklyn, NY 11203

POSITIONS OPEN

STAFF VIROLOGIST

Position will involve secondary in vitro evaluation of candidate antivirals found active in a primary screeing system, mechanism of action studies, and further evaluation in several animal studies. Additional duties include training junior staff and overseeing their work, writing independent research proposals and presentations. Experience required with 2 years of postdoctoral research experience. Experience should include postgraduate work experience in virological research with a specific emphasis in bunyaviruses (Hantaan) in BSL-3 and BSL-4 containment facility. Demonstrated administrative and technical supervisory skills are also required. Forty hours per week, 7-4:30 a.m. Salary: $44000 per month. Mail resume and copy of ad to: Department of Economic and Employment Development, 1100 North Euclid Street, Room 312, Baltimore, MD 21201. Job Order No. 9048636. Job location: Fort Detrick, Maryland. Equal Opportunity Employer/Affirmative Action.

COURSES AND TRAINING

SINGLE CELL GEL (SCG) WORKSHOP

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The SCG assay is a nuclease-sensitive technique for the detection of intercellular differences in DNA damage and repair using small numbers of individual cells. The workshop includes both seminars and hands-on demonstrations of SCG in vivo and in vitro and human applications. Cost: $650.

Contact: Integrated Laboratory Systems, Genetic Toxicology Division, P.O. Box 1301, Research Triangle Park, NC 27709. Telephone: 919-544-4589.

ANNOUNCEMENTS

REQUEST FOR PROPOSALS

The Minnesota Pollution Control Agency announces the publication of a Request For Proposals (RFP) for the writing of an Ecological Risk Assessment Guidance Document. Closing date for receipt of proposals is 7 October 1991. Copies of the RFP can be obtained by calling or writing: Dr. David A. Belluck, Minnesota Pollution Control Agency, 520 Lafayette Road, St. Paul, MN 55155. Telephone: 612-296-7874.

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