

AAAS Science and Technology Policy Yearbook 1994

Albert H. Teich, Stephen D. Nelson
and Celia McEnaney, editors

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for the Advancement of Science

The fourth volume in the
AAAS Yearbook series presents
selected papers from the 19th
AAAS Science and Technology
Policy Colloquium, held in
April 1994, together with other
original articles, addresses from
the 1994 AAAS Annual
Meeting, and excerpts from
influential reports. Authors
include many notable figures in
S&T policy, also included is a
reprint of the 1945 landmark
report *Science—The Endless
Frontier* by Vannevar Bush.

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Monoclonal Antibodies

Seven new mouse monoclonal antibodies (mAbs) to CD markers include a' CD21, a' CD22, a' CD44, a' CD49d, a' CDw70, a' CD86, and a' CD98. The Binding Site. Circle 139.

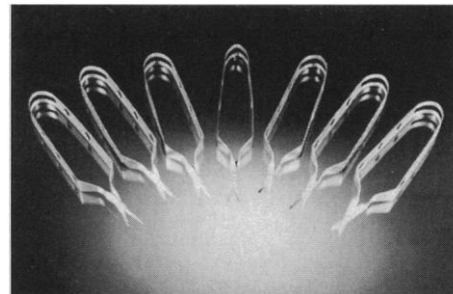
Seven new Dual-Tag double-labeled mAbs to human leukocyte markers for use in flow cytometry are human CD3-FITC/CD4-PE, human CD3-FITC/CD8-PE, human CD3-FITC/CD19-PE, human CD3-FITC/CD57-PE, human CD4-FITC/CD8-PE, human CD5-FITC/CD19-PE, and human CD45-FITC/CD14-PE. These reagents provide fluorescent labeling of cell surface antigens and permit subsets of leukocyte populations to be analyzed and sorted. Sigma Immunochemicals. Circle 140.

Two new mAbs specific for human interleukin 8 (IL-8) recognize distinct epitopes and are matched for immunoassay development. The reagents neutralize the biological activity of IL-8 and are useful for functional studies, enzyme-linked immunosorbent assays, immunohistochemistry, and protein immunoblotting. Antigenix America. Circle 141.

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Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

run side by side. The user heat-bonds the SlideSeal chamber to a slide, creating a water-tight 15-mm-diameter sample area, and adds up to 75 μ l of amplification reagents. A completely vapor-tight seal is effected by a unique plastic filter. These two seals ensure that water does not evaporate during thermal cycling, which maintains the concentration of reaction buffers and stops the sample from drying out. **Hybaid. Circle 144.**

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Nuclease Protection Kit

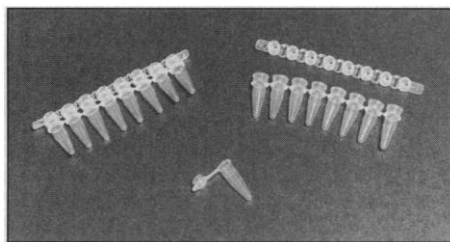
The S1 nuclease protection assay is a powerful technique to quantify and map specific mRNA species. It is 10 to 50 times more sensitive than Northern or dot blot analysis for the detection of specific mRNA species. S1 assays can also be used to identify the 5' and 3' ends of transcripts as well as the positions of introns within the gene encoding the target message. **Ambion. Circle 145.**

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PCR Tubes

Thin-wall polymerase chain reaction (PCR) tubes help accelerate uniform well-to-well heat transfer, leading to shorter cycle times.

They also assist in magnifying critical DNA fragments. The tubes fit in all commonly used thermal cyclers. They come in 0.2 and 0.6 ml sizes. The 0.2-ml tubes come in strips



of eight with matching cap strips, for loading into 8 \times 12 thermal cyclers. Trays loaded with 96 tubes are also available. **Globe Scientific. Circle 146.**

■

Literature

Free Your Analysis from the Confines of Your FT-IR! describes a line of infrared fiber optics offering the ability to analyze samples at remote locations using Fourier transform infrared spectroscopy. The products offer flexibility for applications involving hazardous environments, process and reaction monitoring, restricted access sampling vessels, non-

destructive sampling, caustic and corrosive environments, oddly shaped samples, and high-temperature and -pressure environments. Samples can include liquids (aqueous and nonaqueous), powdered solids, sheet materials, reflective solids, microsamples, and gases. **Spectra-Tech. Circle 147.**

1995 Catalog/Handbook: Neurochemicals for the Neuroscientist describes more than 1100 compounds including more than 200 new products. **Research Biochemicals International. Circle 148.**

Solvent Recovery Systems describes a line of condensers, chambers, and gravity drains to return solvent vapors back to their original liquid state for recycling, thereby protecting the environment, employees' health, and data quality. **Kontes Glass. Circle 149.**

Separations is a newsletter with articles covering biomolecular research. Topics in a recent issue include high-resolution DNA fragment analysis, new reversed-phase chromatography media, large-scale oligonucleotide purification, spectrophotometric quantification of nucleic acids, and kits for purification of monoclonal antibodies by centrifugation. **Pharmacia Biotech. Circle 150.**

Get to the Point

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Get to the Point Fast

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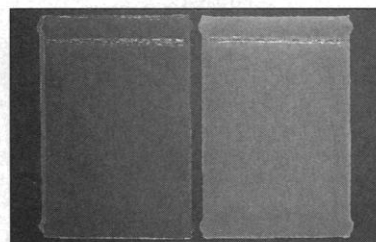
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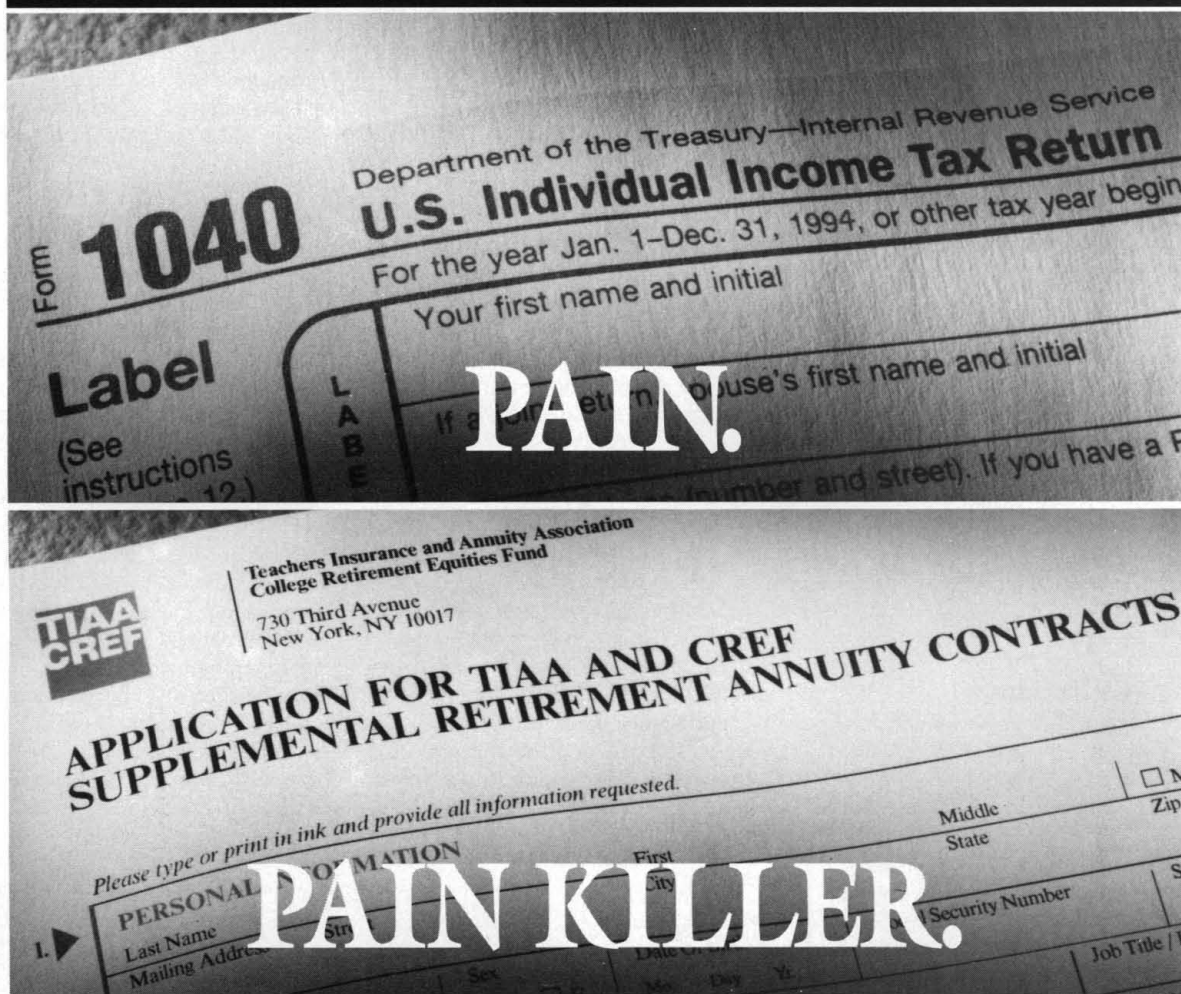
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POSITIONS OPEN

EAST CAROLINA UNIVERSITY SCHOOL OF MEDICINE Department of Microbiology and Immunology

Faculty positions are available at the **ASSISTANT** or **ASSOCIATE PROFESSOR** levels in the areas of molecular and cellular immunology and/or microbial pathogenesis. Salary and rank will be commensurate with qualifications. Successful candidates will develop an extramurally funded research program and will participate in team-taught courses in the Medical and Graduate Schools. Appointment at the Associate Professor level requires a strong record of continuous research funding including current extramural support and evidence of leadership in teaching and service. The department has 15 full-time faculty and is fully equipped with advanced core facilities for research in immunology, molecular biology and genetics. Please provide curriculum vitae, a letter describing research and teaching goals, and names and addresses of three references to: **Dr. Paul Phibbs, Professor and Chairman, Department of Microbiology and Immunology, School of Medicine, East Carolina University, Greenville, NC 27858-4354.**

East Carolina University is an Equal Opportunity/Affirmative Action University. Accommodates individuals with disabilities. Applicants must comply with the Immigration Reform and Control Act.

Augustana College, Sioux Falls, South Dakota seeks a biologist to fill a one year leave replacement position as **ASSISTANT PROFESSOR** of Biology. This position may be renewable for up to two additional years. Responsibilities include team teaching introductory biology courses for undergraduate and non-majors with opportunities to teach advanced courses in the candidate's specialty area. Candidates must willingly and cheerfully integrate with a professionally active and diverse department of nine members. Earned doctorate in biology. College level teaching experience desirable. Candidates must be committed to the liberal arts and understand the role of science as a component of the liberal arts. Knowledge of technology appropriate to the position, and a commitment to continuing professional/scholarly growth and to the mission of a church-related college required. Applications accepted until May 26, 1995, or until position is filled. Qualified applicants may submit a letter of application, curriculum vitae, graduate transcripts (direct from Registrar's Office), three current letters of reference, and a statement of professional goals to: **Dean of the College, Augustana College, Box 763, Sioux Falls, SD 57197.** *Equal Opportunity Employer/Affirmative Action.*

Invertebrate Paleontologist-Field Museum. **ASSISTANT CURATOR**, tenure-track. Seeking productive colleague with innovative, specimen-based research program. Ph.D. and record of scientific achievement required. Entails research, curation of world-class invertebrate paleontology collections, and museum service. Participation in university education programs is encouraged. Search Committee must receive résumé, statement of research objectives, copies of relevant publications, and three letters of reference, by July 31, 1995. Mail to: **Search Committee, Department of Geology, Field Museum, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605-2496.** Telephone: 312-922-9410 ext. 293; Email: PaleoSrch@aol.com (no electronic submissions). Hiring subject to final budgetary approval. *Equal Opportunity Employer; qualified women and minority group members encouraged to apply.*

Two tenure-track **ASSISTANT PROFESSOR** positions for fall 1995: 1) Vertebrate Zoology, expertise in ornithology, mammalogy, and/or conservation desirable; 2) Anatomy and Physiology/Histology. Teaching duties for both positions also include introductory courses for major and non-majors, plus specialty courses. Involvement in undergraduate and M.S. graduate research expected. Send curriculum vitae, statement of teaching and research interests, and three letters of reference by May 24, 1995, to: **Search Committee, Department of Biology, Northeast Louisiana University, Monroe, LA 71209-0520.** Further information: bipritchett@merlin.nlu.edu.

FACULTY POSITIONS: Anatomy and Physiology: 12-month, tenure-track, at instructor/assistant/associate or professor levels. Requirements: Master's degree or Ph.D. in human anatomy or physiology. Teaching positions with lectures and laboratories; may include Saturday and/or evening classes. Submit letter of interest, curriculum vitae, date of availability, salary requirements, official transcripts and three letters of recommendation to: **Vice President of Academic Affairs, Life College, 1269 Barday Circle, Marietta, GA 30060.** *Equal Employment Opportunity Employer.*

POSITIONS OPEN

TRANSPLANTATION IMMUNOLOGY University of Nebraska Medical Center

The Department of Pathology and Microbiology is seeking to fill multiple **ASSISTANT** or **ASSOCIATE PROFESSOR** positions with expertise in molecular and cellular immunology. The primary responsibility will be innovative, original research that will include pre- and postdoctoral students. It is expected that this individual will collaborate with clinical investigators in studies on solid organ and stem cell/cellular transplantation. Preferred qualifications include a doctorate degree in immunology or related field, at least two years of successful postdoctoral research and demonstrated capacity for independent research and funding. Curriculum vitae, letter, and three references to: **James E. Talmadge, Ph.D., Pathology/Microbiology, UNMC, 600 South 42nd Street, Omaha, NE 68198-5660.** *An Equal Opportunity/Affirmative Action Employer.*

DEVELOPMENTAL BIOLOGIST

The Oregon Regional Primate Research Center (ORPRC) has an opening for a developmental biologist at a level equivalent to **ASSISTANT, ASSOCIATE** or **FULL PROFESSOR**. Scientists interested in early mammalian growth and developmental processes are especially encouraged to apply. Candidates must hold a Ph.D., M.D., or equivalent doctoral degree, have experience in molecular biology and gene transfer technology, and be able to establish and maintain an externally funded research program. The ORPRC offers a unique opportunity to develop new lines of research on gene expression and transfer in nonhuman primate embryos. Joint academic opportunities are available at the Oregon Health Sciences University. Applicants should submit a résumé, letter of research interests, and the names of three references to: **Chair, Developmental Biologist Search Committee, ORPRC, 505 N.W. 185th Avenue, Beaverton, OR 97006 USA.** Applications will be accepted until the position is filled. *The ORPRC is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR of Biology—Tenure-Track. The Biology Department of Raymond Walters College, a two-year branch campus of the University of Cincinnati, invites applications of qualified individuals for a position to begin September 1, 1995. The major teaching responsibility will be in the area of entry-level Biology courses for majors and non-majors. The candidates must demonstrate significant teaching experience with primary course responsibility for lecture and laboratory preparation at the college level. Minimum qualifications: A Master's degree in Biological Sciences, Ph.D. preferred. Send a detailed résumé, including a summary of teaching experience, courses taught, evidence of teaching proficiency, college transcripts and three letters of professional reference by June 1, 1995, to: **Dr. Donald M. Meisner, Chairman, Department of Biology, Raymond Walters College, 9555 Plainfield Road, Cincinnati, OH 45236.** *The University is an Equal Opportunity Employer.*

FACULTY POSITION IN GLYCOBIOLOGY University of California, San Diego

The Cancer Center and the Division of Cellular and Molecular Medicine are jointly recruiting for an established investigator to join the Glycobiology Program (current members are: **M. Farquhar, A. Manzi, J. Marth, E. Muchmore, G. Palade, L. Powell, and A. Varki**). This 12-month, tenure-track **FACULTY POSITION** is for an individual with an established track record in any area of Glycobiology. Particular attention will be given to candidates with experience in genetics, immunology or cellular and molecular biology. Departmental affiliation, teaching activities, professional rank and compensation will depend upon background and experience. Interested individuals should send a full curriculum vitae, and names of three professional references to: **Ajit Varki, Associate Director for Basic Research, UCSD Cancer Center, University of California, San Diego, La Jolla, CA 92093-0687.** *Equal Employment Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR: Division of Molecular Medicine, Department of Medicine; tenure-track, M.D., or Ph.D. Research in human or mouse genetics, mouse models of disease, genomics, gene regulation. Send curriculum vitae to: **Dr. Alan Tall, Department of Medicine, Columbia University, New York, NY 10032.** *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

UNIVERSITY OF CINCINNATI SENIOR LEVEL RESEARCH FACULTY Department of Pathology and Laboratory Medicine

The Department of Pathology and Laboratory Medicine at the University of Cincinnati is recruiting two senior level **RESEARCH FACULTY**. One position is in the area of Cancer Biology and the other is in the area of Atherosclerosis Research. Established investigators with a strong publication record and a demonstrated ability in sustaining extramural research support are encouraged to apply. Successful candidates will be expected to lead independent research programs and to interact with current faculty members in developing and expanding the research activities in these two focused areas of research in the department.

Interested applicants should send a curriculum vitae and the names of three references. Applications will be accepted until the position is filled. Applications and inquiries should be directed to:

David Hui, Ph.D.
Chairman of The Research Committee
Department of Pathology and Laboratory Medicine
University of Cincinnati College of Medicine
P.O. Box 670529
Cincinnati, OH 45267-0529

Affirmative Action/Equal Opportunity Employer.

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE (NIH) Richard W. Hendler, Ph.D.

The Laboratory of Cell Biology, National Heart, Lung and Blood Institute invites applications for a senior **NON-TENURE-TRACK POSITION** to collaborate on studies of the mechanisms of energy transduction by electron-transporting and photon-absorbing enzymes. The candidate must be a U.S. citizen or permanent resident with a Ph.D. degree and a minimum of five years of postdoctoral experience involving the use of sophisticated, computer-controlled instrumentation for obtaining rapid kinetic spectra and membrane potential data, and for measuring the activity of enzymes in proteoliposomes. It is essential that the candidate be able to perform a variety of computer-based data analyses and have a sufficiently strong background in electron transport, photosynthesis and photocycles to interpret the data and design experiments. The salary range is \$50,000 to \$65,000, depending on experience. Send curriculum vitae and bibliography and three letters of reference to: **Dr. Richard W. Hendler, Laboratory of Cell Biology, NHLBI, NIH, 3 Center Drive MSC 0301, Building 3, Room B1-06, Bethesda, MD 20892-0301.** Applications must be received within 30 days of this announcement. *NIH is an Equal Opportunity Employer.*

POSTDOCTORAL OPENINGS. The Department of Zoology, Miami University, Oxford, Ohio seeks two postdoctoral associates to collaborate on existing or new research efforts with faculty sponsors and to interact with graduate and undergraduate students. Starting date: 1 September 1995.

Position 1: Aquatic Toxicologist. Qualifications: Recent Ph.D. with a strong background in aquatic toxicology, statistics, and organic chemistry. Experience with fish toxicity testing and HPLC is desirable.

Position 2: Ecological Geneticist/Genetic Ecotoxicologist. Qualifications: Recent Ph.D. with a strong background in biochemical population genetics. Experience with methods of mtDNA restriction fragment analysis and/or RAPDs is desirable. Initial appointment is for one year; reappointment is possible. Send letter of application and statement of research interests, curriculum vitae, and three letters of recommendation to: **Dr. Douglas H. Taylor, Chair, Zoology, Miami University, Oxford, OH 45056.** *Miami University is an Equal Opportunity Employer.*

Harvard **POSTDOCTORAL** opening in Receptor Protein Kinase Signaling available to dissect insulin, IGF-1, EGF (see *Nature*, 324:68, 1986; *Science*, 236:197, 1987; *PNAS*, 85:1477, 1988; *EMBO J.*, 8:2943, 1989; *J Virol*, 68:411, 1994) or PKC action (see *JBC*, 268:3456, 1993; *MCB*, 13:4728, 1993; *J Biochem*, 115:1000, 1994; *Mol Carcinogen*, 12:166, 1995) by biochemistry and the yeast two-hybrid system. Please send curriculum vitae, summary of your work, pre-/reprints, and addresses of three references or call: **Heimo Riedel, Ph.D., Co-Section Head (Molecular Biology), Harvard Medical School and Joslin Diabetes Center, 1 Joslin Place, Boston, MA 02215-5397.** Telephone: 617-732-2691, or -2693; FAX: 617-732-2593.

POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY

The Dr. William M. Scholl College of Podiatric Medicine (SCPM) invites applications for a full-time **FACULTY POSITION** in the Department of Basic Biomedical Sciences. The position is available July 1, 1995, and offers faculty rank and salary commensurate with professional experience and achievements. We require a Ph.D. in biochemistry, or related area, and a firm commitment to teaching. You will teach a comprehensive course in medical biochemistry to podiatric medical students. Productivity in research and other scholarly activity is expected. Limited intramural funds are available for research. Please submit a letter of application, curriculum vitae, and supporting material including names/addresses of three references to: **Bruce L. Manion, Ph.D., Chairman, Search Committee, Scholl College of Podiatric Medicine, 1001 North Dearborn Street, Chicago, IL 60610.** *SCPM is an Equal Opportunity Employer.*

POSTDOCTORAL/RESEARCH ASSOCIATE

We seek an outstanding individual to participate in research projects directed at determining the cellular and molecular events in the attachment and colonization of bacteria in the urogenital system. The glycoproteins and glycolipids involved in the adhesion of bacteria will be characterized and the specific oligosaccharide structures that interact with the bacterial adhesins identified. Specific and novel methods of interfering with the oligosaccharide interactions will be sought. Qualified candidates should have a Ph.D. in cellular, molecular or structural biology with experience in the structures and biology of glycoconjugates, together with an interest in bacterial adherence infectious diseases. This position has the possibility of leading to a tenure-track faculty appointment. To apply, submit curriculum vitae and a summary of research experience to:

Anthony J. Schaeffer, M.D.
Professor and Chairman
Department of Urology
Northwestern University Medical School
303 East Chicago Avenue
Tarry 11-715
Chicago, IL 60611

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POSTDOCTORAL POSITIONS

Positions are now available to study either the involvement and mechanism of activation of cell cycle-related protein kinases in apoptotic signal transduction (**Lahti et al.**, *Mol Cell Biol*, 15:1-11, 1995; **Xiang et al.**, *J Biol Chem*, 269:15786-15794, 1994) or the physical alteration of the genes encoding these protein kinases in childhood neuroblastoma (**Lahti et al.**, *Nature Genetics*, 7:350-375, 1994). Individuals are needed to work on all aspects of these projects involving biochemical, molecular, cellular, and molecular genetic analyses. Recent Ph.D., M.D., or M.D./Ph.D. with experience in molecular biology, molecular genetics, biochemistry, cell biology, or related field is required. Send curriculum vitae and three references to: **Dr. Vincent Kidd, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, TN 38101-0318.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION. Electrophysiologist. Experience in intracellular recording required, whole-cell voltage-clamp techniques and brain slice work desirable. Fellow will study retrograde transmission in the GABA system in the hippocampal slice; cf. **Pitler and Alger**, *Neuron*, 13:1447-55, 1994. The project is relevant to epilepsy and ITP. Available immediately; start date flexible. Advanced postdoctorals encouraged to apply. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. B. E. Alger, Department of Physiology, University of Maryland School of Medicine, Baltimore, MD 21201.** *The University of Maryland is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION—Immediate opening to work on a NIH-funded study of the role of interleukin 6 gene expression in the pathogenesis of multiple myeloma. Experience in molecular biology and/or cellular immunology is desirable but not required. Send a curriculum vitae, names and addresses of three references, and a short letter describing research experience to: **Dr. Diane Jelinek, Department of Immunology, Mayo Clinic, 200 First Street SW, Rochester, MN 55905.** *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

POSITIONS OPEN

UNIVERSITY OF CINCINNATI POSTDOCTORAL POSITIONS Department of Pathology and Laboratory Medicine

The Department of Pathology and Laboratory Medicine at the University of Cincinnati is recruiting two **POSTDOCTORAL POSITIONS** for those scientists with a recent doctorate degree and a strong background in molecular biology techniques. The successful candidate will be involved in lipid and cholesterol research. These studies will involve the generation and use of transgenic and gene knock out mice in delineating the mechanisms for dietary regulation of lipid absorption genes and in the relationship between dietary lipid absorption and atherosclerosis.

Interested applicants should send a curriculum vitae and the names of three references. Applications will be accepted until the position is filled. Applications and inquiries should be directed to:

David Hui, Ph.D.
Department of Pathology and Laboratory Medicine
University of Cincinnati College of Medicine
P.O. Box 670529
Cincinnati, OH 45267-0529

Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study CNS serotonergic function through the examination of mutant mouse strains generated through transgenic and gene targeting procedures (See **Tecott et al.**, *Nature*, 374:542-546, 1995). Projects involve the generation of such strains and multidisciplinary approaches to their phenotypic analysis. A strong background in molecular biology and/or neurobiology is preferred. Send curriculum vitae and names of three references to: **Laurence Tecott, M.D., Ph.D., Department of Psychiatry, Center for Neurobiology and Psychiatry, UCSF, San Francisco, CA 94143-0984.** *The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Yale University School of Medicine, Division of Molecular Psychiatry, Psychiatric Genetics: for research using genetic linkage and association techniques, and mutational analysis. Psychiatric disorders under study include schizophrenia, panic disorder, substance abuse, and alcoholism. Send curriculum vitae with names of three references to: **Joel Gelernter, M.D., Psychiatry 116A2, West Haven VA Medical Center, 950 Campbell Avenue, West Haven, CT 06510.** Email: gelernter-joel@cs.yale.edu. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately for Ph.D. in neurobiology to study the role of endogenous neurotoxins in neurodegeneration. Interested candidates possessing experience in using isolated nerved terminals, stereotaxic injection, and cell culture methods should send curriculum vitae, a brief statement of research interest, and names and telephone numbers of three references to: **Dr. Michael B. Mattamall, 11G, VA Medical Center, No. 1 Jefferson Barracks Drive, St. Louis, MO 63125.**

NEUROSCIENTIST

POSTDOCTORAL RESEARCH ASSOCIATE position available for work in a multidisciplinary laboratory studying cellular and molecular basis of response of developing neural tissues to injury. Systems include developing mammalian and frog embryos, organotypic brain slice cultures, neural cell line culture with emphasis at all levels on cytokine regulation of neural function. Methods to be employed include mammalian fetal surgery, molecular biology, confocal microscopy, immunocytochemistry, calcium measurements, and whole cell patch clamp. Guaranteed one year position with strong potential for two additional years of support. Contact: **Dr. Charles F. Ide, Deputy Director, Center for Bioenvironmental Research and Department of Cell & Molecular Biology, Tulane University, 604 Boggs Hall, New Orleans, LA 70118.** Telephone: 504-862-8370; Email: cfide@mailhost.tcs.tulane.edu.

GENETIC DISORDERS OF BONE

Applicants invited for **POSTDOCTORAL POSITION** to investigate genetic disorders of bone matrix. Projects include antisense suppression, osteoblast biochemistry and mutation detection. Broad knowledge of biochemistry and molecular biology desired. Less than five years of postdoctoral. Contact: **Dr. J. Marini, Building 10, Room 9S242, 10 Center Drive, MSC 1830, Bethesda, MD 20892-1830.** FAX: 301-402-0234.

Imagine The Possibilities

At Berlex, we've built our reputation on FDA-approved product successes and a proven track record in the pharmaceutical industry. Currently, we are seeking a Scientist to focus on protein and gene expression systems as a member of our Cell and Molecular Biology Department in the beautiful San Francisco Bay Area.

SCIENTIST

Protein/Gene Expression

Calling on your skills and experience in *E. coli* and yeast expression systems, inducible mammalian expression systems, cell culture and mammalian transfection techniques, you will design and construct expression systems for a wide variety of core and research projects within Berlex. Along with a Ph.D. in molecular biology, biochemistry or genetics, you will need at least 4 years' experience in the construction, optimization and development of protein expression vectors supported by a broad range of expertise in molecular biology and gene expression. Excellent communication and interpersonal skills are essential to interact with project leaders and other members of our research team.

As a US subsidiary of an international Fortune 500 company, Berlex is proud to offer competitive salaries and a generous benefits package. To apply, send your CV/resume to: BERLEX, HUMAN RESOURCES EMPLOYMENT, 15049 SAN PABLO AVE., DEPT. B95-018, RICHMOND, CA 94804-0099. Principals only, please. EOE.

BERLEX

THE BEST IS YET TO COME

Senior Scientist

Mass Spectrometry/Bioanalytical

Southern California

Allergan, a Fortune 500 company and a global leader in specialty therapeutic products, is offering an outstanding opportunity to supervise a mass spectrometry/bioanalytical facility in our Department of Pharmacokinetics. The purpose of this facility is to develop sensitive mass spectrometric assays and to characterize the metabolic fate of drug candidates.

Responsibilities include analyzing/interpreting mass spectrometric data, assessing/developing/validating mass spectrometric bioanalytical assays for in-house analysis, preparing/releasing reports, staffing/training and identifying/evaluating contract laboratories. The selected candidate will also contribute to other R&D areas.

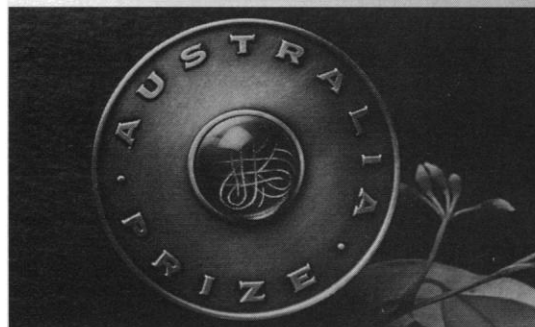
Requires a Ph.D. in Chemistry/related field or a Ph.D. in Pharmacology/similar area and 5+ years industrial mass spectrometry experience in drug metabolism/bioanalysis using GC/MS and LC/MS. Must have the ability to design, interpret and execute mass spectrometric experiments, working knowledge of gas chromatography and high pressure liquid chromatography, GLP compliance issues and human/animal drug metabolism and the ability to maintain/troubleshoot complicated analytical equipment.

We reward our employees with a competitive salary, an excellent benefits package and a great working environment. Please send resume to: **Allergan, Human Resources Dept., Attn: JSPK, 2525 Dupont Drive, T2-1B, Irvine, CA 92175.** An Equal Opportunity Employer.

Advancing the Science of Health Care.

ALLERGAN

Frontline Science wins the Australia Prize



The 1995 **Australia Prize** was recently awarded to four pioneers in remote sensing, the observation of the Earth by instruments carried in aircraft or orbiting satellites.

Three Australian scientists, Dr Ken McCracken, Founding Chief of the CSIRO's Division of Mineral Physics, and his colleagues Dr Andrew Green, Director of the Cooperative Research Centre for Australian Mineral Exploration Technologies, and Dr Jonathan Huntington of the CSIRO's Division of Exploration and Mining, shared the \$300,000 award with Dr Richard Moore, Emeritus Professor of Electrical and Computer Engineering at the University of Kansas.

Between them, the winners of this year's **Australia Prize** have made an enormous contribution to human welfare, literally showing the Earth in a new light.

Nominations called for the 1996 **Australia Prize**

The **Australia Prize** is a prestigious international award for outstanding achievement in selected areas of science and technology which promote human welfare. The prize, which consists of \$A300,000 and an inscribed medal (picture above), was instituted by the Australian Government in 1989.

The 1996 **Australia Prize** will be awarded in the field of Pharmaceutical Design.

This field embraces any aspect of rational drug design and draws on many disciplines including biochemistry, clinical research, computer-aided design, crystallography, human biology, pharmacology, physiology, toxicology, statistics and other related fields.

Nominations for the 1996 **Australia Prize** close on 31 July 1995. More information about nominations is available from the Australia Prize Secretariat at the following address:

Australia Prize – GPO Box 9839, Canberra, ACT 2601, Australia, Fax: 61-6-276-2002.

POSITIONS OPEN

POSTDOCTORAL FELLOW IN NEUROBIOLOGY

POSTDOCTORAL POSITION available immediately, to study communication between the immune and peripheral nervous systems *in vitro*. Sensory and sympathetic neurons in intact ganglia or in acute isolation are examined with electrophysiological (current and voltage-clamp), immunological (active and passive sensitization) and optical (caged second messengers) techniques to address fundamental questions about neurogenic inflammation. We are identifying signal molecules and membrane mechanisms underlying short (10 minutes)- and long-term (hours) changes in neuronal excitability and synaptic transmission following antigenic activation of immune cells. A strong background in cellular electrophysiology is desired. Salary consistent with experience; up to four years of support. Please send or FAX curriculum vitae and addresses and telephone numbers of three references to: **Dr. Danny Weinreich, University of Maryland School of Medicine, Room 4-0002 BRB, 655 West Baltimore Street, Baltimore, MD 21201. FAX: 410-706-0032; Email: dweinrei@umabnet.ab.umd.edu. University of Maryland at Baltimore is an Affirmative Action/Equal Opportunity/ADA Employer. Minorities and women are encouraged to apply.**

ASSOCIATE RESEARCH SCIENTIST in Pharmacology at Columbia University. Applicant must have Ph.D. degree with experience in biochemical and molecular techniques to study signal transduction mechanisms in cardiac myocytes. Please send curriculum vitae and names of three references to: **Dr. Susan F. Steinberg, Department of Pharmacology, College of Physicians & Surgeons of Columbia University, 630 West 168 Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

Clinical Chemistry POSTDOCTORAL FELLOW-SHIPS at Mayo Clinic. Seeking applicants for two year ComACC-approved fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1995, will be considered for appointment beginning in July 1996. Contact: **Mary F. Burritt, Ph.D., Division of Clinical Biochemistry & Immunology, Mayo Clinic, Rochester, MN 55905, for more information. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.**

LANDSCAPE ECOLOGIST

Applications are invited for this position at the Center for Forested Wetlands Research, USDA, Forest Service, Charleston, South Carolina. Research will involve the study of forested wetland landscapes with applications to ecosystem dynamics, ecosystem management and global change. This is a permanent, full-time position (GS-12, \$42,600 to \$55,400). Applicants should have a Ph.D. or equivalent in landscape ecology or ecology with an emphasis on remote sensing and modeling. Direct questions about the position to: **Dr. Carl C. Trettin, 803-727-4271. Applicants should submit a letter of application, curriculum vitae, transcripts, names of three references, Qualification and Scientific Fact Sheet, statement of citizenship and veteran preference forms by May 12, 1995. Inquiries and submission of application materials should be directed to: Ms. Carmen Everton, Southern Research Station, P. O. Box 2680, Asheville, NC 28802. Telephone: 704-257-4342; FAX: 704-257-4840.**

The Department of Surgery at Rhode Island Hospital is seeking a **RESEARCH ASSOCIATE** who would qualify for a faculty position at the level of Instructor (Research) with the Brown University School of Medicine. An individual is sought with interest and experience in the field of molecular carcinogenesis to participate in research with particular emphasis in human breast and colon cancer. Candidates should have a Ph.D. degree in post-graduate research experience in biochemistry or molecular biology. Applications are expected by June 30, 1995. Screening will begin on that date and continue until a candidate is selected or the search is closed. Submit with three references and a statement of research objectives to: **Jorge Albina, M.D., Chairman, Search Committee, Surgical Research, Nursing Arts Building 216, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903. Rhode Island Hospital is an Equal Employment Opportunity/Affirmative Action Employer and actively solicits applications from minority and protected groups.**

POSITIONS OPEN



**Agricultural Research Service
United States Department of Agriculture**

VETERINARY MEDICAL OFFICER (GS-11/12/13). The USDA, ARS, Avian Disease and Oncology Laboratory, East Lansing, Michigan, is seeking a veterinarian with research training to lead research on the epidemiology and immunopathogenesis of Marek's disease in chickens. This is a base-funded high priority research program which utilizes a team-oriented, multidisciplinary approach and involves a strong interface with the poultry industry. Knowledge of pathology, virology and immunology required. U.S. citizenship required. A D.V.M. or equivalent degree required plus at least one year of professional veterinary research experience. A Ph.D. and/or equivalent research experience required at grades 12/13. Salary commensurate with experience (range \$35,578 to \$65,915). For information about application procedures, call 517-337-6825. Incomplete Applications Will Not Receive Consideration. Complete applications must be postmarked by June 12, 1995. For information about the position, call: **Dr. R. L. Witter at 517-337-6828. USDA/ARS is an Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH SCIENTIST. Two-year position available July 1, 1995, for a Marine Chemist or Geochemist to study the sediment geochemistry, paleoceanography and paleoclimatological impact of global ocean nutrient cycles (N, P, Si). Applicants must have a recent Ph.D. in Chemical Oceanography or a related field with a background in stable isotope, trace element and/or nutrient geochemistry. Send résumé, statement of research interests and the names and addresses of three references to: **Dr. Philip N. Froelich, Director, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, GA 30332-0340. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSISTANT

The University of Virginia Department of Medicine seeks a **RESEARCH ASSISTANT** for the Division of Endocrinology and Metabolism. Candidates should be able to independently conduct *in vivo* and *in vitro* experiments in rats (experimental design, surgical techniques, treatment, sampling methods), measure specific hormones in blood samples and mRNAs in the pituitary, prepare manuscripts and presentations to scientific meetings. Submit curriculum vitae and three letters of reference by June 1, 1995, to: **Daniel J. Haisenleder, Ph.D., University of Virginia, Department of Medicine, 5041 MR-4 Building, Charlottesville, VA 22908. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.**

SPECIAL MRC STUDENTSHIP

Applications are invited for an **MRC STUDENTSHIP** leading to a Ph.D. This studentship has been made available to complement an MRC Programme Grant on fundamental studies of the bone/implant interface. The project will address the mechanisms of adsorption of non-collagenous bone proteins to materials surfaces with a view to explaining the apparent differences between bonding and non-bonding biomaterials. Candidates with excellent track records should have, or anticipate having, a degree in biochemistry, chemistry, chemical engineering or other relevant discipline. The University of Toronto offers an excellent program of support training. Dr. J. E. Davies, Centre for Biomaterials, University of Toronto, 170 College Street, Room 330, Toronto, Ontario M5S 1A1.

RESEARCH ASSOCIATE for university in central Ohio. Conduct a scholarly research project with heart failure rats; do metabolic and physiologic studies in heart and liver (blood pressures, echocardiography, prepare isolated myocytes and hepatocytes, perform ovariectomies); do biochemical and clinical assays; analyze and prepare data for publications; supervise graduate students. M.S. in nutrition or biochemistry and two years of research experience in above-described duties or in doing procedures in rats (blood pressures, echocardiography, prepare isolated myocytes and hepatocytes, perform ovariectomies). 40 hours per week, 8 a.m. to 5 p.m., Monday to Friday, \$2,000 per month. Send two résumés and cover letters (no calls) to: **J. Davies, JOB No. 1084, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

POSITIONS OPEN

Cardiology POSTDOCTORAL FELLOW position: Available July 1, 1995, to study the cellular and molecular regulation of cardiogenic differentiation. Projects include the characterization of factors which activate cardiac-specific gene expression and the generation of anteroposterior polarity in cardiogenic mesoderm. Training in molecular and developmental biology is desired. Please send curriculum vitae and the names of references to: **Dr. David Bader, Professor of Medicine, Division of Cardiology, Vanderbilt University School of Medicine, Nashville, TN 37232-6300. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available July 1, 1995, for outstanding individual interested in pursuing basic research related to birth defects. Candidate selected will be able to work with one of 12 investigators associated with our Medical Teratology Training Program. Candidates should have strong background in Molecular Biology/Biochemistry. U.S. citizenship or permanent residency is required. Send curriculum vitae and names of three references to: **Dr. Philip E. Mirkes, Department of Pediatrics RD-20, University of Washington, Seattle, WA 98195. FAX: 206-543-3184.**

COURSES AND TRAINING

GRADUATE TRAINING IN MOLECULAR ONCOLOGY AND IMMUNOLOGY

POSTDOCTORAL TRAINING positions are available in molecular oncology and immunology. Fellows will be supported by an NIH training grant, requiring U.S. citizenship or resident status. Minority applicants are encouraged.

The principal interests of participating faculty are molecular mechanisms of tumorigenesis including oncogenes and tumor suppressors, repair of DNA damage, signal transduction and growth control, as well as various aspects of molecular, cellular and tumor immunology.

Preceptors are: **R. S. Basch, R. J. Boorstein, R. B. Carroll, Drs. V. Defendi, F. G. Giancotti, L. I. Gold, G. Inghirami, M. M. Ittmann, R. Lang, D. E. Levy, D. R. Littman, Y. Liu, D. Meruelo, E. W. Newcomb, V. Nussenzweig, A. Pellicer, D. B. Rifkin, D. Ron, R. Schneider, G. Teebor, G. J. Thorbecke, J. T. Vilcek, S. Vukmanovic, E. B. Ziff and S. Zolla-Pazner.**

Please send applications to: **Dr. G. J. Thorbecke, New York University Medical Center, Department of Pathology, 550 First Avenue, New York, NY 10016.**

WORKSHOP ON MOLECULAR EVOLUTION

August 6-18, 1995
Plus Extended Special Topics Session
August 19-25, 1995

A series of lectures and discussions exploring multiple approaches to molecular evolution, with a computer laboratory for phylogenetic and sequence analysis. Current topics in molecular evolution including the theoretical basis for comparative sequence analysis and phylogenetic tree reconstruction, evolution of genomes and origins of major lineages, the evolution of development, and applications of molecular techniques to studies of population biology and microbial diversity will be addressed. Enrollment limited to 60 students. Co-Directors: **Mitchell L. Sogin, Marine Biological Laboratory and Daniel Davison, University of Houston. Faculty: Douglas Eernisse, California State University; Andrew Ellington, University of Indiana; Joseph Felsenstein, University of Washington; Barry Hall, University of Rochester; Daniel Hartl, Harvard University; David Hillis, University of Texas; Elizabeth Kellogg, Harvard University; James Lake, UCLA; Laura Landweber, Princeton University; David Maddison, University of Arizona; Lynn Margulis, University of Massachusetts; Marc McMenamin, Mt. Holyoke College; Francois Michel, CNRS; Roger Milkman, University of Iowa; Gary Olsen, University of Illinois; Norman Pace, Indiana University; Rudy Raff, Indiana University; Monica Riley, MBL; David Swofford, Smithsonian Institution; and Bruce Walsh, University of Arizona.**

Tuition: \$700 (room and board available at no additional charge).

Application Deadline: May 16, 1995.

For information and application forms contact: **Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543. Telephone: 508-289-7401; Internet: admissions@mbi.edu; World Wide Web: http://www.mbl.edu.**

Tenure-Track And Postdoctoral Opportunities.

Listed below are some of the outstanding research training opportunities that are currently available at the National Institutes of Health.

Tenure-Track Position

Assistant Professor Equivalent

Nuclear Magnetic Resonance

Robert S. Balaban, PhD

Seeking to appoint a junior scientist to initiate an independent program of basic and applied clinical research. Applications invited from candidates with demonstrated potential for creative research in physiology using *in vivo* nuclear magnetic resonance (NMR). Experience in whole body, high field NMR applications is desirable. The applicant will be the clinically responsible physician for human studies in the LCE and, therefore, must be board-certified in his/her medical specialty. Applications must be received within six weeks of the publication of this advertisement. Laboratory of Cardiac Energetics (OE-77), NHLBI, Building 10, Room B1D161, 10 CENTER DR MSC 1668, BETHESDA MD 20892-1668.

Postdoctoral Positions

HIV Gene Regulation

Sundararajan Venkatesan, MD

Research efforts are focused on 1) the functional mechanisms of HIV-1 Rev transactivator protein and associated cellular co-factors and HIV-1 RNA binding cellular protein(s); and 2) the mechanisms of receptor down-regulation and cell signalling modulation induced by HIV-1 Nef protein. Applicants must be well trained in molecular and cell biology. Training and experience in virology and immunology are highly desired. Laboratory of Molecular Microbiology (OE-77), NIAID, Building 10, Room 6A05, 10 CENTER DR MSC 1576, BETHESDA MD 20892-1576.

Molecular Biology of Eye and Ear Development

Heinz Arnheiter, MD

In mice and humans, mutations in the microphthalmia transcription factor gene result in abnormalities in pigmentation in skin, eye and inner ear and concomitant deafness. Studies focus on elucidating the mechanisms of action of this factor in normal and abnormal development. Candidates should have a background in molecular or developmental biology and have less than three years of postdoctoral experience. Laboratory of Developmental Neurogenetics (OE-77), NINDS, Building 36, Room 5D04, 36 CONVENT DR MSC 4160, BETHESDA MD 20892-4160.

Molecular and Developmental Neurogenetics

Lynn D. Hudson, PhD

Current research focuses on 1) how an oligodendrocyte selects an array of genes, including transcription factors, and integrates their action; and 2) unravelling the genetics of a complex trait, namely epilepsy, as another approach to defining genetic interactions. Candidates should have a molecular biology/developmental background and less than three years of postdoctoral experience. Laboratory of Develop-

mental Neurogenetics (OE-77), NINDS, Building 36, Room 5D06, 49 CONVENT DR MSC 4160, BETHESDA MD 20892-4160.

Neurobiology of Essential Fatty Acids

Norman Salem, Jr., PhD

A neurobiologist to study the functional deficits involved in the loss of docosahexaenoic acid (22:6n3) from the nervous system. Relevant skills for this position include behavioral, biochemical, anatomical or physiological techniques for assessing brain and retinal function. Experience with artificial rearing of rats or fetal alcohol syndrome is desirable, and candidates must have less than five years of postdoctoral experience. Laboratory of Membrane Biochemistry and Biophysics (OE-77), NIAAA, 12501 Washington Avenue, MSC 8205, BETHESDA MD 20892-8205.

Polysaccharide Biosynthesis

Willie F. Vann, PhD

Position for either a biochemist with experience in enzymology and molecular biology to characterize enzymes related to biosynthesis of polysialic acid in bacteria and eucaryotic cells, or an organic chemist with experience in the synthesis of carbohydrates to synthesize oligosaccharide protein conjugate vaccines and substrate analogues for enzymes in polysialic acid biosynthesis. Applicants must have less than three years of postdoctoral experience. Laboratory of Bacterial Polysaccharides (OE-77), FDA/CBER, (HFM-428), 1401 Rockville Pike, Rockville, MD 20852-1448.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet (wylbur.cu.nih.gov) or modem (1,301-402-2221 or 1,800-358-2221) with parameters set at "7,Even,1". When connected to NIH, type in "vt100" for terminal emulation, "F5E" for initials, and "AJL1" for account number.

The Postdoctoral Research Fellowship Opportunities catalog, which describes intramural laboratories at the NIH, is also available by request. An electronic version of the catalog may be accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (<http://www.nih.gov>). When connected, select *Research Opportunities at the NIH*. If you would like to request a catalog or have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, 301-402-1603, Fax 301-402-0483.

To Apply

If you hold a doctoral degree (e.g., PhD, MD/PhD, MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



National Institutes Of Health

Office Of Education

The NIH is an Equal Opportunity Employer

JPL/NASA Visiting Senior Scientist Office of Space Flight

The **Jet Propulsion Laboratory** is seeking a Visiting Senior Scientist (VSS) to serve as Senior Scientist to the Space Station Program. As such, this VSS will be the principal advisor to the Space Station Program Director at NASA Headquarters in all areas related to utilization within each phase of the Space Station Program, including the early Mir Program.

Responsibilities will include coordinating national and international user communities relating to research in science, technology, and associated commercial programs, and fostering close working relationships and coordination with the NASA user communities and the NASA Advisory Committees and Subcommittees which are responsible for oversight of the International Space Station. The VSS will serve as an internal advocate to the space program regarding station capabilities and the responsiveness of the program to requirements put forth by diverse user communities, including industrial participants. The purpose of these activities is to ensure that the full range of user requirements are properly integrated with program capabilities. The incumbent also serves as an articulate spokesman for space station to the general public and Congress.

A PhD (or equivalent research experience) in a technical field is required. Applicants should have experience working with diverse communities, and have demonstrated organizational and communication skills because of the emphasis of the Space Station Program, preference will be given to experience in the microgravity and life sciences area. For more information about the scope of the program and position responsibilities, please contact **Dr. Edmond M. Reeves** at (202) 358-2560.

Tenured faculty members are the preferred choice although qualified individuals from non-profit research institutions may also be considered. This position is open for immediate filling. Normal assignment in the Visiting Senior Scientist Program does not exceed two years. Appointees must be U.S. Citizens or Permanent Residents and are expected to return to their home institution following the NASA assignment. Please provide Curriculum Vitae, bibliography and the names of four references to **Dept. T39, Dr. Frederick Shair, Jet Propulsion Laboratory, 4800 Oak Grove Drive M/S 183-900, Pasadena, CA 91109. (818) 354-8251.** An Equal Opportunity Employer M/F



Dean of the College of Agricultural, Food, and Environmental Sciences and Associate Director of the Minnesota Agricultural Experiment Station University of Minnesota SEARCH EXTENDED

The University of Minnesota invites nominations and applications for the position of dean of the College of Agricultural, Food, and Environmental Sciences and associate director of the Minnesota Agricultural Experiment Station. The College of Agricultural, Food, and Environmental Sciences (CAFES) with its 10 departments, five branch stations, and landscape arboretum is a key part of a large land-grant research University that is located in a metropolitan area of 2.2 million people. Minnesota has a high rank nationally in food and agricultural products, a very diverse agricultural base, and is the home for a large number of food processing and horticultural firms. Programs of the college are not only involved with food and agriculture, but also with environmental issues associated with the production, processing, marketing, and distribution of food and agricultural products. The college has a comprehensive budget totaling approximately \$65 million. The college employs 230 faculty, 330 civil service staff, 120 academic professional and administrative staff, and provides instruction to 900 undergraduate and 425 graduate students. Many of the faculty, departments, and centers are nationally and internationally recognized for the quality and innovation of their disciplinary and interdisciplinary teaching, extension, and research programs.

The dean is the chief executive and academic officer of the CAFES and associate director of the Minnesota Agricultural Experiment Station (MAES). This position has administrative responsibility for collegiate faculty and programs, the recurring station budgets in the college and branch stations, and shared responsibility for state extension specialists integrated into college departments.

Responsibilities include: Overall leadership for disciplinary and interdisciplinary teaching, research, and outreach efforts in agriculture; administration of fiscal planning and management; personnel; and collaborative work with students, alumni, staff, faculty, administrators, and external constituencies to facilitate effective delivery of programs. The dean and associate director is the leading champion for the CAFES in the promotion of mutual understanding of the needs, programs, and accomplishments of the college to the University, the public, and constituency groups. This person will work with the Director of the MN Agricultural Experiment Station to create and sustain the MAES vision and programs, in cooperation with a team of associate directors who represent other colleges that contribute to experiment station programs.

Required qualifications include: An earned doctoral or comparable degree; experience in food, agricultural, or environmental sciences; demonstrated record of administrative and leadership experience; demonstrated knowledge of teaching, research, and outreach programs; demonstrated excellence in verbal and written communication; demonstrated commitment to affirmative action, cultural diversity, and equal opportunity for women and minorities; and demonstrated ability to work effectively with and/or lead people in a diversity of programs. **Desired qualifications include:** Demonstrated experience with agricultural, food, or environmental research, teaching or outreach within the context of the land-grant mission for domestic and international programs; three years administrative and leadership experience, preferably in an interdisciplinary setting including experience in planning, budgeting, personnel systems, and in recruiting and supervising administrative colleagues; successful career experiences working with constituency groups, donors, advisory committees, and/or other boards.

This person will report to the University of Minnesota Provost for Professional Studies and Director of the MN Agricultural Experiment Station. It is a three-year fixed-term academic administrative appointment in the University, subject to review for renewal. Academic rank and tenure is dependent upon qualifications and vote of peer faculty in the appropriate department. Starting date is August 1, 1995. Salary level is commensurate with educational and career experience. The University's attractive fringe benefits program includes participation in a faculty retirement plan, health and dental programs, and life insurance coverage. Nominations for this position must be submitted by May 1, 1995. To be considered for this position, a complete file must be postmarked by May 15, 1995 to: Chair, Search Committee for CAFES Dean and Associate Dir. MAES, 201 Coffey Hall, 1420 Eckles Ave., St. Paul, MN 55108. A complete file must include a letter of intent and interest that also describes the candidate's qualifications for this position, a current resume or vitae, and a list of five references who have already been contacted by the applicant.

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.

Gene Medicines For Controllable Gene Therapy

GENEMEDICINE, INC. is developing non-viral gene therapy products through corporate partnerships. We seek highly motivated and qualified professionals for the following key positions:

Director, Cancer Program

We seek an accomplished scientific leader to create and implement the Cancer Program's research, preclinical and early clinical development strategies. The current focus is on gene medicines for treating head and neck solid tumors. This person will report to the Vice President, Research & Development and will be responsible for leading a multidisciplinary team of up to twenty (20) scientists in gene delivery and gene expression systems as well as establishing collaborations with key expert scientists, worldwide.

The successful candidate will have at least five (5) years experience in either advanced drug or gene delivery or gene expression systems, will have experience in cancer or a related field and ideally will have developed a successful product through an approved IND. He/she will have strong interpersonal and communication skills and will have demonstrated success as an exemplary leader in a pharmaceutical or biotechnology company or in academia.

Senior Scientist, Gene Expression Systems

We seek a scientist with a proven record of achievement in molecular or cell biology to lead a small research team in the exploration of RNA processing and the effects of chromatin structure on gene expression and the design and construction of cell-specific eukaryotic gene expression systems. He/she should have at least three (3) years post-doctoral experience, preferably in industry, and excellent management, interpersonal and communication skills.

GENEMEDICINE, INC., offers career growth and highly competitive compensation packages. For confidential consideration please send a resume to: **GENEMEDICINE, INC., Attn: Human Resources, 8301 New Trails Drive, The Woodlands, TX 77381-4248, or fax to: (713) 364-0858.**



GENEMEDICINE, INC.

DEPUTY DIRECTOR, National Institute of Environmental Health Sciences (NIEHS)

The National Institute of Environmental Health Sciences (NIEHS) invites nominations and applications for the position of Deputy Director, National Institute of Environmental Health Sciences (NIEHS). The incumbent of this position is responsible for coordinating, formulating, and implementing policies and programs necessary to carry out the Institute's mission. He/she is responsible for assuring that adequate review of intramural program research program plans and operations are made so that Institute research activities are at the forefront of research in environmental health. The incumbent is also responsible for assuring that adequate technical review of grant applications and research contract proposals is made so that the best quality research is supported. The incumbent is responsible for providing direction and oversight for the Institute's international programs. The Deputy Director serves as the focal point for coordinating intramural and extramural research efforts, and assuring the integration of Institute programs and activities. The incumbent represents the Director, NIEHS, and serves as liaison with other government agencies, private foundations, universities and private research institutes, scientific societies, lay interest groups, and international health and research organizations with interest in the environmental health sciences. In this capacity, gives speeches and presentations on Institute policies, programs, and future initiatives. As required, represents the Institute on a variety of international, national, DHHS, NIH, and NIEHS committees. Develops, plans and coordinates programs for Institute sponsored symposia, workshops, and seminars. Coordinates and/or undertakes high priority initiatives particularly in areas and/or subjects which cross program lines (e.g., environmental factors and women's health). Sets up and plans procedures for periodic evaluation of program accomplishments. Assures that plans developed by various components of the Institute comprise a comprehensive program for the Institute. In exercising his/her responsibilities for program planning, implementation and evaluation, works with and seeks the advice of the National Advisory Environmental Health Sciences Council and the NIEHS Board of Scientific Counselors.

This is a Civil Service position in the Senior Executive Service. The salary range is ES-1 to ES-5, currently \$96,374 to \$115,981 (includes a locality pay) per annum. The person selected may be eligible for Physicians Comparability pay up to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-Federal selectee for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. (Alternatively, applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The SES individual selected, if not presently in the Senior Executive Service, must serve a one year probationary period.

Applicants must meet the minimum educational requirements (or possess equivalent combination of experience and training) for Medical Officer, GS-602; Veterinary Medical Officer, GS-701; Health Science Administrator, GS-601; Biologist, GS-401; Pharmacologist, GS-405; Toxicologist, GS-415; Geneticist, GS-440; Physiologist, GS-413 or Chemist, GS-1320 as defined by the U.S. Office of Personnel Management Qualifications Standard Handbook for General Schedule Positions, which is available in Federal Personnel Offices and Federal Job Information Centers. Further information about the position may be obtained by calling 919-541-7811. An Application for Federal Employment (SF-171); Federal Application for Federal Employment (OF-612); curriculum vitae and bibliography; or other written format and Executive Qualification narrative should be submitted to:

**Mr. Bruce Wiggins (CODE: HNV101), NIEHS Personnel Office
P. O. Box 12233, Research Triangle Park, NC 27709**

Applications must be received by June 23, 1995.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, sexual orientation, national origin, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.

NIH is an Equal Opportunity Employer

THE ROCKEFELLER FOUNDATION

POSTDOCTORAL POSITION IN AGRONOMY-MALAWI

The Rockefeller Foundation seeks a postdoctoral agronomist on behalf of the Government of Malawi for a Foundation-funded program of maize research in Malawi. The Government of Malawi's Department of Agricultural Research has been implementing an interdisciplinary maize improvement research plan since 1988 with Foundation support. Advances have been made in understanding the developing of improved varieties but major problems remain in understanding the reasons for poor maize yields. Current focus is on the nutrition and management of the maize crop under smallholder financial and labor constraints. Agroforestry, legume intercropping, crop rotation, and organic matter management, with and without inorganic fertilizers, are all being investigated. Over 80% of the Malawian population relies on maize as a staple food. Maize is planted on approximately 70% of arable smallholder land each year. Most of the maize varieties grown are unimproved and of relatively low yield potential.

The successful applicant will have an excellent academic record, developing-country field-work experience, and the ability to work cooperatively as a member of a research team. The agronomist will be assigned to the Department of Agricultural Research with a joint appointment to the Maize and the Agroforestry Commodity Teams. He or she will develop innovative research ideas, in collaboration with the Commodity Team Leaders and participate fully in the work of the Teams. The agronomist will join a well-qualified group of national scientists and two other postdoctoral fellows on assignment to the Department.

The position will be based at Chitedze Research Station outside Lilongwe, the capital of Malawi, but will require extensive field work throughout Malawi. The Lilongwe office of the Rockefeller Foundation will provide local logistical support for the post but the appointee will work under the direction of the National Maize Research Coordinator. Within this environment, he or she will be expected to contribute positively toward the detailed formulation and implementation of appropriate research activities.

Interested candidates should send a letter by June 15, 1995, indicating why they are qualified for and interested in the position, enclosing a current curriculum vitae to:

**Malawi Postdoctoral Search
Agricultural Sciences Division
The Rockefeller Foundation
420 Fifth Avenue
New York, New York 10018-2702**

*The Rockefeller Foundation is an Equal Opportunity/
Affirmative Action Institution.*

POSTDOCTORAL FELLOWSHIPS IN CANCER BIOLOGY

ST. JUDE CHILDREN'S RESEARCH HOSPITAL

Two postdoctoral fellowships are available supported by an NIH/NCI Training Grant in Cancer Biology. Recent Ph.D., M.D. or Pharm.D. fellows train with leading scientists in several basic biomedical research laboratories which include biochemistry, experimental oncology, genetics, infectious diseases, immunology, pharmaceutical sciences, molecular pharmacology, tumor cell biology and virology/molecular biology. Only U.S. citizens and permanent residents may apply.

Applicants should provide a curriculum vitae, a brief description of research interests and have three referees send letters of reference to:



**St. Jude Children's
Research Hospital**

**Dr. Charles O. Rock,
Program Director
Department of Biochemistry
St. Jude Children's
Research Hospital
P.O. Box 318
Memphis, TN 38101-0318**

All information must be received by June 1, 1995
An Affirmative Action/Equal Opportunity Employer

RESEARCH OPPORTUNITIES IN ANALYTICAL BIOCHEMISTRY

The Analytical Biochemistry Department of Pioneer Hi-Bred International, Inc. is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment.

SENIOR RESEARCH ASSOCIATE, NUCLEIC ACID ANALYSIS (JOB #1386-J)

Primary responsibilities of this position will be to interact extensively with other researchers to design and conduct nucleic acid analysis for transgenic plant projects. This person will conduct analyses, supervise research associates involved in the same types of analysis, and communicate the results. Trouble-shooting and development/testing of new techniques are also important.

EDUCATION/EXPERIENCE: MS degree or equivalent in molecular biology, biochemistry, or related field plus 2 years of relevant research experience are required. Applicants should have experience in nucleic acid analysis (Southern, PCR, RNA analysis), along with computer and statistical analysis experience. Strong communication skills are essential. Supervisory experience and analytical support experience are preferred.

Application deadline is May 24, 1995.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity Employer. Please send TWO complete sets of your resume and other application materials. Be sure to indicate in your correspondence the JOB #, along with the names, addresses and phone numbers of three references to:

PIONEER HI-BRED INTERNATIONAL, INC.
Analytical Biochemistry Dept.
ATTN: Dawn Meyer, Job #1386-J
P.O. Box 1004
Johnston, IA 50131-1004



FACULTY POSITION ASSISTANT, ASSOCIATE OR FULL RESEARCHER (One vacancy only)

Position number 86062, Hawaii Natural Energy Institute, School of Ocean and Earth Science and Technology, full-time, general and extramural funds, 11-month, tenure track position. To begin approximately July 1, 1995, continuation dependent upon satisfactory performance and availability of funds. **DUTIES:** Plan, develop, organize and supervise activities in the biochemical areas of renewable hydrogen and ocean resource systems. Identify and seek new funding sources to conduct and manage research related to hydrogen, marine biotechnology, and ocean resources. Serve as an international liaison for the Institute in marine biotechnology. Publish articles in journals and proceedings, make presentations to local, national and international audiences as appropriate. Develop program for teaching and training of graduate assistants and post-doctoral fellows in these areas. Direct and/or conduct research in the Bioresources Laboratory, home of the Mitsui-McKinley Marine Microbiological Memorial Collection. Perform related duties as assigned. **MINIMUM QUALIFICATIONS:** Ph.D. from an accredited college or university in biochemical or ocean science or engineering. Ten years (for Full Researcher level) of university, national laboratory or industrial experience in applied research on biological hydrogen production and/or ocean resources development. Proven ability to secure extramural funding. Familiarity with design, implementation and management of projects in these areas. **PAY RANGE:** R3-5, \$40,524 - \$75,888/annually (to be determined based on qualifications and experience.) **INQUIRIES:** Dr. Patrick Takahashi at (808) 956-8346. To apply: Submit statement of research interest, C.V., and three letters of recommendation from work-related references to Personnel Officer, Hawaii Natural Energy Institute, 2540 Dole Street, Holmes 246, Honolulu, Hawaii 96822.

CLOSING DATE: June 6, 1995.

The University of Hawaii is a Equal Opportunity/Affirmative Action Institution and encourages women, minorities, handicapped, and veterans to apply.

Diagnostics Sales

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Our Diagnostics Group serves the clinical diagnostics market worldwide. Continued introduction of new products has created a need for sales representatives in several U.S. cities. Career paths include sales and product management leading to general management.

We require a B.S. or equivalent in a Life Science (MS, PhD or MBA is a real plus). Successful candidates must be willing to relocate.

For consideration, please send your resume to: Bio-Rad Laboratories, 4000 Alfred Nobel Dr., Dept. 323, Hercules, CA 94547. *EOE MFDV.*

BIO-RAD

Bio-Rad Laboratories

Veterinary Systemic Physiology

The Department of Anatomy, Physiology and Cell Biology, School of Veterinary Medicine, University of California, Davis, is recruiting for an **ASSISTANT PROFESSOR OF VETERINARY SYSTEMIC PHYSIOLOGY**. **QUALIFICATIONS:** PhD required with advanced training in vertebrate systemic physiology and strong foundation in pathophysiology of animal diseases. DVM or equivalent and strong foundation in molecular techniques preferred; demonstrated aptitude/experience in teaching and ability or potential to secure extramural funds. Documented research record or potential to develop independent research program. Preference given to those whose research interests complement existing departmental programs. **RESPONSIBILITIES: Teaching:** 1) DVM professional curriculum lectures and laboratories in systemic physiology including animal endocrine, renal and gastrointestinal system; 2) participation in graduate academic programs (MS and PhD); and 3) undergraduate instruction in physiology. **Research:** development of creative, independent and productive research program, with publication of results in professional/scientific journals; provide leadership in directing research projects of graduate students. **Service:** University and public service through committee work, participation in professional organizations, continuing education and other appropriate means required.

To apply, submit: 1) letter of intent outlining special interest in position, overall related qualifications, experience and career goals; 2) C.V.; 3) research and teaching goals summary; and 4) names, titles and addresses of 3 references to: Dr. Dallas M. Hyde, Department Chair, Department of Anatomy, Physiology and Cell Biology, School of Veterinary Medicine, University of California, Davis, CA 95616. Applications accepted through July 15, 1995 or until candidate is identified. The University of California, Davis is an affirmative action/equal opportunity employer.

TENURE-TRACK FACULTY POSITION ASSISTANT PROFESSOR

**Crump Institute for Biological Imaging
Department of Molecular and
Medical Pharmacology
UCLA School of Medicine**

The Crump Institute for Biological Imaging is a new Institute at UCLA that is committed to the merger of imaging and modern biology to examine systems ranging from cellular subassemblies up to human subjects. The Institute and the Department of Molecular and Medical Pharmacology at UCLA are seeking a junior faculty member with interests in both synthesis and protein chemistry. The successful applicant will be expected to develop an independent research program with emphasis in radiolabeled proteins and other biochemical imaging probes for position emission tomography and confocal fluorescence microscopy. The individual we seek will also act as a member of a research consortium and should have the ability to interact with scientists of diverse interest who have come together to advance biology and medicine through the use of novel probes and bio-medical imaging modalities. The faculty includes scientist with strengths in chemistry, biochemistry, molecular biology, pharmacology, nuclear medicine, biophysics, and biomathematics.

Candidates should have a Ph.D. in Chemistry, Biochemistry, or a closely related field. Teaching of graduate and M.D./Ph.D. students is expected. Send curriculum vitae, a description of research plans and three letters of recommendation to: **David Tomita, Search Coordinator, Crump Institute for Biological Imaging, UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, CA 90024-1735.**

Research

IN CELL BIOLOGY

RESEARCH SCIENTIST

The Division of Cell Biology of The Hospital for Sick Children, a major teaching hospital affiliated with the University of Toronto, is seeking a Staff Scientist with basic research interests in one or more of the following areas: signal transduction mechanisms; ion or non-electrolyte transport; membrane biosynthesis, dynamics and traffic.

Start-up funds and laboratory facilities will be made available in the Hospital. The appointment will be at a rank equivalent to Assistant or Associate Professor, leading to a permanent Staff position. Research Institute Scientists are normally appointed to the University of Toronto.

Please send curriculum vitae, a brief description of research interests and three reference letters before July 30, 1995, to: **Dr. Sergio Grinstein, Division of Cell Biology, The Hospital for Sick Children, 555 University Ave., Toronto, Ontario, Canada M5G 1X8.**



THE HOSPITAL
FOR SICK CHILDREN

INVESTIGATOR

Gene Expression Sciences

SmithKline Beecham Pharmaceuticals has an immediate opening for an Investigator to join the Yeast Genetics Group within the Department of Gene Expression Sciences. This group is using *Saccharomyces cerevisiae* as a model system to identify, clone and characterize novel human drug targets; discover the mechanisms of action of established drugs and lead compounds; and develop high-throughput mechanism-based drug screens. We are conducting pioneer research in several therapeutic areas, including immunosuppression, asthma, inflammation, infection, atherosclerosis and bone disease.

The successful candidate will join a multi-disciplinary team of scientists working to define the biological functions of novel human proteins discovered through a collaboration with Human Genome Sciences. This individual will use yeast molecular genetics (including two-hybrid technology) to identify and characterize new genes (cDNAs) and elucidate the functions of their gene products. At the same time, this person will continue to develop molecular genetic and biochemical systems for analyzing recombinant protein function.

Minimum qualifications include a Ph.D. in Genetics or related discipline; 2-3 years of postdoctoral or industrial research experience; a strong background in recombinant DNA techniques; experience in yeast genetics and protein biochemistry. The candidate should also possess a proven record of scientific achievement as evidenced by publications in leading scientific journals. SmithKline Beecham scientists are strongly encouraged to publish their research findings.

Located in our state-of-the-art R&D facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package, as well as a stimulating and challenging work environment. Qualified candidates should send C.V. plus the names of three references to: SmithKline Beecham Pharmaceuticals, Job Code H5-0088, P.O. Box 401, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



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FACULTY POSITION BIOMEDICAL LASER RESEARCH



A faculty position at the level of Assistant, Associate, or Full Professor is available at the New England Eye Center, Tufts University School of Medicine, to conduct ophthalmic laser research and to develop novel techniques for optical tomography and laser surgery. Potential candidates should have a strong background in optics and lasers, good communication skills, and an ability to work closely with clinical investigators. A Ph.D. degree in physics, biomedical engineering, biophysics, optics, or related field is preferred. Successful candidate will develop his or her own independent research program. Please send CV and three letters of recommendation to Carmen A. Puliafito, M.D., Director, New England Eye Center, 750 Washington Street, Boston, MA 02111, FAX 617-636-4215.

Vanderbilt University Molecular Geneticist

A tenure track faculty position is available at the Vanderbilt Cancer Center in the area of **Molecular Genetics of Gastrointestinal Malignancies**. Experience in molecular genetics and a willingness to study gastrointestinal neoplasia are required. Investigators of all academic ranks are encouraged to apply. A generous start up package will be provided. The investigator will have a primary appointment in a Medical School department and will be housed in newly-constructed Gastrointestinal Cancer Center space. Women and minorities are especially encouraged to apply.

Vanderbilt University is an Equal Opportunity/Affirmative Action employer. Candidates should send a curriculum vitae, an outline of research plans, and three letters of recommendation to:

Robert J. Coffey, M.D.
Vanderbilt University
1161 21st Ave. South
C-2104, Medical Center North
Nashville, TN 37232-2279
Fax (615) 343-6229
Tel (615) 343-6228

POSTDOCTORAL POSITION IN LEUKOCYTE BIOLOGY AND ATHEROSCLEROSIS

The primary focus of this position will be to characterize the role of leukocytes in the pathogenesis of atherosclerosis. The successful candidate will be expected to establish *in vitro* systems for application in *in vivo* murine models of hyperlipoproteinemia and atherosclerosis. These model systems will be used to investigate the leukocyte cell biology of inflammation as it relates to atherosclerosis. A strong background in leukocyte biology and the capability to work independently is required. Applicants with Ph.D. degrees are preferred, but those with MD degrees and relevant experience will be strongly considered. Salary will be commensurate with NIH post-doctoral fellowship guidelines and experience. Send resume and three letters of reference to: **Robert J. Nicolosi, Ph.D., University of Massachusetts Lowell, Rolfe Street, Weed Hall, Room 305, Lowell, MA 01854.**

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SCIENTISTS

SEQUENCE ANALYSIS

■ Lead a group responsible for sequence analysis including contiguation, identification of potential coding sequence from genomic sequence and detailed analysis of potential function/structure of novel genes based on their conceptually translated amino acid sequence. A strong emphasis will be placed on analysis of emerging sequence data bases as an engine for new discovery. A Ph.D. with 3-5 years' post-doctoral experience and strong computational biology experience required. Code: SC1

HUMAN GENETICS

■ Lead a group focused on the genetic mapping of human diseases with an emphasis on polygenic disorders. Also participate in study design, data analysis and continued development of automated genotyping. A Ph.D. and 2-3 years' post-doctoral experience in human genetics, genotyping and gene mapping required. Code: SC2

MOUSE GENETICS/ ASSOCIATE SCIENTIST

■ Assist in the positional cloning of monogenic and polygenic syndromes/mutations in the mouse that will subsequently lead to the cloning of human disease genes. A Ph.D. with 0-2 years' post-doctoral experience with emphasis in molecular biology and mammalian genetics. Code: SC3

GENETIC EPIDEMIOLOGIST/STATISTICAL GENETICIST

■ Ph.D. level scientist with two or more years of post-doctoral work and a strong publication record. Ideal candidate will have a strong interest in genetic mapping of complex traits in humans as well as model systems. Expertise in application of non-parametric methods essential. An interest in developing new methods for data analysis would be encouraged. Candidate will perform an essential role in selection and design of studies as well as data analysis. He/she will also participate in the management of external collaborations, work closely with the Human/Mouse genetics groups as well as Bio-informatics and assume a leadership position in the genetic analysis group. Code: SC4



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Molecular Virologist: Drug Discovery

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Based in Melbourne, it is envisaged you will have at least two to five years postdoctoral experience in the area of molecular virology either in a research based or commercial setting. You will be an expert in the molecular biology of HIV and/or HBV and possess a broad knowledge of viral diseases. You will have well developed interpersonal and communication skills, be highly interactive and flexible as in this role you will interact with both AMRAD laboratory personnel and senior investigators of collaborative research centres. You will be dedicated to the discovery and development of effective antiviral drugs.

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282 Collins Street, Melbourne Victoria 3000, Australia
Fax (61 3) 654 1481

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Faculty Positions

The VCCRI is affiliated with the University of New South Wales and is part of the St Vincent's Hospital complex that includes the Garvan Institute of Medical Research. Research programmes of the VCCRI involve the application of state-of-the-art molecular, cellular and biophysical approaches to research into cardiovascular disorders, with emphasis on heart muscle diseases. The Institute is soliciting applications for **FACULTY POSITIONS** at the Assistant, Associate or full Member level. Candidates should have a continuous record of research excellence. With support from the Institute, successful candidates will be expected to establish independent and collaborative research programmes that are strongly supported by external funding. Candidates with special interests in developmental biology, molecular cardiology, including cardiac myocyte growth and hypertrophy, transplantation biology, and the genetics of cardiovascular diseases, are particularly encouraged to apply. Candidates should send a curriculum vitae, brief description of research interests, and names and addresses of three references to: Professor R. Graham, Victor Chang Cardiac Research Institute, 376 Victoria Street, Darlinghurst, Sydney NSW 2010, Australia.

POSTDOCTORAL SCIENTIST

Pulmonary Pharmacology

SmithKline Beecham, a worldwide leader in pharmaceutical research, has a challenging opportunity for a Postdoctoral Scientist to join our Department of Pulmonary Pharmacology.

The selected candidate will conduct research on receptor localization and intracellular activation pathways in the lung using molecular biological and biochemical techniques. The incumbent will also be expected to contribute to ongoing drug discovery efforts, publish results in peer-reviewed journals and participate in national science meetings.

Qualified candidates must have a Ph.D. in Molecular Biological Science, Biochemistry or Pharmacology. Experience in standard molecular biological techniques essential, and knowledge of immunohistochemistry and/or *in situ* hybridization preferred. Previous postdoctoral experience preferred. A demonstrated record of publications in major scientific journals desirable.

Our state-of-the-art research facility is located in suburban Philadelphia. We offer a competitive compensation/benefits package and a stimulating team environment. For confidential consideration, send your resume to: SmithKline Beecham Pharmaceuticals, Employment Administrator, Dept. #H0297, P.O. Box 401, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



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RESEARCH SCIENTIST: To qualify, you should have a Ph.D. (or equivalent), 2-5 years' experience in humoral and cellular immunology, and a knowledge of the mucosal immune system.

POSTDOCTORAL SCIENTIST: To qualify, you should have a Ph.D. in Immunology (or a closely related discipline), a basic understanding of humoral and cell-mediated immune mechanisms, and a knowledge of the mucosal immune system.

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Candidates with a Ph.D. typically must have postdoctoral training or related experience and experience with in vivo modeling. (Job Code: OXP-SC-2410)

Candidates with a MS typically must have 8-10 years' experience with in vivo modeling. (Job Code: OXP-SC-2252)

BONE MORPHOGENESIS

The successful candidate will have a M.D. or Ph.D. in the Life Sciences with postdoctoral training or related experience. Experience in regulatory mechanisms of mammalian bone morphogenesis is also required. Candidates must have experience in establishing in vitro culture systems of bone formation and knowledge of in vivo test systems. Experience in one or more of the following areas is also required: ELISA development, protein purification, molecular biology, and immunohistochemistry. (Job Code: OXP-SC-2452)

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