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The AAAS Science & Technology Policy Colloquium provides a forum in which federal and industrial policymakers and members of the scientific and engineering community can participate in an open discussion of issues relating to science and technology policy.

The Colloquium occurs after the release of the President’s budget but before final congressional action, thus allowing for the timely exchange of information about the budget and the consequences of various policy issues involving science and technology.

**Who should attend:** Scientists, administrators, industrial R&D managers, policymakers, academicians, association officials, federal grant recipients, students, and others with an interest in science and technology policy.

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**Thursday, 16 April**

**Welcome:** Leon M. Lederman, Director Emeritus, Fermi National Accelerator Laboratory, and Chairman, Board of Directors, AAAS

**Keynote:** D. Allan Bromley, Assistant to the President for Science and Technology, and Director, OSTP

**Alternative Visions for U.S. Science and Technology (Symposium)**
- The Overall Federal R&D System — Frank Press, President, National Academy of Sciences
- Restoring Integrity to the Scientific System
- Technology Policy and Economic Competitiveness — Ralph Gomory*, President, Alfred P. Sloan Foundation
- Science and Technology in Support of a Globally Sustainable Environment — William Clark, Harvard University

**Competitiveness in the Evolving International System (Luncheon address)**

**Prospects for R&D in an Election Year (Panel)**
- Congressional Perspective on R&D in the FY 1993 Budget
- Overview of FY 1993 R&D Budget Proposals
- The Politics of Large S&T Projects

**Major R&D Agency Budgets for FY 1993 (Concurrent small group sessions)**
- DOD
- DOE
- NASA
- NIH
- NSF

*Invited speaker

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**Friday, 17 April**

**Breakfast Address:** Les Aspin* (D-WI), Member, U.S. House of Representatives

**Concurrent Symposia**
- A Market Shake-Out in Research and Education: Is It in the Cards? Is It Underway?
- International Collaboration in Science and Technology
- The Politics of Health Research

**Luncheon Address:** William Reilly*, Administrator, U.S. Environmental Protection Agency

**Closing Remarks:** Thomas H. Moss, Dean of Graduate Studies and Research, Case Western Reserve University

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Budget discussions will be based on AAAS Report XVII: Research and Development, FY 1993, a comprehensive analysis of the proposals for the FY 1993 budget, prepared by AAAS and a group of its affiliated scientific, engineering, and higher education associations. Registrants will receive this report at (or before) the Colloquium; the AAAS Science and Technology Policy Yearbook, 1992 (containing most of the colloquium addresses, plus other significant items) following the Colloquium; and Congressional Action on R&D in the FY 1993 Budget in the fall.

Register now by completing and returning the form on the facing page. For further information, contact: Directorate for Science and Policy Programs, 1333 H Street, NW, Washington, DC 20005; (202) 326-6600.
Advance Registration Form

AAAS Colloquium on Science & Technology Policy
16–17 April 1992 † The Capital Hilton † Washington, DC

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To register by mail (26 March deadline¹), send this top half (registration form) to: Registration, AAAS S&T Policy Colloquium, P.O. Box 630285, Baltimore, MD 21263.

To register by FAX (26 March deadline¹; VISA or MasterCard only), send this top half (registration form) to 202-289-4021.

To register by phone (26 March deadline¹; VISA or MasterCard only), call 202-326-6600 (9am – 5pm Eastern Time).

¹ Deadline for advance registrations is 26 March 1992. Thereafter, register in person at the Capital Hilton beginning at 8:00 am, 16 April. On-site registration fees are $15 higher than advance registration fees. [2] Special rates: Nonprofit rates apply only to employees of government, academic, and nonprofit organizations. Student rates apply only to full-time undergraduate and graduate students and retirees. [3] Refund requests for registration fees and meal tickets must be submitted in writing (to the address or FAX number above) by 10 April 1992 and will be honored after the Colloquium; no refunds will be made on cancellations received after 10 April. [4] Publications: All registrants receive AAAS Report XVII: Research & Development, FY 1993 before (or at) the Colloquium; the AAAS Science and Technology Yearbook, 1992 after the meeting; and Congressional Action on R&D in the FY 1993 Budget in the fall. [5] Program materials will be mailed to those who preregister by 26 March.

| Registration Fees |
|-------------------|--------|---|
| Regular (with 3 meals) | $280 | $____ |
| Regular (no meals) | $205 | $____ |
| Nonprofit² (with 3 meals) | $220 | $____ |
| Nonprofit² (no meals) | $145 | $____ |
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| Lunch (16 April) | $ 35 | $____ |
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| Lunch (17 April) | $ 35 | $____ |

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AAAS S&T Policy Colloquium † 16–17 April 1992

(Reservations received after 21 March cannot be guaranteed)

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POSITIONS OPEN

The Department of Anesthesia at the University of Pennsylvania seeks applications for the position of ASSISTANT PROFESSOR (tenure track). The successful candidate is expected to conduct research on mechanisms of anesthetic action, with special emphasis on the peripheral vascular effects of anesthetics. Experience in whole animal techniques, microcirculation, signal transduction mechanisms, and cell biology is desired. Responsibilities include directing a tissue culture facility, teaching graduate and medical students, and participation in collaborative research programs. Applicants must have an advanced degree (Ph.D., M.D.), relevant postdoctoral research experience in pharmacology or a related discipline, and a record of research accomplishment. Proven potential to develop an independent research program with extramural funding is expected. The primary appointment will be in the Department of Anesthesia, a joint appointment in the tenure track in the appropriate basic science department is required for basic scientists. Candidates should submit their curriculum vitae, names of three references and a statement of research and career goals to: David E. Longnecker, M.D., Chairman, Department of Anesthesia, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104-4283, by 20 March 1992. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

ELECTROPHYSIOLOGIST/HISTOCHEMIST with experience in the olfactory system; ASSISTANT PROFESSOR (non tenure track) position. To join research team investigating neurodegenerative disorders and olfactory dysfunction. A Ph.D. is required in olfactory pathways useful, as well as interest in axoplasmic transport. Contact: Dr. Richard L. Doty, Director, Smell and Taste Center, Department of Otolaryngology: Head and Neck Surgery, School of Medicine, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104. Send curriculum vitae and statement of medical research interests, along with names of three references, to the University of Pennsylvania Medical Center is an Equal Opportunity/Affirmative Action Employer.

BIOLOGY: ASSISTANT PROFESSOR, fall 1992, tenure track. Pennsylvania State University, to teach upper level courses appropriate to field of specialization and introductory biology courses, to conduct research appropriate to undergraduate and master's level interests, to supervise the university gardens, greenhouse, and orchards. Ph.D. in plant biology, commitment to undergraduate and graduate education required. Salary: $32,000. Please send letter of application and resume with names, addresses, and telephone numbers of three references to: Dr. Leeda Carusutto, Chairperson, Biology Department, Central Connecticut State University (CCSU), New Britain, CT 06050-4010. Review of candidates will begin on 12 March 1992. CCSU is an Affirmative Action/Equal Opportunity Employer. Women, minorities, the handicapped and veterans are encouraged to apply.

ASSISTANT PROFESSOR, University of Wisconsin–Madison, Medical School, Department of Medical Microbiology and Immunology. The Department of Medical Microbiology and Immunology invites applications for a teachers-track (12-month) position at the rank of assistant professor. Applicants must have a Ph.D. and/or M.D. degree with solid research training, excellent teaching experiences and interests in the molecular basis of parasitic, microbial or other pathogen diseases. Candidates will be expected to develop and maintain strong independent research in the field of molecular parasitology, mycology or bacteriology and to participate in teaching medical and graduate students. Starting date for this position is negotiable. Applicants should send curriculum vitae, a brief outline of current and future research plans and three letters of recommendation to: Dr. Edward Balish, Ph.D., Professor, Department of Medical Microbiology and Immunology, The University of Wisconsin–Madison, 1380 University Avenue, Madison, WI 53706. The University of Wisconsin–Madison is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR
UNIVERSITY OF PENNSYLVANIA
SCHOOL OF MEDICINE
DEPARTMENT OF ANATOMY AND \nPENNSYLVANIA MUSCLE INSTITUTE

A tenure-track assistant professor position is being jointly offered by the Pennsylvania Muscle Institute and the Department of Anatomy of the University of Pennsylvania School of Medicine. The successful candidate will be expected to establish an extramurally funded research program using a molecular biological approach to study motor neuron or muscle (preferred emphasis on development) or contractile protein structure/function relationships. The position will also involve the teaching of medical students (e.g., cell and tissue biology), and participation in the training of graduate students and postdoctoral fellows.

Application deadline is 1 April 1992. Send curriculum vitae and three letters of recommendation to: Joseph J. Gall, Chair, Department of Anatomy, University of Pennsylvania School of Medicine, 37th and Hamilton Walk, Philadelphia, PA 19104-6085.

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FACULTY POSITION

The Department of Biochemistry at University of Medicine and Dentistry of New Jersey (UMDNJ), New Jersey's university of the health sciences, Robert Wood Johnson Medical School, invites applications for a tenure-track position at the ASSOCIATE PROFESSOR level. Candidates should have a Ph.D., M.D. or equivalent plus two or more years of postdoctoral training as well as significant research accomplishments in one of the following areas: cell biology, developmental biology or immunology. Successful candidates are expected to obtain extramural funding from granting agencies and to establish a vigorous research program in addition to teaching medical students and graduate students. Send curriculum vitae, reprints, a statement of research accomplishments and plans, and three to four letters sent by 15 March 1992, to: Search Committee, Department of Biochemistry, University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer. M/F/H/V.

The University of Medicine is a member of the University Health System of New Jersey.

BIOLOGY POSITIONS

The Center for Extracellular Matrix Biology at the Institute of Biosciences and Technology, Texas A&M University, located at the Texas Medical Center, Houston, Texas, invites applications for two tenure-track positions at the ASSISTANT PROFESSOR level. Applicants should have a Ph.D. or M.D. and a proven record of accomplishments as a postdoctoral fellow or faculty member and have research interests in the area of extracellular matrix biology. Preference will be given to candidates with training in biochemistry and/or cell biology and experience in molecular biology.

Applications should send a letter outlining their research interests, their curriculum vitae and three letters of reference to: Dr. Magnus Hoek, c/o Hill Alley, Institute of Biosciences and Technology, 2121 Holcombe Boulevard, Houston, TX 77030.

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

CELL BIOLOGIST
CARLETON COLLEGE

Applications are invited for a 1-year leave replacement beginning 1 September 1992. The position of ASSISTANT PROFESSOR in the Department of Biology. Teaching responsibilities include a course in cell biology, a course in immunology, and participation in laboratories of a tremuta-thought introductory course, and a seminar course. Applicants must have a Ph.D. Women and minority candidates are strongly encouraged to apply. Send application, curriculum vitae, undergraduate and graduate transcripts, a statement of teaching philosophy, a summary of research and three letters of reference to: G. J. C. Hill, Department of Biology, Carleton College, Northfield, MN 55057–4025 by 16 March 1992. Carleton College is an Equal Opportunity/Affirmative Action Employer.

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SCIENCE, VOL. 255
Protein Chemistry Research at Pfizer

The Department of Molecular Genetics and Protein Chemistry is a rapidly growing group committed to the support of Pfizer's drug discovery program through the application of new and emerging technologies. Through a range of innovative programs, we provide essential reagents and information to multidisciplinary discovery project teams. Areas currently covered by the Protein Chemistry Department include the recovery and characterization of recombinant proteins; peptide synthesis, including the use of peptide libraries; protein structural analysis by chemical, spectroscopic and crystallographic means; the isolation from natural sources of new protein targets of interest and new approaches to the development of biochemical probes.

For our current expansion of the Protein Chemistry unit, we seek highly capable candidates at both PhD and BS/MS levels who will lead one phase of our effort while contributing to team success. In all cases, a range of experience will be considered an advantage, including a knowledge of molecular biology techniques.

Research Scientist, Protein Chemistry Candidates should possess a PhD in Biochemistry or a related field, with an interest in protein structure and function. Postdoctoral training and a sound publication record will be advantageous. Experience in protein purification is essential, and a knowledge of biophysical methods for protein characterization is also desirable. For this position, we seek a versatile scientist to lead their own laboratory group while participating in a highly interactive senior staff team.

Research Scientist, Receptor Biochemistry For this position, candidates should possess a PhD and postdoctoral experience. Knowledge in the biochemistry of receptor proteins is a central requirement. We seek a lab leader who, with colleagues, will implement any necessary approach (including expression cloning) to determine the sequence and structure of selected receptor molecules.

Assistant Scientists, Protein Chemistry Candidates for these positions should have a BS or BS/MS in Biochemistry or a related field. Especially sought are individuals with a fine academic background and some experience in protein purification, while additional experience in other areas will also be welcome. Knowledge of chromatography and electrophoresis is essential. An acquaintance with receptor binding assays will be helpful for one position.

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KEAN COLLEGE OF NEW JERSEY

FACULTY POSITION, DEPARTMENT OF BIOLOGICAL SCIENCES ASSISTANT PROFESSOR. This is a 12-month, non-tenure track position available August 1992. The department is seeking a qualified candidate to teach introductory biology, upper level courses in area of expertise, and assist in the administration and running of the Kean College Herpetology Research Project. The successful applicant will also be expected to contribute to Kean's B.A. program in Biological Sciences. Qualification: Ph.D. in a biological science. Send letter of application, résumé, names and addresses of three references to: Dr. Robert C. Griffen, Chairman, Department of Biology, Kean College of New Jersey, Union, NJ 07083. Kean College is an Equal Employment Opportunity/Affirmative Action Institution encouraging and welcoming applications from women and minority candidates.

EUKARYOTIC MOLECULAR GENETICIST

Non-tenure-track RESEARCH ASSISTANT PRO- FESSOR position available August 1992. Expertise in recombinant DNA technology, molecular cloning, and interest in translational research is essential. Responsibilities include teaching course in molecular genetics, participating in research laboratory, and assisting in research laboratory activities. The successful candidate will work closely with the professor and will have responsibility for independent research projects. Qualifications: Ph.D. in molecular biology. Send letter of application, curriculum vitae, and names of three references to: Dr. Michael W. Barry, Chairman, Department of Biology, East Carolina University, Greenville, NC 27858-4383. Screening begins 1 March 1992. East Carolina University is an Equal Opportunity/Affirmative Action Employer. Confidential applications will be considered.

ASSISTANT PROFESSOR, MEDICINAL CHEMISTRY AND PHARMACOLOGY. The College of Pharmacy, The Ohio State University, invites applications for a tenure-track assistant professor position beginning 1 July 1992. The successful individual will be expected to develop an independent research program in medicinal chemistry and pharmaco- nology, with an emphasis on drug design and development. Qualifications: Ph.D. in chemistry or pharmacy with postdoctoral experience in medicinal chemistry and pharmacology. Send letter of application, curriculum vitae, copies of all transcripts, and three letters of recommendation to: Dr. Joseph F. Halasy, Chairman, Search Committee, Division of Medicinal Chemistry and Pharmacology, College of Pharmacy, The Ohio State University, Columbus, OH 43210. Applications received by 12 June 1992 will be considered.

NEUROCHEMIST/NEUROPHarmacologist with behavioral interests; ASSISTANT PROFESSOR (non tenure) track). To join research team investigating an olfactory dysfunction including that due to eye or nose cancer and Parkinson's disease. Immuno- nohistochemistry and radioimmunoassay use- ful. Contact: Dr. Richard L. Doty, Director, Smell and Taste Center, Department of Otorhinolaryngology: Head and Neck Surgery, School of Medicine, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104. The University of Pennsylvania Medical Center is an Equal Opportunity/Affirmative Action Employer.

ECOLOGY/BOTANY/GENERAL BIOLOGY

The Department of Biology, University of Central Ar- kansas, invites applications for a tenure-track ASSISTANT PROFESSOR position to begin August 1992. Preference will be given to individuals conducting research in physiological plant ecology. The individual will teach general biology, plant taxonomy, and ecopsychology. Qualifications: Ph.D. or equivalent. Send letter of application, curriculum vitae, copies of all transcripts, and three letters of recommendation to: Dr. Ed- mond Griffin, Chairman, Department of Biology, Uni- versity of Central Arkansas, Conway, AR 72035 (tele- phone: 501-450-3146; FAX: 501-450-6280). The deadline for接收 applications is 15 March 1992. The University of Central Arkansas is an Affirmative Action/Equal Opportunity Employer.

METHODOLOGY AND MOLECULAR BIOLOGY—VISITING ASSISTANT PROFESSOR. Middlebury College invites applications for a 3-year term position in biology beginning fall 1992. Applicants should have a broad background in biology, a commit- ment to excellence in both teaching and research, and an interest in supervising student research. The successful applicant will offer a laboratory course in general microbiology, an advanced course in microbiology or molec- ular biology, and participate in the college's undergraduate research program. Applicants should be experienced in molecular genetics, and a course which will serve the general college community. Ph.D. required. Candi- dates must send their curriculum vitae, undergraduate and graduate transcripts, three letters of reference and research interests, and recommendations must be re- ceived by 20 March 1992. Three recent letters of recommend- ation should be sent directly to: C. R. Langdon, Chairman, Department of Biology, Middlebury Col- lege, Middlebury, VT 05753. Telephone: 802-388- 3711-5435. An Equal Opportunity/Affirmative Action Employer.

ANATOMY AND CELL BIOLOGY

A tenure-track position is available at the ASSIST- ANT OR ASSOCIATE PROFESSOR level in the Department of Anatomy and Cell Biology at the Uni- versity of Georgia on 1 July 1992. Research is stressed, and candidates are expected to maintain independent pro- grams of investigation and to participate in graduate education. The department seeks candidates with experi- ence that complements existing programs in developmen- tal, cellular/molecular, and reproductive biology. Individuals with research on the development and/or cellular biology of the nervous system are of particular interest. Teaching is in medical gross anatomy, and training will be provided if necessary. If productive, collegial interactions include interdisciplinary programs in developmen- tal biology, neuroscience, molecular biology, cancer, and developmental biology. Candidates should send curriculum vitae and names of three references to: Dr. Charles J. Flickinger, De- partment of Anatomy and Cell Biology, Box 439, School of Medicine, University of Georgia, Athens, GA 23008. An Equal Opportunity/Affirmative Action Employer.

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WEIL Biotechnology

The Department of Obstetrics and Gynecology at Tufts University School of Medicine invites applications for three research faculty positions at the ASSISTANT PROFESSOR level, starting 1 July 1992. Applicants (Ph.D. or M.D.) must bring a record of extramural research training in molecular genetics, developmental biology, or reproductive biology. Preference will be given to those demonstrating strong potential for de- veloping independent research with extramural funds, estab- lishing clinical collaborations, and obtaining joint appointments in tubal Tufts University graduate schools. Send curriculum vitae, summary of research and teaching and three letters of reference by 1 May 1992 to: Dr. Alan H. DeCherney, Chairman, Department of Obstetrics and Gynecology, Tufts University School of Medi- cine, Stearns 209, 136 Harrison Avenue, Boston, MA 02111. Tufts University is an Equal Opportunity/Affirmative Action Employer and encourages applications from wom- men and members of minority groups.

ASSISTANT PROFESSOR OF PHARMACOLOGY

THE UNIVERSITY OF GEORGIA

Applications are invited for a 12-month tenure-track faculty position at the assistant professor level. A Ph.D. in pharmacology or a related area is required. A profes- sorship requires a Ph.D. degree and postdoctoral experience is preferred. Areas of interest include pharmacokinetics and drug delivery systems. Responsi- bilities include teaching graduate and undergraduate level courses and developing extramurally funded research program. Applications received by 31 March 1992 are assured of consideration. Applicants should submit a letter of application, curriculum vitae, and the names and addresses of three references to: James C. Price, Ph.D., Chair, Search Committee, Department of Pharmacology, College of Pharmacy, The University of Georgia, Athens, GA 30602. The University of Georgia is an Equal Opportunity/ Affirmative Action Employer.

TERRESTRIAL VERTEBRATE ZOOLOGIST

Tenure-track ASSISTANT PROFESSOR in Depart- ment of Zoology/Assistant Professor in Georgia Bio- logical Survey of University of Oklahoma starting July 1992, with 12-month salary of $38,000 (subject to budget approval). Responsibility, as active member of Oklahoma Natural Heritage Inventory (a division of Survey), to inventory and evaluate priority species and biological communities in Oklahoma, including many species. Teaching duties expected of one per year. Person to develop active research program in area of specialty. Ph.D. required. Successful applicant must dem- onstrate research productivity and potential for exter- mal funding. Ability to conduct meaningful research of regional fauna; skill in written and oral communication. Screening from 20 March 1992 until position filled. Send resume, summary of post-doctoral experience and re- search interests, reprints, and three recommendation letters to: Gary D. Schnell, Director, Oklahoma Bio- logical Survey, Sutton Hall 363, University of Okla- homa, Norman, OK 73019. Telephone: 405-325- 4034. Equal Opportunity/Affirmative Action Employer. Women and minorities encouraged to apply. University has policy of being responsive to needs of dual-career couples.

ANIMAL GENETICIST. The Department of Vet- erinary Pathobiology, Texas A&M University, is seeking to fill an ASSISTANT OR ASSOCIATE PROFESSOR level tenure-track position with research and teaching responsibilities in animal genetics. Candidates should have a Ph.D. degree in genetics or molecular biology and will be expected to bring molecular biology and/or statistical expertise to ongoing departmental programs in comparative animal genetics. The program is currently teaching while developing an independent research program. Interested persons should send letter of application including complete resume and names and addresses of three references to: Dr. James E. Womack, Search Committee Chairman, Texas A&M University, Department of Veterinary Pathobiology, College of Veterinary Medicine, College Station, TX 77843-4467. Telephone: 409-845-9810. FAX: 409-845-7789. Texas A&M University is an Equal Opportunity/Affirmative Action Employer.
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**Principal Research Investigators/Ph.D.**

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*(Position #RS-58-91)* Responsible for providing leadership in Bioanalysis which will include ensuring development of valid bioanalytical methods to support drug development and discovery, as well as prompt reporting of all related materials. Requirements include a Ph.D. in pharmaceutical or analytical chemistry with a minimum of 4 years experience, including assay development using HPLC/GC methodologies. Familiarity with LIMS and LAS systems and worldwide GLP regulations required.

**Research Scientists/BS/MS**

*(Position #RS-89-91)* Responsible for assisting in the experimental design and preparation of study protocols and for the practical conduct of *in vivo* and *in vitro* drug disposition experiments. Requirements include a BS (MS) in a biological/technical discipline with up to 2 years relevant experience. Candidates should have knowledge of drug metabolism and HPLC or other quantitative chromatographic/instrumental techniques. Familiarity with radioisotopes and GLP regulations preferred.

*(Position #RS-86-91)* Responsible for developing and validating analytical procedures for the determination of drug metabolite concentrations in biological specimens in support of pre-clinical and clinical drug disposition studies. Requirements include a BS (MS) in analytical, organic or pharmaceutical chemistry with up to 2 years relevant experience. Candidates should have a strong background in trace analysis of organic molecules in biological matrices, using HPLC, and/or GC with US, or fluorescence and/or electrochemical detection.

*(Position #RS-72-91)* Responsible for conducting *in vivo* and *in vitro* experiments and developing chromatographic methods for the separation of drugs and metabolites in biological fluids. Requirements include a BS (MS) with up to 2 years related experience and familiarity with *in vitro* techniques and use of computers and microprocessor controlled instrumentation.

At Sterling Winthrop, you’ll enjoy a highly competitive salary and benefits package, including an attractive relocation program, and outstanding career opportunities. Our Rensselaer, NY facility will be relocating to a new state-of-the-art facility in Upper Providence Township, PA in approximately 1993. We invite you to share in the opportunities now and in the future. For confidential consideration, forward your resume and salary requirements to:

**TENURE-TRACK POSITION AT THE NIH**

A junior tenure-track position is available in the Genetics and Biochemistry Branch, NIDDK, NIH. Applications are invited from individuals of the highest caliber who will complement the scientific interests of the current staff. The Branch is similar to a small academic department and has excellent laboratory facilities. The intramural program of the NIH offers an outstanding research environment and the primary responsibility of the successful applicant will be to initiate and establish a first-rate research program. The Branch is located on the main intramural campus of the NIH in Bethesda, Maryland, a 20 minute ride from Washington, D.C. The current interests of the faculty-level staff include:

- Eukaryotic DNA repair, molecular mechanisms of toxin action, and mechanisms of nuclear and cytoplasmic localization of proteins and nucleic acids in *Xenopus* (Eric Ackerman)
- Biochemistry and molecular biology of homologous recombination in eukaryotes and prokaryotes, the structure and function of novel triplex DNAs; gene rearrangements in eukaryotes (Dan Camerini-Otero)
- Molecular mechanisms of homologous recombination in higher eukaryotes, functional studies of mammalian DNA ligases and the formation and recognition of DNA mismatches (Peggy Hsieh)
- Molecular basis of mechanisms involved in hormonal and developmental control of gene expression: protein-nucleic acid interactions, trans acting factors of steroid/thyroid hormone receptor gene superfamily (Vera Nikodem)
- Molecular genetics of lysosomal storage diseases, protein trafficking, gene targeting by homologous recombination to produce models of human disease (Rick Proia)
- Control of gene expression in vertebrates (Ed Rall)
- Thyroid hormone-protein interactions and the mechanism of intracellular thyroid hormone transport, genetic factors in thyroid neoplasia, and clinical studies in thyroid cancer (Jacob Robbins)
- Determinants of anteroposterior axis formation and the role of transcription factors in the specification of neuronal phenotypes in early *Xenopus* development (Sheryl Sato)

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

**Dr. R. Daniel Camerini-Otero, Chief**

**Genetics and Biochemistry Branch**

**National Institutes of Health**

**Building 10, Room 9D-15**

**9000 Rockville Pike**

**Bethesda, Maryland 20892**
The BOC Group, an innovative world leader in Health Care Products, has a challenging career opportunity at our state-of-the-art Technical Center located in Murray Hill, New Jersey.

Applicants are invited to join an on-going biotechnology program aimed at identifying acute and critical care pharmaceutical agents. The successful candidate will be responsible for the design and development of isolation techniques for biologically active proteins from recombinant organisms. The position requires a PhD in Biochemistry with 2+ years of experience, or an MS with 5+ years of experience in protein isolation, purification and characterization. Knowledge of molecular biology techniques or of immunology would be a plus.

The BOC Group Technical Center offers a challenging and stimulating scientific research environment with the opportunity to interact with professionals from many disciplines. We provide an excellent compensation and benefits package. For prompt, confidential consideration, please forward your resume and salary history to: The BOC Group Technical Center, Human Resources, Box EM, 100 Mountain Avenue, Murray Hill/New Providence, New Jersey 07974.

**THE BOC GROUP**

**Technical Center**

**Postdoctoral Research Associate**

The Medical Research Division of American Cyanamid has an immediate opening for a Postdoctoral Research Associate, within the Fermentation Department, to be part of a team that is currently investigating the regulation of antibiotic production in Streptomyces.

The successful candidate will be a recent graduate in microbiology, biochemistry or a related field with experience in microbial physiology or genetics and have an interest in the regulation of secondary metabolism. The candidate should be familiar with standard molecular biology procedures; familiarity with RNA isolation and Northern blot analysis, the use of reporter genes, and gene disruption and replacement techniques would be a plus. Experience with Streptomyces/Bacillus would also be desirable.

The appointment to this position is renewable for up to two years. For consideration, please send your resume to: Professional Employment Office, Dept. MR, Lederle Laboratories, 401 N. Middletown Road, Pearl River, NY 10965. Equal opportunity employer, M/F.

**Chairperson and Professor, Department of Psychiatry**

Tufts University School of Medicine and New England Medical Center

Applications are invited for the position of Chairperson of the Department of Psychiatry at Tufts University School of Medicine, and Chairman-in-Chief at New England Medical Center. We seek a candidate with the highest academic credentials who will be able to direct a vigorous multi-faceted department in an expanding academic Medical Center and leading Medical School.

Please send your curriculum vitae and supporting information to: Robert Schwartz, M.D., Hematology-Oncology Division, Department of Medicine, New England Medical Center and Tufts University School of Medicine, 750 Washington Street, Boston, MA 02111-1845. We are an equal opportunity employer.

Tufts University School of Medicine

New England Medical Center

**Gliatech, Inc.**

**PEPTIDE/PROTEIN BIOCHEMIST**

Gliatech, Inc., a growing pharmaceutical company dedicated to understanding and utilizing the unique properties of neural and glial cells in treating nervous system disorders, has an opening for a peptidic/protein biochemist. The successful candidate will have a Ph.D. in biochemistry or a related field and previous experience in peptide synthesis and protein purification. Prior research in the neurological sciences will be helpful, but not required.

Gliatech offers a competitive salary and benefits package, and our suburban Cleveland location allows access to affordable housing within a major metropolitan area. Qualified candidates are encouraged to submit their curriculum vitae to: Gliatech, Inc., Corporate Recruiting, R3740 Commerce Park Rd., Cleveland, OH 44122.
CHAIR, PHARMACOLOGY DEPARTMENT

St. Jude Children's Research Hospital, a private research institute, is recruiting a new chairperson for its established Department of Pharmacology. The appointee will be expected to lead an internationally recognized program in his/her area of interest and to shape the future direction of research within the institution, through faculty recruitment and by contributions to the institution's overall scientific leadership, as a member of the Institution's Executive Committee.

The department is currently undergoing major expansion, and has recently occupied a new 240,000 sf research tower, where substantial laboratory and office space has been reserved for the pharmacology chair. The department currently has 9 faculty, all of whom are NIH funded investigators, and the new chair will be expected to recruit additional faculty. The current departmental budget is approximately $3 million. The department interfaces with established basic science programs in Virology and Molecular Biology, Biochemistry, Immunology, and Tumor Cell Biology, and established clinical research programs in Hematology/Oncology, Pharmaceutical Sciences and Infectious Diseases. Appointment to the University of Tennessee graduate faculty is also possible. The Chair's salary will be provided through committed endowed funds, together with additional resources commensurate with the needs of a dynamic and productive individual.

Applicants should submit a curriculum vitae and the names and addresses of four references to: Dr. William E. Evans, Chair, Pharmacology Search Committee, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, Tennessee 38105

St. Jude Children's Research Hospital is an Affirmative Action/Equal Opportunity Employer

THE STATE UNIVERSITY OF NEW JERSEY

RUTGERS

PROFESSORSHIP IN MOLECULAR BIOLOGY AND PLANT PATHOLOGY

Rutgers University is recruiting a Professor to lead a research program in the molecular biology of host-parasite interaction at the Center for Agricultural Molecular Biology (AgBIOTECH). AgBIOTECH serves the state's agricultural and environmental industries with expertise in biotechnology. AgBIOTECH currently has six research groups housed in new facilities and will grow to 16 research groups. Significant opportunity exists for input in the development of the Center and for technology transfer.

Candidates should have demonstrated outstanding research and leadership skills in plant molecular biology and plant pathology. Expertise in novel mechanisms of disease resistance and host-parasite interaction is preferred, but other specialties will be considered.

The successful candidate will have developed a productive research program attracting significant external funding and with potential for field applications. He/she will provide leadership for the development of the research thrust and will collaborate with other faculty working in this area. The candidate will advise graduate students and undertake some teaching. The position requires excellent communication skills.

The position will be split between AgBIOTECH (60%) and the Department of Plant Pathology (40%), and will be tenured in the Department of Plant Pathology. AgBIOTECH will provide some staff support, in addition to a generous salary and benefits package. Send resume, statement of research interest and teaching philosophy, and names of three references for confidential consideration to Dr. Peter Day, Center for Agricultural Molecular Biology, Rutgers University, New Brunswick, NJ 08903–0231 by April 1, 1992.

Rutgers University is an Equal Opportunity/Affirmative Action Employer.


Battelle, Pacific Northwest Laboratory, is an international leader in the practical application of technology. Since our founding 60 years ago, Battelle researchers have been advancing science and putting technology to work—from restoring the environment to advanced studies in the areas of energy resources, human health, industry and defense.

Today, 25 years after Battelle began operating the federal government's Pacific Northwest Laboratory, we've become one of the world's leading environmental research laboratories. Our staff of over 4,000 scientists, engineers and support specialists, are internationally recognized in their fields.

Chief Scientist — Computer Science Department

Battelle's Computer Sciences Department is a national leader in developing and deploying state of the art information systems technology to problems of national importance. We are currently seeking a qualified, senior individual to lead the technology direction of the Department as the Chief Scientist. The successful candidate will:

— provide an exciting vision that matches the broad possibilities of technology with solid bases leading to new business opportunities
— have a PhD in a science or engineering discipline
— offer a history of successes in building new capabilities by defining and leading innovative research teams
— be able to demonstrate significant experience (15 years or more) in the design and development of computational systems for scientific applications
— easily and naturally communicate concepts and excitement about our work to technical peers, clients, and non-experts in the computing field
— possess broad experience working in or with both academia and industry
— foster a creative, innovative working environment that leads to continuous career opportunities for all our staff

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, send your resume to: Battelle, Pacific Northwest Laboratory, Staffing Center, P.O. Box 1406, Dept. 6104-SKM, Richland, WA 99352. FAX (509) 376-9099. We are an equal opportunity employer.

...Putting Technology To Work
POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR. The Division of Pulmonary/Critical Care Medicine, University of California, Davis, School of Medicine is recruiting for a full-time, tenure-track position. The division has a strong clinical program and desires an individual with a demonstrated record of research in lung cell biology, competence in teaching and training, and experience necessary for acting as an attending physician in pulmonary/critical care medicine. Interested applicants should send a resume to: Timothy Albertson, M.D., Ph.D., Chair, University of California, Davis, WPM/C Critical Care Medicine, University of California, Davis, Medical Center, 4301 X Street, #2120 Professional Building, Sacramento, CA 95817. The University of California, Davis, is an Equal Opportunity/Affirmative Action Employer.

EXTENSION TOXICOLOGIST

The Department of Agricultural Chemistry of Oregon State University (OSU) is recruiting a toxicologist to serve as an extension specialist. This individual will be concerned with the toxicology of agricultural and other chemicals and the assessment of risk associated with exposure to these substances. The candidate will translate scientific findings in these areas into practical information through training and educational programs, publications, etc. This is a 12-month tenure-track position to be filled at the Assistant Professor level; requires a Ph.D. in toxicology, chemistry, biochemistry or a closely related field and demonstrated research competence in toxicology. Communication skills, knowledge of computer information systems, and/or understanding of pesticide chemistry, toxicology and technology also will be considered favorably.

Send curriculum vitae letter describing experience to the position, requirements, and a list of three references to:

Extension Toxicologist Search Committee
Department of Agricultural Chemistry
Oregon State University
Weener 339
Corvallis, OR 97331-4602
Telephone: 503-737-2563
Application deadline is 20 March 1992. OSU is an Equal Employment Opportunity/Affirmative Action Employer and has a policy of being responsive to the needs of dual-career couples.

OREGON HEALTH SCIENCES UNIVERSITY (OHSU) SCHOOL OF MEDICINE
PORTLAND, OREGON

The Department of Biochemistry and Molecular Biology is recruiting a Ph.D. in cell biology, biochemistry, or related field for a tenure-track position at the Assistant Professor level. The successful candidate will teach courses in biochemistry and related topics and develop an extramurally funded research program. Applications should be sent to: Chair, Search Committee, Department of Biochemistry and Molecular Biology, School of Medicine, Oregon Health Sciences University, Portland, OR 97201-3098, OHSU is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS MEHARRY MEDICAL COLLEGE

Applications are invited for two tenure-track positions as ASSISTANT OR ASSOCIATE PROFESSOR in the Department of Microbiology. Candidates are sought with training and research experience in molecular virology or microbial pathogenesis. Successful applicants will be expected to participate in graduate and professional teaching activities of the department and to develop and maintain an extramurally funded research program. Institutional programs in cell and molecular biology, neurosciences, and tropical diseases provide opportunities for collaboration. Appointment from minority and women candidates are especially encouraged. Please send curriculum vitae, a summary of research interests and experience, and three letters of recommendation to: Shirley B. Russell, Chairperson, Department of Microbiology, Meharry Medical College, Nashville, TN 37208. Meharry Medical College is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN PHARMACOLOGY

Candidates are invited to apply for a full-time, tenure-track position at the level of ASSISTANT PROFESSOR available 1 July 1992. The position requires a Ph.D. degree, preferably in pharmacology, and postdoctoral experience. Applicants should have a strong research background in cellular and molecular pharmacology. Special interests are receptor structure/function and signal transduction. The successful candidate is expected to establish an extramurally supported research program and participate in the B.S. in pharmacy and graduate training programs of the department; pharmacy background desirable. Please send curriculum vitae, representative reprints, and the names of three references to: Dr. K. C. Kim, Department of Pharmacology, University of Maryland School of Pharmacy, 20 North Pine Street, Baltimore, MD 21201. The committee will begin reviewing applications on 1 April 1992. The University of Maryland at Baltimore is an Affirmative Action/Equal Opportunity Employer, M/F/H/V.

ASSISTANT/ASSOCIATE PROFESSOR at the University of Wisconsin–Madison. The Department of Human Oncology and the University of Wisconsin Comprehensive Cancer Center invite applications for an assistant or associate professor position in the general area of molecular oncology. Areas of interest include, but are not limited to, cell cycle control, oncogene/suppressor genes, cytoskeleton gene regulation, signal transduction, and molecular pharmacology. This position will involve both research and graduate student education. Applications should include a curriculum vitae, copies of two recent publications, and a brief description of current and future research objectives. Applications should be mailed to: Michael N. Gould, Ph.D., K4322 CSC, 1300 University Avenue, Madison, WI 53792. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

PLANT POPULATION ECOLOGIST

Tenure-track, ASSISTANT/ASSOCIATE PROFESSOR, Department of Range Science and the Ecology Center, Utah State University. Beginning summer of fall 1992. An earned doctorate with an emphasis on plant population biology at the time of appointment is required. The position should have an experimental, field-oriented approach and a strong quantitative background. Applicants with special interests in conservation biology will also be considered. Postdoctoral experience and an interest and experience in arid land research are desirable. Position is 60% research and vegetation (course work) and 40% in vegetation measurements and graduate class in population biology. Jointly sponsored by Utah Agricultural Experiment Station and Utah women's minority groups are strongly encouraged. Send resume, selected publications and names of three references to: M. C. Caldwell, Department of Range Science, Utah State University, Logan, UT 84322. Review of applications begins 10 April 1992; position open until filled. An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS MEHARRY MEDICAL COLLEGE

Applications are invited for three tenure-track positions as ASSISTANT OR ASSOCIATE PROFESSOR in the Department of Pathology. Candidates are sought with training and research experience in any area of pathology. Successful applicants will be expected to participate in graduate and professional teaching activities of the department and to develop and maintain an extramurally funded research program. Institutional programs in cell and molecular biology, neuroscience, and tropical diseases provide opportunities for collaboration. Application from minority and women candidates are especially encouraged. Please send curriculum vitae, a summary of research interests and experience, and three letters of recommendation to: Shirley B. Russell, Chairperson, Department of Microbiology, Meharry Medical College, Nashville, TN 37208. Meharry Medical College is an Affirmative Action/Equal Opportunity Employer.

VASCULAR RESEARCH POSITION

The Vascular Research Division of the Department of Pathology at the Brigham and Women’s Hospital, Harvard Medical School, is seeking well-qualified (M.D., Ph.D.) applicants for one or two tenure-track positions, at the ASSISTANT OR ASSOCIATE PROFESSOR level. Candidates should have completed at least 2 to 3 years of relevant postdoctoral experience and have the capability of directing an independent research program in the cellular/molecular/developmental biology of endothelial, smooth muscle, leukocytes, or extracellular matrix in a multidisciplinary vascular pathology center. Applicants should send their curriculum vitae, including a statement of their research interests and experience, and arrange for three letters of recommendation to: Michael A. Gimbrone, Jr., M.D., Director, Vascular Research Division, Department of Pathology, Brigham and Women’s Hospital, Longwood Medical Research Building, Room 401, 221 Longwood Avenue, Boston, MA 02115. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR IN RHEUMATOLOGY

The Yale Section of Rheumatology is seeking a physician, trained in internal medicine, with extensive training in molecular biology, experience in Lyme disease, and in animal models of Lyme disease. Individual should be able to pursue research in the molecular immunobiology of Lyme disease, and also participate in fellowship training, general teaching, and patient care. Individual must be capable of establishing an independent research program. Send curriculum vitae and three letters of reference to: Dr. Craft, M.D., Department of Internal Medicine, Yale University, P.O. Box 3333, New Haven, CT 06510, by 27 March 1992. Yale is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR/CELLULAR IMMUNOLOGIST

The Virginia Mason Research Center (VMRC) in Seattle, Washington, is recruiting an ASSISTANT/ASSOCIATE PROFESSOR level investigator to establish an independent research program in immunobiology. Preference will be given to applicants with expertise in cellular immunology, and whose interests interface with the highly interactive research environment at VMRC, which emphasizes human immunology and autoimmunity. Please reply by 15 March 1992 with curriculum vitae and statement of research interests to: Gerald T. Nepom, M.D., Ph.D., VMRC, 1000 Seneca Street, Seattle, WA 98101. Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION VIROLOGY/MICROBIOLOGY

SAN FRANCISCO STATE UNIVERSITY (SFSU) CENTER FOR ADVANCED MEDICAL TECHNOLOGY (CAMT)

This tenure-track position will start at the ASSISTANT OR ASSOCIATE PROFESSOR level in fall 1992. Candidates must have a doctoral degree, be able to instruct cell culture, diagnostic virology and related subjects for M.S. degree students, and develop appropriate research. Curriculum vitae, reprints, a brief description of proposed research and letters of reference should be sent to: Chair, Search Committee, CAMT, SFU, 1600 Holloway Avenue, San Francisco, CA 94132 by 6 April 1992. SFU is an Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK ZOOPLANKTON BIOLOGIST

Division of Marine Sciences (MFS), Rosenstiel School of Marine and Atmospheric Science (RSMAS). The Division invites applications for a full-time tenure-track academic appointment at the ASSISTANT, ASSOCIATE OR FULL PROFESSOR level. We are seeking a zooplankton biologist with demonstrable abilities to conduct creative research, attract funding from national agencies and develop appropriate research. Curriculum vitae, reprints, a brief description of proposed research and letters of reference should be sent to: Chair, Zooplankton Biology Search Committee, MFS, RSMAS, Miami, 4600 Rickenbacker Causeway, Miami, FL 33149.

The University of Miami is an Equal Opportunity/ Affirmative Action Employer.
Promising new researchers may win fellowships for visits to Japan of six months to two years. The fellowships, which support both American and Canadian researchers at Japan’s national laboratories and certain non-profit R&D institutes, are provided by the Research Development Corporation of Japan (JRDC).

To qualify, researchers should hold a recent doctoral degree in a field of science or engineering. In the fields of engineering, candidates without the doctorate will be considered if they can demonstrate equivalent professional experience.

The STA fellowships provide the following allowances (in Japanese yen):

- Round-trip, economy-class air transportation: one ticket
- (for the researcher only, not for dependents)
- International relocation allowance: ¥200,000
- Monthly living allowance: 270,000 yen
- Monthly housing allowance up to: 100,000 yen
- Monthly family allowance: 50,000 yen
- Annual travel allowance in Japan: 115,000 yen

In all, more than 100 Japanese government research institutions are potential hosts for STA postdoctoral fellows. They include such well known laboratories as the Institute of Physical and Chemical Research (RIKEN), Electrotechnical Laboratory, National Institute for Environmental Studies, National Institute of Health, Mechanical Engineering Laboratory, National Institute of Agrobiological Resources, Communications Research Laboratory, and the National Research Institute for Metals.

Potential candidates are responsible for finding the Japanese research institute which will best match their field of professional interest. Each applicant should begin correspondence with his or her prospective Japanese host well before submitting a proposal.

**In the United States**

To obtain an application, United States citizens, nationals, or permanent residents should request NSF publication 90-144, *Japan Program Announcement*, from the following address:

Forms and Publications Unit, Room 232
National Science Foundation
Washington, D.C. 20550

Publications may also be ordered electronically through either Internet (pubs@nsf.gov) or BitNet (pubs@NSF). Please include the NSF publication number and title, number of copies needed, your name, and a complete mailing address.

The NSF application deadline is November 1, 1992, for positions starting in April 1993 or after. In addition, there are opportunities for individuals wishing to start sooner. Further information is available from the following address:

Japan Program, Room V-501
National Science Foundation
Washington, D.C. 20550

or, by electronic mail:

NSFinfo@nsf.gov (Internet) or
NSFinfo@NSF (BitNet)

**In Canada**

For further information, Canadian candidates may contact the following:

Ms. Dawn Conway
Director, International Programs
Natural Sciences and Engineering Research Council of Canada
200 Kent Street
Ottawa, Ontario
K1A 1H5
Canada

Tel: (613) 995-1818
Fax: (613) 992-5337
ASSISTANT STAFF POSITION
SECTION OF DIGESTIVE DISEASE RESEARCH
THE CLEVELAND CLINIC FOUNDATION

Two new positions at the Assistant Staff (Professor) level are available in the Section of Digestive Disease Research, Research Institute, Cleveland Clinic Foundation. Positions are targeted for expansion of basic investigations in inflammatory bowel disease. The candidates must have a Ph.D. and degree of potential for an independent career in research. Their area of expertise can include molecular biology or cell biology, immunology, biochemistry, etc. They must be interested in the gastrointestinal tract as a target organ and/or inflammation as a mechanism of disease. Package includes laboratory space, equipment, professional salary for the staff and technical/fellow, and it is negotiable depending on qualifications. Interested individuals should send curriculum vitae and correspondence to: Gerardo Fischetti, Section Director of Digestive Disease Research Research Institute NN1-26 The Cleveland Clinic Foundation 9500 Euclid Avenue, Cleveland, OH 44195 The Cleveland Clinic Foundation provides a smoke-free environment and is an Equal Opportunity Employer.

CHAIRMAN, DEPARTMENT OF PATHOLOGY.
Northwestern University seeks a chairman for its Department of Pathology. The successful candidate will be responsible for the administration of all educational, research and clinical programs within the department and will serve as department chairman at Northwestern Memorial Hospital. Other responsibilities include coordinating the development of an exemplary program and widely respected research program linking the laboratory with ecologists and conservation biologists in the Division of Biological Sciences and the Department of Natural Resources in teaching responsibilities. Qualifications: Ph.D. in biology or related subject, extensive research and teaching experience adequate for appointment at the associate/full professor level. Personal research should be in some aspect of bird populations with demonstrated ability to work effectively as part of a group including graduate students, undergraduates and volunteers. Salary commensurate with background and experience. Attractive fringe benefits. To apply, submit a letter of application, curriculum vitae, and names of three references to: Charles Walters, Executive Director, Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850. Closing date: 1 May 1992. Northwestern University is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR, BIOTECHNOLOGY CENTER
UTAH STATE UNIVERSITY (USU)

The Director: Manages, coordinates and promotes the growing, centralized biotechnology program; encourages biotechnology in the colleges; provides services, facilities and a full range of technical support for faculty, staff, and students; advises departments on new faculty positions with biotechnology components; assists faculty with grant proposals; coordinates the interdepartmental course in biotechnology.

Requirements include: Appropriate terminal degree, significant research experience, demonstrated administrative skills, commitment to a service role for the center. Experience in grant writing, instrument and biotech product development preferred.

The Biotechnology Center Director reports to the Director of the Utah Agricultural Experiment Station on budget and fiscal matters, to the Office of Research and Development on research applications and to the University President on faculty matters.


Direct inquiries to: Search Committee
Seattuck Research Program
P.O. Box 31
Issip, NY 11751

DIRECTOR
MICHIGAN STATE UNIVERSITY (MSU)
U.S. DEPARTMENT OF ENERGY (DOE)
PLANT RESEARCH LABORATORY (PRL)

Applications for the position of Director of the MSU-DOE Plant Research Laboratory (PRL) are invited from plant scientists with an outstanding record of research achievement. We seek an individual with administrative experience, capable of providing scientific leadership and direction, and management of all activities including planning, coordination, resource development and management, and research activities. Responsibilities for the director include an earned Ph.D. degree in an agronomically related discipline, experience in research administration, and the ability to interact with faculty, staff, students, agricultural industry personnel, legislators and other clientele served by OARDC programs. This position is a 12-month appointment. Salary range $46,000 to $109,999. U.S. Citizenship is required. Applications are requested by May 1, 1992. The new Director will begin his appointment in August 1992.

The Plant Research Laboratory involves the subsistence of energy-related problems in the plant sciences, the Director should be appreciative of both basic and applied research in the plant sciences and should have a desire to participate in the formulation and implementation of research initiatives in these areas. The Director will be appointed as a tenure professor in an appropriate academic department at Michigan State University. The salary is intended to be attractive, and access to laboratory space, research facilities and levels of ongoing research support are exceptional.

Applications or inquiries stating full professional details and names of at least three referees should be directed to: Mr. John L. Fennessey, Search Committee, Michigan State University, PO Box 117, East Lansing, Michigan 48824-1312. Telephone: 517-355-5159. Applications should be received by May 1, 1992, but the search will continue until a suitable candidate is identified.

Michigan State University is an Equal Opportunity Affirmative Action Employer.

The Cornell Laboratory of Ornithology seeks to fill a newly ENDED PROFESSORIAL CHAIR. Professor will be responsible for providing academic direction for the Cornell Lab. of Ornithology in developing an exemplary program and widely respected research program linking the laboratory with ecologists and conservation biologists. The Division of Biological Sciences and the Department of Natural Resources in teaching responsibilities. Qualifications: Ph.D. in biology or related subject, extensive research and teaching experience adequate for appointment at the associate/full professor level. Personal research should be in some aspect of bird populations with demonstrated ability to work effectively as part of a group including graduate students, undergraduates and volunteers. Salary commensurate with background and experience. Attractive fringe benefits. To apply, submit a letter of application, curriculum vitae, and names of three references to: Charles Walters, Executive Director, Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850. Closing date: 1 May 1992. Cornell University is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR, BIOTECHNOLOGY CENTER
UTAH STATE UNIVERSITY (USU)

The Director: Manages, coordinates and promotes the growing, centralized biotechnology program; encourages biotechnology in the colleges; provides services, facilities and a full range of technical support for faculty, staff, and students; advises departments on new faculty positions with biotechnology components; assists faculty with grant proposals; coordinates the interdepartmental course in biotechnology.

Requirements include: Appropriate terminal degree, significant research experience, demonstrated administrative skills, commitment to a service role for the center. Experience in grant writing, instrument and biotech product development preferred.

The Biotechnology Center Director reports to the Director of the Utah Agricultural Experiment Station on budget and fiscal matters, to the Office of Research and Development on research applications and to the University President on faculty matters.


Direct inquiries to: Search Committee
Seattuck Research Program
P.O. Box 31
Issip, NY 11751

DIRECTOR/ASSOCIATE DEAN
The Ohio State University invites applications for the position of Director, Research and Development Center (OARD—Ohio’s agricultural experiment station) and Associate Dean, College of Agriculture. This position is a 12-month position. The Vice President of Agricultural Administration and is responsible for leadership, direction, and management of all activities including planning, coordination, resource development and management, and research activities. Responsibilities for the director include an earned Ph.D. degree in an agriculturally related discipline, experience in research administration, and the ability to interact with faculty, staff, students, agricultural industry personnel, legislators and other clientele served by OARDC programs. This position is a 12-month position.

Applications are requested by April 1, 1992. The Ohio State University, 116 Agricultural Administration Building, 2120 Fyffe Road, Columbus, OH 43210. Telephone: 614-292-8222; FAX: 614-292-3263.

DIRECTOR, NUCLEAR RADIATION ASSESSMENT DIVISION
The U.S. Environmental Protection Agency (EPA), Environmental Monitoring Systems Laboratory—Las Vegas, is seeking a senior scientist/environmental scientist to serve as the Director of the Nuclear Radiation Assessment Division (NRAD), (RM-3003-35), salary range $65,000 to $100,000. Responsibilities include managing the programs, resources, and a multidisciplinary staff which are necessary to fulfill the NRAD mission. The NRAD develops and implements a continuous environmental radiation and public safety program in areas surrounding the sites of U.S. underground nuclear tests conducted by Department of Energy (DOE). Individual must be managing complex scientific operations; reviewing programs; determining the nature and cause of problems; recommending and implementing corrective actions; and in developing, performing, and managing programs for assessment of radiological measurements in the environment. The NRAD Director fulfills a Radio-logical Safety Adviser to the DOE Test Controller’s Scientific Advisory Panel; and participates in radiation emergency response exercises. Position requires an advanced degree in one of the physical or biological sciences, engineering, mathematics, or computer technology; and a degree or comparable experience in health physics. The individual must have the knowledge and experience with the operation of environmental radiation monitoring networks. Much of the work of NRAD requires a Top Secret clearance which the incumbent must possess or be qualified to obtain. Incumbent will be considered a radiation worker. Send copies of college transcripts or OPM Form 1170 and Federal VA 2412. Application closing date is 12 March 1992 to the attention of Connie A. Christensen, Human Resources Office; U.S. EPA, P.O. Box 98161, Las Vegas, NV 89198-8510. Applications and materials must be requested in writing at the above EPA address. Proof of U.S. citizenship is required prior to appointment. The U.S. EPA is an Equal Opportunity Employer.

DIRECTOR OF RESEARCH (CURATOR)
The Virginia Museum of Natural History (VMNH) is seeking a Director of Research and Collections. We desire an applicant with a Ph.D. in a discipline of natural sciences. Candidates are expected to have an established and ongoing research program that complements existing research at the museum (mammalogy, paleontology, geology, anthropology, and education). Experience in development of a tenured position would be given to candidates possessing experience in planning and budgeting, in collecting and caring for natural history holdings, and in development of research programs. Priority administrative and fundraising experience preferred. Salary commensurate with experience. Deadline 1 May 1992.

Direct inquiries to: Search Committee
Seattuck Research Program
P.O. Box 31
Issip, NY 11751

USU is an Affirmative Action/Equal Opportunity Employer.
FACULTY POSITIONS—
CENTER FOR NEUROBIOLOGY
UNIVERSITY OF CALIFORNIA, DAVIS

The newly established Center for Neurobiology invites outstanding individuals in the field of integrative neurobiology to apply for faculty appointments at a rank (Assistant, Associate and Full Professor) commensurate with qualifications. The Center serves as a campuswide unit involving faculty from five different colleges/schools on the Davis campus. It is expected that 10 faculty appointments will be made over a 5 year period, with up to 5 positions available for appointment over the next 2 years. The specific fields of research range from a systems approach to cellular neurobiology. Emphasis will be placed on neuroscientists working with both evolutionary and functional perspectives. These positions are part of a major commitment to further, through the Center, the development of neurobiology at UC Davis.

The University of California is interested in candidates who are committed to the highest standards of scholarship and professional activities and are committed to the development of a campus climate that supports equality and respect for differences based on gender, cultural ethnicity, level of disability and sexual preference. The selection committee will begin review of applications on March 15; the positions will remain open until filled. Applicants should send curriculum vitae and the names of at least three references to:

Michael S. Gazzaniga, Ph.D.
Director, Center for Neurobiology
Dean’s Office,
Division of Biological Sciences
University of California, Davis, CA 95616

DIRECTOR
NATIONAL ASTRONOMY AND IONOSPHERE CENTER
CORNELL UNIVERSITY

Cornell University invites applications and nominations for the position of Director of the National Astronomy and Ionosphere Center. Headquartered on the university campus, the Center is operated by Cornell for the National Science Foundation. Its observing facilities at the Arecibo Observatory in Puerto Rico are available for use by the astronomical and atmospheric sciences community on a proposal and peer review basis. Four research groups at the Observatory work in the areas of radio and radar astronomy, atmospheric sciences and ionospheric modification. A major NSF/NASA sponsored upgrading of the 305 m telescope is currently in progress which will greatly increase the research opportunities for all of these groups. The Director is the chief administrative and scientific officer of NAIC and should have a record of accomplishment in one of the areas of interest at the Observatory which would qualify him or her for appointment to a tenure track position in the appropriate department. However, it is expected that the Director will devote essentially full time to NAIC related activities. Demonstrated administrative, management and leadership skills are essential. Applications or nominations should be received by March 30, 1992. Please reply to: Dr. N.R. Scott, Vice President for Research and Advanced Studies, 314 Day Hall, Cornell University, Ithaca, NY 14853, Tel: 607/255-7200.

Cornell University is an equal opportunity, affirmative action employer.

Postdoctoral Researchers

Genentech, a leader in the biotechnology field, is seeking highly motivated Postdoctoral Fellows in basic research relating to:

- Cell Genetics
- Molecular Biology
- Protein Chemistry
- Developmental Biology
- Immunobiology
- Protein Engineering
- Cardiovascular Biology

The Genentech Postdoctoral Program consists of more than 50 Postdoctoral Fellows and is a vibrant and intensive environment for advanced scientific training. Postdoctoral Fellows conduct basic research in the areas of our scientific interests, publish actively in scientific journals, attend and present work at scientific conferences and maintain close ties with the academic community.

Genentech offers an extensive benefits package. Send your resume to Genentech, Inc. Human Resources Dept. YSPD, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity.

Geisinger Clinic

Postdoctoral and Associate Scientist Positions

Positions available for Associate Scientists (three years postdoctoral experience) and postdoctoral fellows. The successful applicants will be engaged in research on the biochemical and molecular mechanisms by which angiotensin peptides and other hormonal and pharmacological stimuli mediate cardiac muscle cell growth under the direction of Dr. Kenneth M. Baker. There will also be the opportunity to engage in research defining the role of a localized intracellular renin-angiotensin system in mediating cardiac muscle cell growth, with an emphasis on the regulation of the precursor genes for this system, and cloning the expression of the relevant receptors.

Competitive salary and fringe benefits are available. Please send CV and three names or letters of reference to: Human Resources Dept. (KB), Geisinger Clinic, 100 North Academy Avenue, Danville, PA. 17822-3024, Equal Opportunity Employer M/F/H/V.

Geisinger
HEAD OF BIOMOLECULAR COMPUTING FACILITY

As part of the ongoing expansion of biomolecular and biological sciences at Emory University, applications are solicited for the position of Director of the newly created Biomolecular Computing Facility. The Director will lead the train faculty in the use of the state-of-the-art GCG and other software, design interfaces to GCG programs in collaboration with end-users, support and maintain GCG and database management software, and enhance the availability of software, hardware and database developments and network resources relevant to the evolving needs of molecular biology. GCG will still have an office in the new Rollins Research Building equipped with a VAX, PC and Mac, and will be supported by a network coordinator. This is a full-time, permanent staff position. Candidates with an advanced degree in a molecular biology-related discipline are preferred. Applications will be reviewed beginning 15 February 1992 until the position is filled. The Director should send curriculum vitae and direct three letters of reference to:

Committee on Biomolecular Computing Department of Microbiology and Immunology Emory University 3001 Rollins Research Center Atlanta, GA 30322

Prospective candidates are encouraged to apply. Emory University is an Equal Opportunity/Affirmative Action Employer.

DEPARTMENT HEAD
DEPARTMENT OF AGRICULTURAL ENGINEERING UNIVERSITY OF MINNESOTA

The College of Agriculture, University of Minnesota, is seeking candidates for the position of head, Department of Agricultural Engineering. The head serves as administrative officer of the department; provides leadership for programs in research, extension, and international activities; represents the department both within the university and to the wider community. The appointee may continue his or her professional interests and activities within the department's programs, as appropriate.

Qualifications include an earned doctorate in agricultural engineering or a closely related engineering discipline, or a scientific discipline with a strong engineering emphasis; demonstrated achievement in research, teaching, extension, extension of five years of professional experience. Desired qualifications include demonstrated ability in fiscal management, administration and leadership; effective communication skills; and an understanding of the land grant system. Must be eligible for permanent employment (U.S. citizen or appropriate visa status). Application deadline is 15 April 1992. Send letter of application, an up-to-date curriculum vitae, and names of five qualified individuals to report on the position to:

Dr. George L. Johnson
Chair, Department of Agricultural Engineering
University of Minnesota
Minneapolis, MN 55455

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status or sexual orientation.

DIRECTOR OF HISTOCOMPATIBILITY LABORATORY

The Department of Hospital Laboratories of the University of North Carolina (UNC) Hospitals and the Department of Microbiology and Immunology of the UNC-Chapel Hill School of Medicine invite applications for a tenure-track position. The successful candidate, Ph.D. or M.D., will be expected to develop an active research program within the area of histocompatibility and to direct the Histocompatibility Laboratory at UNC Hospitals. Active participation in the teaching of medical students and graduate students and laboratory staff is expected. Academic rank and salary will be commensurate with experience. Interested applicants should submit curriculum vitae and the names and addresses of four references to: James D. Folds, Ph.D., Clinical Microbiology–Immunology Laboratories, CB #7600, Room 1055 East Wing, UNC Hospitals, Chapel Hill, NC 27514-5132. April 1, 1992. The University of North Carolina and the UNC Hospitals are Equal Opportunity/Affirmative Action Employers.

DIRECTOR UNIVERSITY BIOTECHNOLOGY FACILITY AND BIOCHEMISTRY FACULTY POSITION

Kansas State University invites nominations and applications for a joint appointment as Director, University Biotechnology Facility and as a faculty member in biochemistry. The Director will have lead responsibility for the newly established University Biotechnology Facility, which will be a major research center, with initial focus in protein sequencing, peptide synthesis, and oligonucleotide synthesis, and will provide dynamic growth and development of this facility through acquisition of additional state-of-the-art equipment, mainly through instrumentation grants. Administratively, the Director will report to the Provost and, through the Vice Provost for Research. The appointment as a half-time faculty member in biochemistry will be at the Assistant or Associate Professor rank and will carry normal expectations of faculty in the areas of teaching, research and service in biochemistry. The individual is expected to maintain an externally funded independent research program of research.

Qualifications include necessary academic credentials to hold faculty rank and experience related to supervision of a major instrumentation program. Interested applicants should send a complete résumé describing their experience related to their administrative leadership for a biological sciences research interaction particular to biochemistry. Please include a minimum of three references that may be contacted with respect to the qualifications of the candidate for this joint position. The search committee will make decisions on nominations on 10 April 1992 and continue until the position is filled. The position is a 12-month appointment available 1 July 1992. Minutes should be sent to Dr. E. Roche, Head, Department of Biochemistry, Willard Hall, Kansas State University, Manhattan, KS 66506-3702.

The university is an Equal Opportunity Employer, and encourages applications and nominations of women and minorities for this position.

HEAD, LABORATORY OF NEUROSCIENCE, AGING AND NUTRITION, USDA Human Nutrition Research Center on Aging at Tufts University.

To initiate program in neuro- and/or neuro-behavioral sciences Center located on the Tufts University Health Sciences campus in Boston. Proven record of scientific accomplishment and willingness to explore problems of nutritional status. Research funding is anticipated. Tufts is an Equal Opportunity/Affirmative Action Employer. Send curriculum vitae, cover letter and at least four references to: Dr. David Rush, M.D., Head, Neurosciences Search Committee, 711 Washington Street, Boston, MA 02111 (telephone: 617-556-3320; FAX: 617-556-3295).

CELL/MOLECULAR PHYSIOLOGIST THE UNIVERSITY OF CHICAGO

The Committee on Cell Physiology invites applications for a FACULTY APPOINTMENT for qualified candidates in the area of cellular and molecular physiology. Candidates with research interests in the areas of membrane receptors, signal transduction and second messenger mechanisms, membrane transport, cell cycle control and aging are encouraged to apply. Some core research funding will be considered. The successful candidate will be a tenure-track appointee in the Department of Pharmacological and Physiological Sciences. Applicants should provide a brief letter of interest, a complete curriculum vitae and bibliography, and the names of three individuals who are willing to write letters of recommendation to:

Dr. Mitchell Villareal, Chairman Cell Physiology Committee 947 East 58th Street/MC 9296 The University of Chicago Chicago, IL 60637

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Serve as leader and principal contributor for new Technology Development in non-invasive medical monitoring, from concept to product introduction. Your expertise will be applied in one or more of the following areas: medical instrumentation, human physiology, electrophysiology and signal processing and algorithm development. Requires an MS or PhD in a biomedical or biophysical discipline, with a minimum of 6 years experience in successful medical technology development. Demonstrated leadership and management skills in a dynamic R&D team environment necessary.

**Instrumentation R&D Scientist**

Be a principal contributor to technology development in non-invasive medical monitoring. Responsible for measurement, analysis and development support of new analytical technologies, this position requires an MS or PhD in analytical chemistry, biophysics, bioengineering or related field with three or more years experience supporting product development. Experience in analytical chemistry/instrumentation, especially spectroscopy/optics is essential.

Nellcor offers competitive salaries and benefits including stock options and profit sharing. Please send your resume to: Employment, Dept. BFE, 25495 Whitesell St., Hayward, CA 94545. FAX (510) 299-4420. EOE men/women.

**MOLECULAR BIOLOGIST**

Wyeth-Ayerst Research is a multi-national leader in the research and development of a broad range of highly advanced pharmaceuticals. We currently have a position available in the Biotechnology and Microbiology Division at our Radnor, PA headquarters.

This scientist will work in the Technological Support Subdivision and participate in the development of viral vaccines and biologicals.

Candidates should have BS/BA degree plus at least two years of research experience, or an MS degree. Training in molecular biology, biochemistry and/or microbiology is desirable, and familiarity with methods for characterization of proteins would be helpful.

Wyeth-Ayerst Research offers a competitive salary, comprehensive benefits package and opportunities for advancement. For immediate consideration, forward your resume and salary history/requirements to: Wyeth-Ayerst Research Personnel, Position 899, P.O. Box 8299, Philadelphia, PA 19101-0082. An equal opportunity employer, M/F/D/V.

**DNX**

DNX is an established leader in the emerging field of transgenic sciences, developing enhanced biological models and systems for use in drug discovery, chemical safety testing, transgenic pharmaceutical production, and livestock improvement. Career opportunities currently exist in our research and development facilities in Princeton, New Jersey.

**IMMUNOLOGY/COMPLEMENT BIOLOGY**

**RESEARCH SCIENTIST**

Positions are available for Ph.D. level scientists with at least 1-3 years postdoctoral training in immunology or complement biology research. An interest in transplantation biology would be advantageous as would experience in molecular biology. Good oral and written skills a must. Code RSX-1.

**RESEARCH ASSOCIATE**

Several openings exist for the BS or MS level scientist with 2-3 years experience in immunological related techniques including ELISA's, monoclonal antibody production, complement assays. Code RAX-1.

**MOLECULAR BIOLOGISTS**

**RESEARCH ASSOCIATES**

Several openings exist for the BS or MS level scientist with 2-3 years experience in recombinant DNA technology, in vitro mutagenesis, mammalian cell culture and/or biochemistry. Code RAH-1.

**TRANSGENICS**

Opening exists in our transgenic animal facility for a BS or MS level research associate-micronjectionist. Applicants should be skilled in DNA pronuclear injection and/or ES cell manipulation. Molecular biology skills preferred. Code RTG-1.

DNX offers an excellent working environment and an ideal location (midway between New York and Philadelphia), as well as competitive compensation and a superior benefits package. Individuals interested in a challenging opportunity at an exciting and rapidly growing company are invited to submit a curriculum vitae or resume indicating position code reference and the names of three references to:

DNX Employment Manager 303B College Road East Princeton, NJ 08540
POSITIONS OPEN

BOSTON UNIVERSITY
SCHOOL OF MEDICINE
DEPARTMENT OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

The Boston University School of Medicine is continuing to expand the faculty and research program in the areas of molecular pharmacology and molecular neurobiology. A FACULTY POSITION is available at any level. Start-up funds, core facilities, and laboratory space are available to foster the establishment of new extramurally funded research projects. Please send curriculum vitae and names and addresses of three references. Dr. David H. Farh, Chairman, Department of Pharmacology and Experimental Therapeutics, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118. Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION
THE HEBREW UNIVERSITY
HADASSAH MEDICAL SCHOOL
DEPARTMENT OF ANATOMY AND EMBRYOLOGY

The Faculty of Medicine invites applications for the tenure-track position of LECTURER OR SENIOR LECTURER in the Department of Anatomy and Embryology beginning 1 October 1992. Candidates may hold a Ph.D. and/or M.D. degree. Postdoctoral training is required. Experience with teaching and research is of prime importance in the decision of the Search Committee. Preference will be given to candidates who have shown significant research activity and participation in the utilization of updated techniques to answer questions of importance to medical science. Preference will also be given to candidates with experience in the teaching of anatomy and/or neuroanatomy and/or embryology and teratology. Interested candidates should send curriculum vitae, list of publications, three to five selected reprints, statement of research activities and plans, and three letters of recommendation to: S. David Gerts, M.D., Ph.D., Chairman, Department of Anatomy and Embryology, The Hebrew University-Hadassah Medical School, P.O. Box 1172, Jerusalem 91010, Israel. Applications must be received not later than 15 April 1992.

FACULTY POSITION
CANCER/TRANSPLANTATION BIOLOGY

The Center for Cancer and Transplantation Biology of the Children's Research Institute/Children's National Medical Center is seeking an investigator (M.D. or Ph.D.) with a background in immunology or molecular biology and demonstrated interest in tumor cell microenvironment, tumor-host interactions and/or mechanisms of tumor neoplasia. Establishment of an independent laboratory program is envisioned, to complement an established research program in tumor cell glycosylphosphotidylinositol. Active clinical or pediatric oncology and a small, open-lab approach to cancer research are encouraged. The successful candidate will join the faculty of the University of Washington School of Medicine and will have appointment in the Departments of Pediatrics and Surgery. The University of Washington School of Medicine is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION(S) IN MAIZE MOLECULAR GENETICS
Available 1 June 1992 or thereafter, to study dosage-sensitive regulatory effects on selected molecularly defined loci in maize, using genetic and molecular methods. Exceptional expertise in genetics or molecular biology is desirable. Interested individuals should send curriculum vitae and the names and addresses of three references to: A. Birks, Division of Biological Sciences, 117 Tucker Hall, University of Missouri, Columbia, MO 65211.

POSITIONS OPEN

POSTDOCTORAL POSITION. Current studies focus on: (1) DNA photolyase and the mechanisms of enzymatic repair of DNA damaged by ultraviolet light; and (2) structure/function relationships in bacterial protein-DNA recombination, using two different flavins and tetrahydrofuran as cofactors. Applicants interested in enzymology, recombinant DNA technology or photolysis are encouraged to send curriculum vitae and names of three references to: Dr. Marilyn Jorns, Department of Biological Chemistry, Haber Institute, University School of Medicine, Broad and Vine, Philadelphia, PA 19102-1192.

DANA-FARBER CANCER INSTITUTE
HARVARD MEDICAL SCHOOL

A POSTDOCTORAL POSITION is available immediately in the laboratory of Dr. Alan D’Andrea for study of DNA photolyase and signal transduction. Experience in cell culture and molecular biology is advantageous, but highly motivated individuals are encouraged to apply. Send curriculum vitae and names of three references to: Dr. Alan D’Andrea, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study mRNA expression in posthatching brain for a 5-year NIH-funded project. Experience in molecular biology techniques desired. Send curriculum vitae and telephone number of three references to: Dr. Kusum Kumar, Michigan State University (MSU), Department of Pathology, 620 East Fee, East Lansing, MI 48824-1083. Telephone: (517) 432-1731. Dr. Kusum Kumar, MSU is an Affirmative Action/Equal Opportunity Institution.

POSITIONS OPEN

IMMUNOGLOBULIN TRANSCRIPTION AND SIGNAL TRANSDUCTION

A postdoctoral position is available to study regulation of transcription and signal transduction during B-cell development. Preference will be given to recent graduates with experience in cell biology and/or molecular biology. Salary is commensurate with experience. Please send curriculum vitae, reference letters, and name of three references to: Dr. Sanka Ghosh, Section of Immunobiology and Department of Molecular Biology and Biophysics, BCNM, Yale University School of Medicine, P.O. Box 9812, New Haven, CT 06516-0812.

POSITIONS OPEN

POSTDOCTORAL POSITIONS, MOLECULAR BIOLOGY

Spring or summer 1992 opening for position to study thymic stromal interactions and their role in early T cell development. The successful candidate will work under the supervision of Dr. Barbara Bryant, Department of Pathology, The University of Texas, Southwestern Medical Center, Dallas. The University of Texas, Southwestern Medical Center is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION 1 July 1992 for a molecular biologist interested in diabetes mellitus and/or lipoprotein metabolism. Skills in DNA manipulation, establishment and maintenance of bacterial expression systems, and cloning of DNA essential sequences desired. Send curriculum vitae, letter stating interests, and three names for references to: Dr. Robert O. Wolfrom, University of Texas Southwestern Medical Center, Dallas, TX 75235.


POSTDOCTORAL POSITION AIDS IMMUNOLOGY

Position is available 1 May 1992 for 2 years to study CD8 T cell responses to HIV-1 in naturally infected and vaccinated subjects. M.D. or Ph.D. applicants should send curriculum vitae and telephone numbers of three references by 1 April 1992 to: Janis V. Giori, Ph.D., Division of Clinical Immunology and Allergy, Department of Medicine, University of Medicine and Dentistry of New Jersey, 10833 Le Conte Avenue, Los Angeles, CA 90024-1745. The UCLA School of Medicine is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION IMMUNOLOGY

Applications are invited to investigate the role of early genes in tumor growth and programmed cell death. Requires Ph.D. in basic sciences and experience in molecular biology. Send curriculum vitae and telephone numbers of three references to: Dr. Toshiaki Imagawa, Department of Surgery, University of Kentucky, 800 Rose Street, Lexington, KY 40536. Telephone: 606-257-2677.

POSITIONS OPEN

POSTDOCTORAL POSITIONS available immediately to study either (1) the role of protein kinases in yeast growth control, or (2) gene-specific recombinant in H. influenzae. The yeast research will include molecular/genetic and biochemical analysis of the kinase kinase C pathways, and the bacterial research will focus on the regulation of insertion and excision within tRNA genes. Experience in the techniques of contemporary molecular biology and biochemical genetics is required. Send complete application by training grant requiring U.S. citizenship or permanent resident status. Send curriculum vitae and names of references to: (1) David L. Lemon or (2) John D. Wolfrum, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE. A position is available for an ambitious, interactive individual trained in molecular biology and/or genetics. Our work involves physiological and molecular biological approaches to understanding the roles of NMDA and AMPA receptors in neurologic disorders. Research programs include the study of mutant receptors, the identification and characterization of gene regulatory elements, and the functional and molecular characterization of native receptors in individual hippocampal neurons, all in the context of comprehending the cellular mechanisms of epileptogenesis and associated disorders. Plans include studies of mutant receptors and the development of transgenic mouse and/or transgenic animal models. Interested applicants should send curriculum vitae and names of three references to: Dr. Raymond D. d’Angelo, Department of Pharmacology, University of North Carolina, Chapel Hill, NC 27599. Equal Opportunity Employer.

PRORAKTOY GENOMIC SEQUENCING CENTER

To begin on or about April 1992 to work on a bacterial genomic sequencing project. The candidate should have broad experience in recombinant DNA technologies, DNA sequencing, microbiology, microbial genetics and the use of computational facilities working with the bacterium Rhodobacter sphaeroides, and the target of analysis is chromosome II (914 kb). Grant support for 1 year with a commitment for an additional 4 years. It will involve approximately four to five personnel including these positions. The candidates will play a major role in developing the project methodology, and setting research priorities. The project will be conducted within the below-listed departments. Both automated and manual DNA sequencing, automated gel readers, oligonucleotide synthesis, PCR, and high-speed networks are available, in addition to state-of-the-art facilities. Starting salaries will be competitive and a generous fringe benefit package will be provided including a comprehensive health plan.

Call Dr. Samuel Kaplan at 713-794-1742 or Dr. George Weissman at 713-792-5260 or write to the listed address.

Microbiology and Molecular Genetics
Biochemistry and Molecular Biology
P.O. Box 20708
Houston, TX 77225

The University of Texas Health Science Center at Houston is an Equal Opportunity Employer. Minorities and women are encouraged to apply.
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You'll find it at Synergen. Synergen is a different kind of biopharmaceutical company where world class scientists work closely with one another in an environment which is highly productive and interactive. We are developing protein-based human pharmaceuticals for the treatment of serious diseases including inflammatory diseases and neurological disorders. We are applying the latest advances in recombinant DNA technology and molecular biology. We continue our search for talented professionals who value the importance of new ideas.

FORMULATION SCIENTIST — This individual will supervise and be involved in laboratory work, develop formulations for new protein therapeutics for clinical testing and work on advanced delivery systems for product in late stage clinical trials. Position requires a Ph.D. with experience in protein chemistry, formulation or advanced delivery systems applicable to protein therapeutics.

PHARMACOKINETIC SCIENTIST — This professional will possess expertise in pharmacokinetics and protein analysis, and have a Ph.D. in pharmacokinetics, pharmacology or physiology.

PHARMACOLOGY SCIENTIST — The qualified candidate will be a Generalist with broad-based experience in cardiovascular, inflammation, neuroscience, growth factors and pharmacodynamics. Individual will test the efficacy of molecularly derived proteins in a variety of models of human disease. A broad physiology and research background is essential. A veterinary degree with Ph.D. in physiology or pharmacology is preferable.

DISCOVER RESEARCH SCIENTISTS — These positions require a Ph.D. in biochemistry, chemistry, or a life science. Proven expertise in protein purification is essential. Interest in cell adhesion molecules, growth factors or cytokines and experience in synthesis and use of agents for chemical modification of proteins is preferred.

PROCESS BIOCHEMISTRY SCIENTIST — This position involves developing and validating analytical tests and ensuring that all procedures follow FDA guidelines and cGMP regulations. A working knowledge of HPLC, gel electrophoresis, enzymatic assays, ELISA, DNA assays and LAL tests are required. A Ph.D. in biochemistry or related field and minimum 2 years' pharmaceutical experience are also required.

QUALITY CONTROL BIOCHEMIST — The position involves developing and validating analytical tests and ensuring that all procedures follow FDA guidelines and cGMP regulations. A working knowledge of HPLC, gel electrophoresis, enzymatic assays, ELISA, DNA assays and LAL tests are required. A Ph.D. in biochemistry or related field and minimum 2 years' pharmaceutical experience are also required.

RESEARCH ASSOCIATES — Areas: Microbiology, Fermentation, Preclinical Development, Formulations/Pharmaceutics, Analytical Biochemistry and Toxicology. These positions require a BS/MS in Biochemistry or a life science, computer literacy and 3-5 years' related experience.

Synergen offers a competitive compensation package, generous benefits including 401(k) and relocation assistance, and a Rocky Mountain community, renowned for its beauty, culture and natural setting, as a premier place to live and work. Please send your resume to: Synergen, Inc., Box 9, 1885 33rd Street, Boulder, CO 80301. We are an Equal Opportunity Employer.
The Dean of Medical Education is the primary administrator responsible for the curriculum development, coordination and evaluation of the following educational activities within DEAN, other credentials to:

- **PROJECT LEADER**
  - **POSTDOCTORAL SCIENTIST**

Two positions available for creative and motivated individuals, to conduct research on human reproductive disorders, such as preterm delivery and endometriosis. Project leader position requires Ph.D. with postdoctoral experience. Postdoctoral scientist position requires Ph.D. Candidates must have expertise in a wide range of techniques in molecular biology and immunology. Particular preference will be given to project leader candidates with experience in disease research. Send resume including names of three references to: Dr. N. N. Murdze, Adeza Biomedical, 1240 Elko Drive, Sunnyvale, CA 94089.

**POSTDOCTORAL POSITION**

- **PLANT POPULATION ECOLOGY CONSERVATION BIOLOGY**

The USDA Forest Service, Pacific Northwest Research Station, is recruiting for a position to participate in team research on conservation biology of wild populations of Pacific Yew subject to harvesting for Taxol production. Responsible for: (1) development of spatially based population models to evaluate the effects of harvesting, and (2) evaluate relative importance of sexual and asexual reproduction in different environments. Candidates must have a Ph.D. in plant population ecology, conservation biology or forest ecology with strong skills in computer simulation modeling. Initial appointment is for 1 year; additional years dependent on funding availability and performance. Send curriculum vitae and names of three references to: Dr. Thomas A. Spies, USDA Forest Service, Pacific Northwest Research Station, Corvallis, OR 97331. Telephone: 503-750-7324. Applications must be received by 20 March 1992. USDA Forest Service is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL ASSOCIATE, RIBOZYMES**

A position is available immediately to study catalytically active RNA molecules and their role in the inhibition of HIV replication. Experience in the organic or physical chemistry of nucleic acids or in molecular biology is desirable. Submit curriculum vitae and names and telephone numbers of three references to: Dr. John Goodchild, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545. An Affirmative Action/Equal Opportunity Employer, MF/H/H.

**POSTDOCTORAL POSITION**

- **UNIVERSITY OF PENNSYLVANIA**

Available to study a hormone-induced subunit of the amiloride-sensitive sodium channel. A Ph.D. with training in standard molecular genetics techniques for cloning of new proteins is required. Experience in protein biochemistry and tissue culture desirable. Please send curriculum vitae and names of three references to: Bonnie Blazer-Yost, Ph.D., Renal Research, A303R, Veterans Affairs Medical Center, University and Woodland Avenues, Philadelphia, PA 19104.

**POSTDOCTORAL POSITION**

- **THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) HEALTH EFFECTS RESEARCH LABORATORY**

In cooperation with the University of North Carolina, Chapel Hill, for Environmental Medicine, has postdoctoral fellowships in pulmonary toxicology. A position is available to join the molecular biology laboratory employing cellular and molecular approaches to investigate pollutant-induced lung injury and to study basic mechanisms of cellular matrix metabolism; cellular toxicity and growth; cytokine and oncogene expression; fibrogenesis and fibrolysis, and leukocyte adhesion and migration. A Ph.D. or equivalent is required in an area of molecular biology or molecular pharmacology. Send current résumé to: Kevin L. Drehner, Ph.D., EPA, Herl, U.S. EPA, Bin-RM 82, Research Triangle Park, NC 27711. Telephone: 919-541-3691; FAX: 919-541-4234. Other positions in pulmonary medicine are also available. Please send curriculum vitae, academic records, and research experiences to: Dr. J. C. Reed, Ph.D.; enzyme systems involved in metabolism of xenobiotics (D. E. Williams, Ph.D.).

**POSTDOCTORAL FELLOWSHIP**

To study the role of FGF receptors in the response to vascular injury. Required: Ph.D. in molecular or cell biology or biochemistry, experience in quantitative PCR, in situ hybridization, and MAB development helpful. One position available 1 June 1992 (to join PI on sabbatical at address below). Please send curriculum vitae and names of three references to: Dr. Edmond A. Gold, Immunology of Aging Group, Department of Microbiology and Immunology, University of Maryland School of Medicine, 22 South Greene Street, Baltimore, MD 21201. An Equal Opportunity Employer.

**POSTDOCTORAL FELLOWSHIP**

To study the mechanisms of immunity in aging. A position is available immediately to study mechanisms of regulation of the immune response in aging. Research involves investigations of age-associated immune repertoire. Applicants should have a strong background in immunology and preferably also in molecular biology. Send curriculum vitae and name and telephone numbers of three references to: Dr. R. E. Koles, Immunology of Aging Group, Department of Microbiology and Immunology, University of Maryland School of Medicine, 22 South Greene Street, Baltimore, MD 21201.

**POSTDOCTORAL TRAINING IN ENVIRONMENTAL GENETICS**

Postdoctoral fellowships in Environmental Toxicology, supported by the National Institute of Environmental Health Sciences (NIEHS), are available at Oregon State University (OSU) through the Toxicology Program and the Environmental Health Sciences Center. Successful candidates will engage in research with an emphasis on basic mechanisms for toxicity of environmental agents. NIEHS fellowships are available on a competitive basis to applicants (U.S. citizens and permanent residents only) with a recent degree in chemistry, biochemistry, pharmacology, or the biological sciences. Research opportunities would be available under the direction of toxicology faculty members as indicated: Biochemical and genetic mechanisms of chemical carcinogen (G. S. Bailey, Ph.D.); cellular effects and environmental distribution of chlorinated hydrocarbons (L. R. Curtis, Ph.D.); mechanisms of immunotoxicity of chlorinated hydrocarbons (N. H. Zielh, Ph.D.); molecular and cellular toxicological effects of pyrethroids (T. F. Murray, Ph.D.); mechanisms of chemically induced cell injury (D. J. Reed, Ph.D.); and electron spin resonance in metabolism of xenobiotics (D. E. Williams, Ph.D.).

To apply for a NIEHS fellowship, send curriculum vitae, academic records, and three letters of references to: National Toxicology Program, Environmental Health Sciences Center, Oregon State University, Wesner Hall 317, Corvallis, OR 97331-4064. Telephone: 503-737-3263. Application closing date is 30 March 1992. OSU is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to dual-career couples.
POSTDOCTORAL POSITION IN QUANTITATIVE TOXICOLOGY/PATHOLOGY

The Chemical Industry Institute of Toxicology (CIIT) is an independent, non-profit research institute. Our mission is to improve the scientific basis for understanding and assessing the potential adverse effects of chemicals, pharmaceuticals, and consumer products on human health. We are currently seeking a postdoctoral fellow to conduct quantitative studies of pathological responses to chemical exposure.

The successful candidate will be responsible for developing quantitative descriptions of major tissues, such as liver and kidney, at the cellular level and for using this data to develop computer simulation models of normal tissue growth and pathological responses to toxic chemicals. Individuals with (A) strong quantitative skills who are interested in working on biological problems or (B) biomedical training interested in developing skills in computer programming and simulation modeling are encouraged to apply. Applicants must have a doctoral degree in a relevant discipline such as applied mathematics, computer science, chemical engineering, biochemistry, anatomy, pathology, or toxicology.

CIIT is located in Research Triangle Park, NC, which offers many cultural and recreational activities as well as access to three major universities. We offer competitive salary and benefits and a stimulating work environment. Interested applicants should submit a curriculum vitae with the names of three professional references, representative reprints and summary of research interests to: Human Resources Manager, CIIT, P.O. Box 12137, Research Triangle Park, NC 27709.

An Equal Opportunity Employer (M/F/H/V)

The recent opening of the new Glaxo Inc. Giroldi Research Institute, located in Research Triangle Park, NC represents Glaxo’s continued commitment to the discovery and development of drugs for unmet patient needs. We invite you to experience the challenges and accomplishments a future with us holds for you. The following opportunity is now available.

CELL CULTURE SCIENTIST

We are currently expanding the capacity of our Fermentation Facility to include the scale-up of recombinant organisms for the production of heterologous proteins. A position has been created for a Cell Culture Scientist who will be responsible for the culturing of mammalian/insect cells in various bioreactor systems.

Background should include a B.S., M.S., or Ph.D. Degree in a Biological or Chemical Engineering discipline with a minimum of 2-4 years of relevant experience. Specific experience with the operation and maintenance of cell bioreactor equipment is required. Familiarity with downstream processing systems and/or recombinant technology is desired.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume, and salary history, to: Human Resources Department, Job # 9126-JR-SC, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

NEOSE PHARMACEUTICALS

Neose Pharmaceuticals, Inc. is a rapidly growing company dedicated to discovering and synthesizing oligosaccharide-based drugs. With a powerful, proprietary technology for synthesizing oligosaccharides, and a scientific team that has pioneered research into the functions of the complex carbohydrates, Neose is at the leading edge of contemporary exploration into oligosaccharide pharmacology.

Neose is expanding into its new laboratory facilities in Horsham, PA, a suburb of Phila., and invites applications from Ph.D.- and B.A.-level scientists with interests and abilities in the following disciplines:

CELL BIOLOGY

Cell biologists will utilize cell, tissue, and organ culture methods; experience with cell-cell and pathogen-cell adhesion assays will be helpful.

BIOCHEMISTRY

Biochemists will be involved in enzyme discovery and purification; process scale-up experience will be advantageous.

ORGANIC CHEMISTRY

Chemists will synthesize novel, carbohydrate-based compounds; experience in analysis, separation, and process will be desirable.

In addition to a competitive salary and benefit plan, Neose offers employees an unusual opportunity to participate in, and benefit from, the growth of an exciting, dynamic new research and development effort.

Please send resumes to:

Ms. Stacy Bardol, Manager, Administration
Neose Pharmaceuticals, Inc.
3600 Market Street, Suite 100
Philadelphia, Pennsylvania 19104

Neose is an Equal Opportunity Employer
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
PERSONAL INFORMATION MANAGEMENT
LIBRARIAN-BASIC SCIENCES
Library and Center for Knowledge Management

The University of California, San Francisco Library seeks applications from innovative individuals for appointment as the basic sciences specialist in its Personal Information Management Program. UCSF is a health sciences university; its schools of Dentistry, Medicine, Nursing, and Pharmacy and the Graduate Division award advanced professional and research degrees in the basic natural and behavioral sciences related to health.

The Personal Information Management Librarian for Basic Sciences will be part of a team of personal information management specialists in the Interactive Learning Laboratory, which will design, plan, and coordinate a health sciences informatics curriculum in collaboration with each of the campus' schools, with specific responsibility for developing and implementing a consulting service tailored to the specialized information needs of UCSF basic scientists. Service will be delivered to clients in the library as well as in offices, laboratories, and classrooms located at several geographically distributed UCSF sites.

Major responsibilities will be to assist clients with their telecommunications, database searching, personal database building, information retrieval, and file management problems; serve as the Library's subject and database specialist in the basic sciences; participate in the informatics instruction program including course development and teaching.

Other areas of responsibility include participation in the collection development and public information programs.

Qualifications include a Master's degree in library or information science from an ALA-accredited school, or equivalent education and experience; an additional graduate degree (doctorate highly desirable) in molecular biology, biochemistry, or related field; a minimum of three years' experience in an academic or corporate science environment, preferably in the health sciences; superior interpersonal and communications skills; excellent technical background including a record of microcomputer expertise and database search and management skills; ability to function effectively as a member of a team; commitment to excellent service.

Appointment will be to the Librarian series, Assistant Librarian/Associate Librarian rank (salary from $28,686 to $32,496 p.a., depending on qualifications). This position is represented by a bargaining agent. Application deadline: open until filled. Address letters of application with résumé to: Kenneth R. Weeks, Asst. Director for Planning & Administration, UCSF Library, San Francisco, CA 94143-0840. EOE/AA

Postdoctoral Fellow
Seattle, Washington

The Bristol-Myers Squibb Pharmaceutical Research Institute in Seattle (formerly ONCO-GEN), performs research dedicated to pursuing novel approaches to the development of therapeutic products in the areas of immunology, infectious diseases and cancer.

We are currently seeking a postdoctoral fellow to study molecular and immunological aspects of the control of T-cell responsiveness by B7/CD28/CTLA-4 interactions. Candidates should have a Ph.D. in one of the following disciplines: molecular biology, immunology, or biochemistry and recent immunology experience.

We offer a creative work environment, competitive salaries, an excellent benefit package and relocation assistance. Our facility offers open and well-equipped laboratories and views of the Puget Sound and Olympic Mountains. Please forward your resume to: BRISTOL-MYERS SQUIBB PHARMACEUTICAL RESEARCH INSTITUTE, Human Resources Department, Position #92-0107, 3005 1st Avenue, Seattle, WA 98181. An Equal Opportunity Employer, M/F/D/V.

Bristol-Myers Squibb Company

NANOTECHNOLOGY
Reprint

Engineering a Small World:
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to Microfabrication

This 42-page special section, reprinted from the 29 November issue of SCIENCE, is your entry to the expanding world of small-scale engineering. It's a field that spans microelectronics, materials science, chemistry, molecular biology, and microscopy. In this special section, ten illustrated articles by research leaders and by science journalists present the full scope of this small world.

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Department Head
Department of Agricultural Engineering
University of Minnesota

The College of Agriculture, University of Minnesota, is seeking candidates for the position of Head, Department of Agricultural Engineering. The Head serves as administrative officer of the department; provides leadership to multidisciplinary programs in teaching, research, extension, and international activities; represents the Department both within the University and to the wider community. This appointment includes a twelve-month, tenured faculty appointment, with rank negotiable. The appointee may continue his or her professional interests and activities within the Department's programs, as appropriate.

Qualifications include an earned doctorate in Agricultural Engineering, a related engineering discipline, or a scientific discipline with a strong engineering emphasis; demonstrated achievement in research, teaching, extension or industry; minimum of five years of professional experience. Desired qualifications include demonstrated ability in fiscal management, administration and leadership; effective communication skills; and an understanding of the land grant system. Must be eligible for permanent employment (U.S. citizen or appropriate visa status). Application deadline is April 15, 1992. Send letter of application, a current resume, a separate one-page statement of career goals within the context of the position, and the names, addresses, and telephone numbers of three (3) references to: Billie J. Wahlstrom, Search Committee Chair, Department of Rhetoric, 202 Haecker Hall, 1364 Eckles Avenue, University of Minnesota, St. Paul, MN 55108.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

Mammalian Genetics
Agracetus, Inc., a biotechnology company owned by W.R. Grace & Co., is seeking highly motivated individuals to join an expanding research program addressing broad applications in mammalian gene transfer technology using the company's proprietary ACCELL™ gene delivery systems.

Research Scientists
Candidates should hold a Ph.D. degree and will have demonstrated experience in mammalian gene transfer, gene therapy, vector construction, mammalian physiology, somatic cell and biochemical genetics, or broadly related areas of research. Relevant postdoctoral experience is highly desirable. The successful candidates will initiate new research projects in collaboration with ongoing programs directed toward mammalian genetic modification.

Research Assistants
Candidates should hold a B.S. or M.S. degree and should have demonstrated capabilities in one or more of the following areas: cell biology, molecular biology, immunology, cytogenetics, analysis of gene expression in transfected mammalian cells or transgenic animals. The successful candidates will join highly interactive research teams in the development of mammalian gene transfer technology.

Agracetus offers a competitive salary and a comprehensive benefits package. Our research complex, located near the University of Wisconsin in Madison, provides an ideal setting for both career and lifestyle enhancement. Send resume to: Vice President of Research, Agracetus, Inc., 8520 University Green, Middleton, WI 53562. We are an Equal Opportunity Employer.

Environmental Toxicologist – Associate/Full Professor

The University of Nebraska Medical Center seeks an established investigator for a tenure-leading faculty position, to conduct a research program in environmental toxicology in collaboration with the Water Center, University of Nebraska-Lincoln. Areas of research specialization include, but are not limited to, carcinogetic and other health effects of water contaminants such as nitrate and pesticides.

The appointee will be expected to participate in intercampus toxicology and water-related teaching and research activities. The successful candidate will have a primary appointment in the Epplle Institute for Research in Cancer and Allied Diseases, an NCI-Designated Laboratory Cancer Center. Substantial new laboratory space and access to state-of-the-art core facilities in chemical and biological sciences are available. All faculty are expected to have joint appointments in an academic department at UNMC and in the Water Center at UNL.

Academic rank and salary in this tenure-leading position are dependent on qualifications.

Please submit curriculum vitae, statement of research interest, and names of at least three references to:
Raymond W. Ruddon, M.D., Ph.D.
Director
The Epplle Institute for Research in Cancer and Allied Diseases
University of Nebraska Medical Center
600 South 42nd Street
Omaha, Nebraska 68198-6805

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

Ph.D. -Scientist
Natural Products Discovery
(Position #92-40)

PANLABS, INC. is expanding its U.S. Laboratory. Opportunity exists for an individual having a thorough grounding in general microbiology or microbial ecology and experience in devising isolation schemes for unique microorganisms from a variety of different sources. Familiarity with the isolation and taxonomic determination of unusual actinomycetes is highly desirable. Culture collection maintenance will also fall under this person's responsibilities. Good communication skills and be able to work in a team setting. Requirements include Ph.D. in Microbiology.

PANLABS is a growing international company providing R&D services to the pharmaceutical industry worldwide for 21 years. Located in the high tech corridor north of Seattle, PANLABS offers competitive salaries and benefits. Submit CV with 3 references to:

PANLABS, INC.
Attn: Human Resources Manager
Position #92-40
11804 North Creek Parkway South
Bothell, Washington 98011-8805
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POSITIONS OPEN

POSTDOCTORAL FELLOW

Service fellowship available to study anatomical aspects of the development of mammalian neuroectoderm. Experience in neuroanatomical techniques, tissue culture, and electron microscopic techniques is essential. At least 2 years of postdoctoral experience is required. Starting salary will be commensurate with qualifications and experience. Send curriculum vitae, research suggestions, and references to: Brent Stanfield, Ph.D., National Institute of Mental Health (NIMH), NIH Animal Center, P.O. Box 289, Post Office Box 10837, NIMH is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS are available in the Division of Dermatology, Duke University Medical Center, in the areas of: (1) Regulation of collagen biosynthesis, (2) Characterization of molecular defects in inherited connective tissue diseases, (3) Characterization of dermal extracellular matrix—epithelial cell interactions, and (4) Molecular mechanism of human autoimmune diseases. Preference will be given to candidates with experience in molecular biology and immunologic techniques. Salary negotiable. Send curriculum vitae and names of three references to: Dr. Russell Hall, Box 3135, Duke University Medical Center, Durham, NC 27710. Duke University is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWS

Research positions available to study cellular and molecular mechanisms of CNS injury. M.D. and/or Ph.D. required. Training in molecular biology essential. Tissue culture and immunohistochemistry experience desirable. Salary negotiable. Send curriculum vitae, relevant publications and names of three references (with telephone numbers) to: Alan D. Waksman, M.D./Ph.D., Georgetown University Medical Center, Medical Dental Building (NW101), 3900 Reservoir Road, N.W., Washington, DC 20007. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Research associate position available (Ph.D. in medical chemistry or pharmacology) to conduct synthesis and pharmacological evaluation of novel nitrogen heterocycles that have exhibited some analgesic, anti-inflammatory and hyperglycemic activities on preliminary testing. Salary range: $27,000 to $29,000 per year. If interested, please apply before 21 March 1992: Dr. Ken Redda, College of Pharmacy and Pharmaceutical Sciences, Florida A&M University, 127 Dyson Pharmacy Building, Tallahassee, FL 32307; telephone: 904-599-3910/3623.

POSTDOCTORAL—RESEARCH ASSOCIATE positions are available 1 May 1992 for study of (1) regulation of P-450 expression by protein kinases, (2) the role of reactive oxygen species in signal transduction, and (3) immunosuppressive properties of tumor promoters and role of immunosuppression in chemically induced cancer. Positions require a Ph.D. and 0 to 4 years of postdoctoral experience. Positions (1) and (2) require expertise in cloning, DNA sequencing, CAT reporter constructions, transfection and PCR. Position (3) requires expertise in cloning, DNA sequencing, CAT reporter constructions, transfection and PCR. Research will be conducted at the Institute of Chemical Toxicology, Wayne State University, Detroit, Michigan, in the laboratory of J. Reiners. Send curriculum vitae to: Dr. John J. Reiners, M. D. Anderson Cancer Center—Sloan-Kettering Cancer Research Division, Smithville, TX 78957

Wayne State is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available 1 March 1992 to study the acute and chronic effects of alcohol on sympathetic blood pressure regulation. Warnings will involve hemodynamic and electrophysiologic measurements in chronically instrumented conscious rats as well as central administration of drugs to investigate the role of central sympathetic pathways in the interaction. Candidates must have a Ph.D., M.D., D.V.M. or equivalent degree. Familiarity with kennel procedures is desirable. Send curriculum vitae, description of research experience, and names of references to: Dr. Abdel A. Abdel-Rahman, Department of Pharmacology, School of Medicine, East Carolina University, Greenville, NC 27858. Federal law requires proper documentation of identity and employability at the time of employment. An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE POSTDOCTORAL FELLOW

Position available for Ph.D. to join and aid in the direction of an active hematopoietic and stem cell transplantation program. Laboratory studies include (1) mechanisms of mobilization of blood stem cells, (2) influence of cytokines on stem cell subpopulations, (3) role of donor stem cells and host preparation on engraftment, and (4) protection of stem cells with regulatory molecules. Direct inquiries to: Peter Mauch, M.D., Harvard Medical School, JCRT 50 Binney Street, Boston, MA 02115.

POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE WANTED

Applications are invited for a postdoctoral fellowship or research associate position in an active molecular virology laboratory. Laboratory focus is on retroviral pathogenesis. Candidates must have Ph.D. in molecular biology or related field and be available immediately. Please send curriculum vitae with three references to: Dr. Roger J. Pomerantz, Chief, Infectious Disease Division, Department of Medicine, Jefferson Medical College, 1025 Walnut Street, Suite 813, Philadelphia, PA 19107. Equal Employment Opportunity.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for up to 3 years to investigate structural basis of protein-protein interactions and protein stability using site-directed mutagenesis together with chemical and physical approaches used with experience in molecular biology and/or protein chemistry are preferred. Send curriculum vitae and the names of two references to: Dr. Peter H. Riley, Department of Biochemistry and Molecular Biology (R629), University of Miami School of Medicine, P.O. Box 016129, Miami, FL 33101. The University of Miami is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

A position is available to participate in studies of fundamental mechanisms of cardiac injury in models of sepsis and reperfusion injury for up to 3 years. Applicants with experience in myocyte and/or endothelial cell culture and molecular and cellular techniques are sought. Can you work in a fast-growing, well-funded environment, handle significant responsibilities, provide encouragement and creativity while involving Federal and non-Federal grants as you contribute to our mutual success? If so, send your curriculum vitae to: R. D. Goldfarb, Ph.D., Section of Cardiology, Russell Hospital, 1655 West Congress Parkway, Chicago, IL 60612.

RESEARCH ASSOCIATE to design and perform studies in molecular biology: Genetically engineer and test specific mutants of enzymes; conduct protein assays; develop and characterize antibodies for immunosassays. Requires independent experience with standard molecular techniques. Salary: $18,000 to $20,000 per year; 40 hours per week. Apply at the Texas Employment Commission, Houston, Texas, or send resume to the Texas Employment Commission, P.O. Box 23762, Austin, TX 78778, I.O. #6599175. Ad paid by an Equal Employment Opportunity Employer.

RESEARCH ASSOCIATE IN CARBOHYDRATE BIOCHEMISTRY

The University of Georgia Complex Carbohydrate Research Center (CCRC) seeks a staff chemist/biochemist interested in carbohydrate research to aid in a recently created position. The individual will be involved in an active research program that includes the participation in research on the structural characterization of biological polysaccharides and analytical service work conducted on samples submitted to the CCRC by other investigators. Ph.D. desired in chemistry or biochemistry or an equivalent combination of education and experience with one or more of the following techniques required: GC, GC-MS, LC, NMR spectroscopy. Salary depends on experience. Position available immediately; applications will be reviewed until the position is filled. Send curriculum vitae and letter of application to: Dr. Russell W. Carlson, Complex Carbohydrate Research Center, The University of Georgia, 220 Riverbend Road, Athens, GA 30602. An Equal Employment Opportunity/Affirmative Action Institution.

BIOCHEMISTS AND MICROBIOLOGISTS

Pel-Freez, is seeking motivated individuals for excellent career opportunities in biotechnology. Successful candidates will possess expertise in protein purification or microbiology with at least a B.S. and 5 years of related industrial experience. Work with molecular biology or microbial fermentation is highly desirable. Submit resume and salary history to: Human Resources Department/BF Pel-Freez, P.O. Box 68, Rogers, AR 72757. Equal Opportunity Employer.

CENTERS FOR DISEASE CONTROL NATIONAL CENTER FOR INFECTIOUS DISEASES HEMATOLOGIC DISEASES BRANCH BIOLOGIST

A position is available to study hematologic diseases associated with infectious agents. A Ph.D. with a background and experience in the molecular mechanisms of hematologic diseases is preferred. Previous experience with retroviruses is highly desirable. The incumbent should be experienced in recombinant DNA technique, DNA cloning and sequencing, viral genetics, and PCR analysis. Applicants should be capable of collaborative and independent investigations as evidenced by publications. This position is with Dr. Jung-Chung Lin, Molecular Biology Section, Hematologic Diseases Branch, Division of HIV/AIDS, and will be a term appointment not to exceed 2 years. Salary range: $21,000 to $25,000 per year. Experience is required. To apply, please send curriculum vitae and three names and addresses of references (by end of month closest to the closing date: 3 April 1992) to: Nancy Oddy, Personnel Management Office, Centers for Disease Control, 1600 Clifton Road, N.E., Atlanta, GA 30333.

CONSERVATION SCIENTIST: The Department of Conservation and Scientific Research, Freeer Gallery of Art/Arthur M. Sackler Gallery, Smithsonian Institution, has an opening for a GS-11 conservation scientist, salary $32,423 to $42,152 per annum. This position is for the technical study and analysis of works of art and other cultural properties. The basic requirement is an M.S. or equivalent in a relevant branch of physical science plus additional experience. Previous experience in conservation science is an advantage. Apply using form SF-171 (Application for Federal Employment). The above is a supplement to the sheet giving examples of experience and training, to: Smithsonian Institution, Office of Human Resources, Branch 1, P.O. Box 23762, Washington, DC 20026—3762, quoting reference 92-1027A. Closing date 3 April 1992. Further details: John Winter, telephone: 202-357-4880; FAX: 202-633-9105. Equal Opportunity Employer.

INTERN

Virologist

Postdoctoral position is available in the Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases (1) to study the pathogenesis of human and porcine rotavirus strains in animal models, (2) to characterize rotavirus strains of human and animal origin using virologic and genetic techniques, and (3) to develop new vaccine candidates for eventual human use, if safe and antigenic, using cold-adaptation, genetic reassortment or strain characterization studies. Applications are invited from individuals having a doctoral degree in Medicine, Veterinary Medicine, Microbiology, Virology, or Pathobiology. Previous experience with molecular techniques is preferred. Salary will be commensurate with experience. Qualified and interested candidates should send curriculum vitae and names and addresses of three references to: Albert Z. Kapikian, M.D., Head, Epidemiology Section, Laboratory of Infectious Diseases, NIAID, NIH, Bldg. 7, Room 103, 9000 Rockville Pike, Bethesda, MD 20892; FAX: (301) 496-8312

NIH is an Equal Opportunity Employer

Biochemist/Enzymologist

Merck Sharp & Dohme Research Laboratories in West Point, a leader in pharmaceutical and biological research, is currently offering several excellent career opportunities in our Biological Chemistry Department.

The first position involves anticoagulation projects with responsibilities for protein purification from human plasma, activation of zymogens, enzyme mechanistic studies and characterization of inhibitors. Candidates should have an M.S. degree in biochemistry, chemistry or the equivalent with a strong background in enzyme kinetics, protein purification, protein-protein interaction and isolation of natural products. One to 3 years' experience in protein purification and enzymology is required.

The second position requires extensive experience and interest in enzyme kinetics and protein purification. Candidates should have an M.S./Ph.D. degree in biochemistry, enzymology or the equivalent along with strong quantitative abilities.

The third position involves a multidisciplinary effort aimed at identifying novel strategies for the treatment and/or prevention of thromboses. Candidates should have a Ph.D. in biochemistry, pharmacology or related field. Expertise in enzymology and protein chemistry is desired.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter to: Personnel Manager, Ad #D-4, Research Personnel, WP42-2, Merck Sharp & Dohme Research Laboratories, West Point, PA 19486.

EEO/AA/VH/Employer

Associate Vice President, Research & Associate Dean, College of Medicine

The Ohio State University invites nominations and applications for a joint appointment as Associate Vice President, Office of Research and Associate Dean, College of Medicine. Individual will play a key role in strengthening the health and life sciences research and scholarship environment at the University; serve as liaison to various federal, state and local agencies concerning research stimulation and the Graduate School regarding graduate education; serve on various internal and external committees; develop research grant funding programs; coordinate research equipment allocations; direct professional/graduate medical education program.

Qualifications include: necessary academic credentials and appropriate experience to hold the rank of professor in a life science area; distinguished record of research and teaching; substantial experience in funded research; knowledge of federal funding process. Nominations/applications including cover letter and resume should be sent to Susan Enskie, Office of Research, OSU, 208 Bricker, 190 N. Oval Mall, Columbus, OH 43210-1355; materials should be received by March 20, 1992.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, covered veterans and disabled individuals are encouraged to apply.

Branch Manager

The National Renewable Energy Laboratory (NREL), formerly the Solar Energy Research Institute, is the nation's primary national laboratory for R&D and testing in renewable energy. We collaborate with universities, private industry, and government agencies to move technological innovations from the laboratory to the marketplace.

As Branch Manager you will provide leadership and manage research and development for the biogas, agricultural, and industrial applications group. A strong background in interdisciplinary research, demonstrated technical expertise and accomplishments, and an established reputation are also essential. Prior experience in managing interdisciplinary groups in academic or industrial research and obtaining research funding is expected along with strong leadership capability and excellent interpersonal and communication skills. More than 10 years experience in applied biology and 2 to 4 years or more in managing personnel is desired.

We offer a competitive salary and comprehensive benefits package, including relocation assistance. For immediate consideration, please send your resume to: Human Resources Office, E4220-954, NREL, 1617 Cole Blvd., Golden, CO 80401.

For information regarding current job opportunities at NREL contact: JOB LINE (303) 231-1192

NREL is an equal opportunity employer. Women and minorities are encouraged to apply.
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As a Principal Scientist in this dynamic research area, you will be responsible for various in-vitro and in-vivo metabolism studies, analytical methods development and metabolite isolation and identification. Responsibilities will include supervising a small staff of scientific personnel.

To be successful, you should possess a Ph.D. in chemistry (Organic, Analytical, Medicinal), Pharmacy or related disciplines with at least 5 years' relevant experience.

A strong background in research areas such as biopharmaceutics, analytical methods development, instrumentation, in-vivo and in-vitro drug metabolism techniques, including metabolite isolation and identification, and the ability to apply this expertise to independent projects are essential. Excellent oral and written communication skills required. Respond to Box # DS-92-01

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**ASSISTANT/ASSOCIATE SCIENTIST**

**Allergy**

Evaluate and implement new technologies to investigate physiological and pharmacological mechanisms of cough.

To qualify, you must have a B.S. degree in Biology, Physiology or Pharmacology with 2-7 years' experience and/or M.S. degree with 0-5 years' experience. Prior in vivo electrophysiology, airway pharmacology, and/or computer experience a plus. Respond to Box #DD-91-95 (KB).

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We offer highly competitive salaries and an excellent benefits package. Please send resume, indicating appropriate box number, to Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

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RESEARCH ASSOCIATE. Study ultrastructure and immunological responses of human skeletal muscle in disease by electron microscopic techniques. Apply immunohistochemical techniques to examine appearance of cytotoxins after exercise. Study human tissues for data on body functions related to aging and/or exercise; effects of exercise on immune responsiveness and glucose tolerance using englycemic glucose clamp. Select tissue for microscopic study using microtome and other equipment. Maintain equipment. Analyze results concerned with degeneration and regeneration. Research cell physiology and morphology to ascertain physical and chemical factors involved in growth. Perform tests to determine glucose levels; operate clamp procedure. Studies influence of physical and chemical factors on human cells. Salary: $24,000 per year; 35 hours per week; and alterations of physiology on M.D. must have experience in exercise physiology and research. Special requirements: exercise physiology, muscle analysis, electron microscopy, immunocytochemistry, histology, cytotoxicity, chemistry, and glucose clamp. Submit two copies of resume to: Commonwealth of Massachusetts, Department of Employment and Training, Recycling Order #1450, P.O. Box 9868, Boston, MA 02114.

POSITION OPEN

FISHERIES RESEARCH ADMINISTRATION

The U.S. Fish and Wildlife Service in Gainesville, Georgia, seeks a SENIOR FISHERIES RESEARCH MANAGER to administer its National Fisheries Research Center located on the campus of the University of Florida in Gainesville, Florida. The center is located at Marion, Alabama, and Stuttgart, Arkansas. The center is responsible for a wide-ranging program of biological research on exotic, anadromous, and inland fish. Fish research of regional and national importance. The center director is responsible for integrating management of a broad, multidisciplinary research program on fish population dynamics, ecology, and aquaculture. Salary range is $46,000 to $83,000 (GM-15). An Application for Federal Employment (SF-171) should be submitted to the U.S. Fish and Wildlife Service, Department of Interior, Region 9 Personnel, MS 100 ARS, 1849 C Street, N.W., Washington, DC 20240. For further information, telephone: 703-358-1743. Applications for regional and national and international position must be received by COB 27 March 1992. The U.S. Fish and Wildlife Service is an Affirmative Action/Equal Opportunity Employer.

FREE LANCE WRITING SCIENCE TEST QUESTIONS

Opportunity for work at home writing science questions for college and pre-college testing programs administered by American College Testing (ACT). Work involves variety of science areas and requires precise writing to meet exacting standards. Current teaching or teaching within past 5 years at high school or college level required, as is undergraduate or graduate degree.

For additional information, write as soon as possible to: Exchange Test Development Department, (S), ACT National Office, 2201 North Dodge Street, P.O. Box 168, Iowa City, IA 52243. Include (1) area of specialization—biology, botany, zoology, chemistry (general biochemistry); physics, physical science; and (2) resume listing formal education and teaching experience, including identification/dates of courses taught and degrees earned.

ACT is a nonprofit organization recognized as an international leader in testing, student financial aid, guidance, and research services.

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The Department of Commerce (DOC) NOAA/Office of Oceanic and Atmospheric Research (OAR)/Program Development and Coordination Section is seeking applicants for the position of PHYSICAL SCIENTIST, GM-1301-13, $64,332-$111,342. Duties: The position involves the OAR staff expert and focal point for global change research, climate and atmospheric chemistry, and related national and international public policy issues in the field of climate change in the United States. Applicants must submit the June 1988 edition of the Standard Form 171 by 12 March 1992 to: NOAA/Personnel Operations Branch, NOAA/OPS, Operations Branch, SSCM-1, OA213, 32320, 1335 East Highway, Silver Spring, MD 20910. For additional information or to obtain a copy of the job opening call: 301-713-0506 refer to vacancy #: OA-M-92-15-MMP. DOC is an Equal Opportunity Employer.
RESEARCH SCIENTIST, OLFACTION. EROX Corporation is seeking a researcher with a Ph.D. degree and postdoctoral training in Molecular Biology, Biochemistry or other Biological Sciences, and a strong background in recombinant DNA techniques and receptor biology to study and characterize mammalian olfactory and pheromone receptors and related genes. Experience and demonstrated accomplishment in cDNA cloning, subtractive hybridization, and protein 2-D gel analysis is preferred. Must be capable of working independently and leading a small research group. The individual chosen will work at the company's Salt Lake City laboratories affiliated with the University of Utah and will have the opportunity to hold an Adjunct Faculty position at the University. We offer a competitive salary, benefits, and relocation package, plus an excellent working environment and the opportunity for professional development. Qualified individuals should respond to Kevin McCarthy, Vice President and Chief Financial Officer, EROX Corporation, 535 Middlefield Road, #240, Menlo Park, CA 94025. EROX is an equal opportunity employer.

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- Research associates with experience in hybridoma methodology, HPLC, and antibody purification/fragmentation.

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- Ph.D. and M.S. degree plus experience in enzyme kinetics, enzyme assay design, HPLC/FPLC, and protein isolation required.
- Experience in enzyme mechanistic elucidation and/or monoclonal antibodies helpful.

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- M.S./Ph.D. degree as well as experience required in human tumor models both in vitro and using nude/SCID mice.

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- BS/MS in chemistry with 1+ years HPLC experience with knowledge of automated data collection and analysis – must be computer literate
- Laboratory Technician – BS plus 1 year experience with experimental work
- Chemist in Organic Laboratory – minimum of technical school training

Send cover letter, stating desired position, and resume to: Ms. Sally Love, Emisphere Technologies, Inc., 15 Skyline Drive, Hawthorne, New York 10532 Fax: (914) 547-2498

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GS-1315-12/13
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Research technician needed to maintain plant cell cultures and isolate plant cell walls, cell wall polysaccharides, and oligosaccharide fragments of the polysaccharides. The technician will be trained to structurally characterize complex carbohydrates. Experience in any of the following techniques would be desirable: liquid or gas chromatography, working with enzymes, tissue culture, carbohydrate isolation, and/or M.S. preferred in biology or biochemistry. Salary negotiable depending on experience. Send applications by 15 March 1992 to: Dr. Alan Davril or Dr. Peter Albersheim, Co-Directors, Complex Carbohydrate Research Center, The University of Georgia, 220 Riverbend Road, Athens, GA 30602. An Equal Employment Opportunity/ Affirmative Action Institution.

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