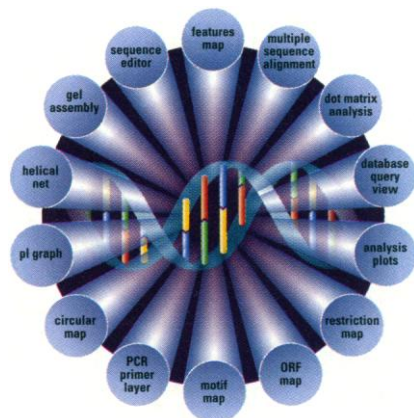




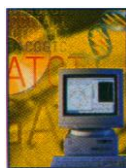
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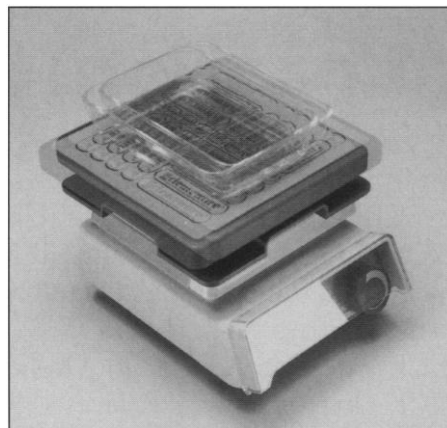
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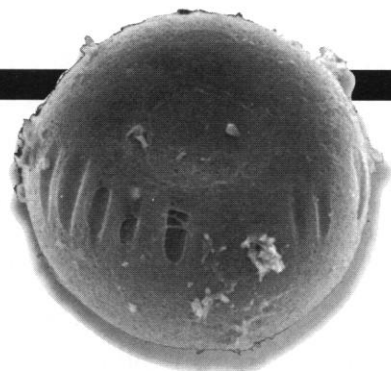
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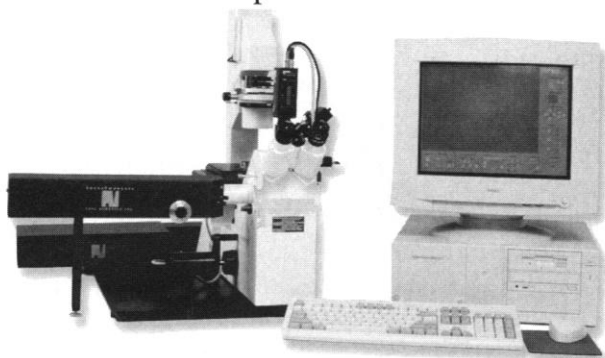
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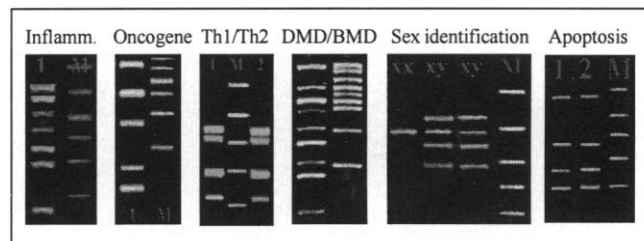
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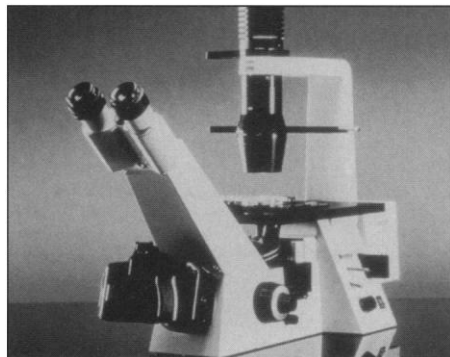
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Literature

Specification Sheet for DNA, RNA, and Phosphorothioate Synthesis Yields details the minimum yields guaranteed from this company's custom DNA, RNA, and phosphorothioate synthesis services. Custom DNA Sequencing Services Specification Sheet describes a range of sequencing options. **National Biosciences Inc. Circle 143.**

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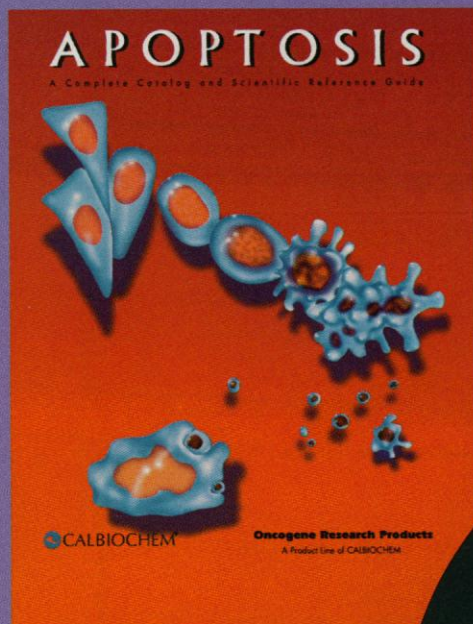
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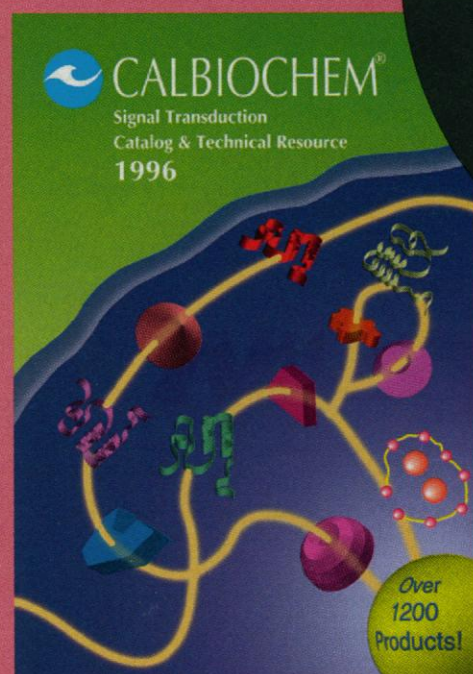
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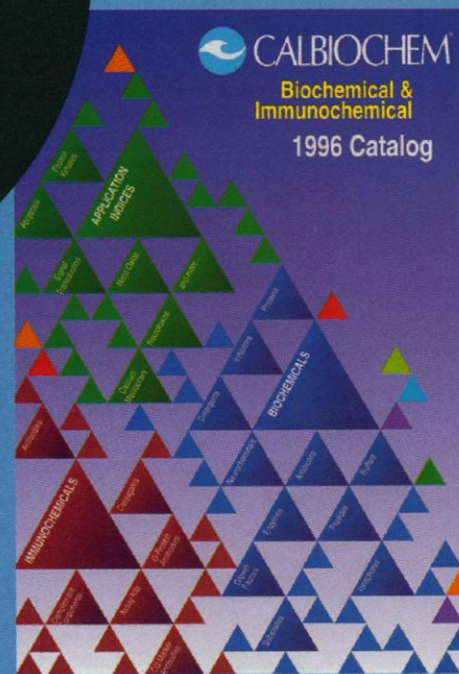
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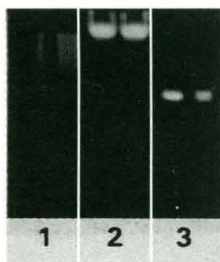
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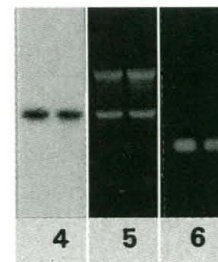
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POSITIONS OPEN

BANTING AND BEST Department of Medical Research

The Department is seeking to fill a **TENURED** or **TENURE-TRACK** position in areas related to fundamental aspects of molecular medicine. Applications from established investigators will be considered; academic rank and salary will be commensurate with the experience of the successful applicant. With a distinguished tradition of medical research dating back to Frederick Banting and Charles Best, the Department aims to build on its current research strengths in gene expression, signal transduction, and diabetes. The Department is an extraordinarily rich environment in which to pursue biomedical research, with at least 75% of time available for research activities. The successful candidate will be expected to maintain an independent research program that achieves international recognition. The position is available July 1, 1996.

Applicants should forward a curriculum vitae and an outline of research interests, and arrange for three letters of reference to be sent directly to: **Dr. Jim Friesen, Professor and Chair, Banting and Best Department of Medical Research, University of Toronto, 112 College Street, Toronto, Ontario M5G 1L6 Canada** by June 15, 1996.

In accordance with its Employment Equity Policy, the University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples, and persons with disabilities.

In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada.

Augustana College seeks to fill a tenure-track position as **ASSISTANT PROFESSOR** of Biology with an emphasis in Genetics/Plant Biotechnology. The successful applicant for this position will participate with other staff members in teaching introductory biology; teach a sophomore-level course in genetics; and teach an advanced-level course in molecular genetics/biotechnology. The successful applicant will also be expected to direct undergraduates in publishable research and to secure extramural funding to support that research. Qualified applicants must possess a Ph.D. in plant genetics and have experience in the application of statistics to biological problems. Evidence of scholarly activities and community/professional involvement is required, as well as a commitment to continued professional and scholarly growth and to the mission of a church-related college. Applications will be accepted until April 12, 1996 or until position is filled. Send letter of application, curriculum vitae, the names and telephone numbers of three current references, and a statement of teaching philosophy to: **Dean of the College, Augustana College, Box 763, Sioux Falls, SD 57197.** *Equal Opportunity Employer/Affirmative Action.*

ASSISTANT PROFESSOR—ZOOLOGY. The Department of Biology, Denison University, Granville, Ohio seeks a two-year sabbatical replacement. Duties include teaching introductory zoology and possibly offering an advanced course in the candidate's area of specialization. The individual selected will be broadly trained in organismic zoology and will have teaching experience. Ph.D. is required. We maintain an active research climate and funding is available for collaborative student/faculty research. Screening begins immediately and continues until the position is filled or May 1, 1996. Send letter of application, curriculum vitae, transcripts, and names and Email addresses of three references to: **Dr. Philip Stukus, Chair, Department of Biology, Denison University, Granville, OH 43023.** Email: **STUKUS@DENISON.EDU.** *Denison University is an Affirmative Action/Equal Opportunity Employer. Women and people of color are encouraged to apply.*

FACULTY POSITION RADIOLOGY Michigan State University

The Michigan State University (MSU) Department of Radiology is seeking applicants for a non-tenure-line **INSTRUCTOR/ASSISTANT PROFESSOR**. This position is not intended for independent investigation. The individual selected will catalyze and support the current investigative team. He or she will relate to the entire Department of Radiology. A Ph.D. in the biological sciences required. He or she must be sufficiently diverse in scientific intent and inclination to participate in a series of staffing functions for scientific activities. Applications to: **Gerald Aben, M.D., Department of Radiology, B220, Clinical Center, East Lansing, MI 48823-1313.** *MSU is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FOREST SCIENTIST, Intensive Culture Forestry. Tenure-track, 12-month, 100% research appointment at Assistant or Associate Professor rank, beginning July 1996. Primary responsibilities will be in an existing multidisciplinary, multi-institutional research program on short rotation—intensive culture of poplars and their hybrids in the Pacific Northwest. Development of techniques for intensive culture of other species and of research in the candidate's specific area of expertise are additional expectations. Qualifications: Ph.D. or equivalent in forestry, botany, plant ecology, plant sciences, or related field is required. Highly desired are: ability to communicate effectively in writing and orally; research experience at the Ph.D. level and beyond in tree physiology, physiological ecology, tree nutrition, or silviculture; ability to attract significant extramural research funding and to manage large research programs; experience in intensive tree culture, particularly short rotation hardwood culture; ability in technology transfer/communication of research results; abilities for and commitment to multidisciplinary research; leadership ability; and experience with multidisciplinary research projects. Send inquiry or letter of application discussing relevancy of previous training and experience and research interests to stated qualifications; transcripts; curriculum vitae; names, addresses, and telephone numbers of five references to: **Dr. John H. Bassman, Intensive Culture Search, Department of Natural Resource Sciences, Washington State University, Pullman, WA 99164-6410.** Telephone: 509-335-5296; FAX: 509-335-7862; Email: **bassman@mail.wsu.edu.** References will be sought after initial screening of applicants May 15, 1996. *Equal Opportunity/Affirmative Action Employer/American Disabilities Act.*

FACULTY POSITION

The Fox Chase Cancer Center, a nationally recognized oncologic specialty hospital and research center, has a faculty position in Pharmacology available at the **ASSOCIATE MEMBER** (Assistant Professor), tenure-track level. Position is ideal for individuals with research interests in pharmacogenetics, and strong research background and interests in some aspect(s) of drug metabolism as related to the treatment of human disease. The selected candidate will be expected to develop an independent, peer-reviewed research program and will have the opportunity to interact with an existing multidisciplinary pharmacogenetics working group. A generous start-up package is offered. Candidates must have a Ph.D. and/or an M.D. degree or equivalent and should send a curriculum vitae, research plan, and the names of three references to: **Dr. Kenneth D. Tew, Head, Search Committee, Department of Pharmacology, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111.** *Equal Opportunity Employer.*

HARVARD UNIVERSITY Appointment in Earth Science

The Department of Earth and Planetary Sciences, Harvard University, plans to make two appointments in areas dealing broadly with paleoclimate and surficial or near-surface processes.

The appointments will ordinarily be made at the junior level, although in exceptional circumstances a senior appointment may be considered.

In addition to carrying out an active research program, the successful candidate will be expected to teach at both the undergraduate and graduate level. The appointments are expected to start in the spring or fall of 1997.

Applicants should send curriculum vitae, descriptions of research and teaching interests, and names of three references to: **Geology Search Committee, Department of Earth and Planetary Sciences, Harvard University, 20 Oxford Street, Cambridge, MA 02138.** Applications are due by 1 May 1996. *Harvard University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

BIOLOGY INSTRUCTOR

McHenry County College, a two-year comprehensive community college located northwest of Chicago, is searching for a qualified individual to teach lower-division biology courses. Master's degree in biology with a broad-based background is required. To apply, submit letter of application, résumé, transcripts, and names, addresses and telephone numbers of three references to: **Nancy Loomis, Director of Human Resources, McHenry County College, 8900 U.S. Highway 14, Crystal Lake, IL 60012.** Application deadline April 15, 1996. *McHenry County College is committed to adding diversity to its professional staff. Applications from qualified women and minority candidates are encouraged.*

POSITIONS OPEN

MICROBIOLOGIST FACULTY POSITION BAYLOR COLLEGE OF MEDICINE

Baylor College of Medicine seeks a microbiologist to develop an independent research program on the molecular pathogenesis of bacterial infections. Potential areas of study include mechanisms of bacterial adherence, the biology and pathogenesis of microbial invasion, and cellular responses to bacterial infection. Principal faculty position will be in the Department of Ophthalmology with joint appointment in the Department of Microbiology and Immunology. Opportunities provided to participate in the graduate program in microbiology and to collaborate with other scientists in the Texas Medical Center. Candidates for this **TENURE-TRACK** faculty position should have a Ph.D. with postdoctoral experience.

Applicants should send their curriculum vitae, a statement of research interests, and the names of three references to: **Search Committee for Microbiologist (K. R. Wilhelmus, M.D.), 6501 Fannin Street, NC 200, Baylor College of Medicine, Houston, TX 77030.** *Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.*

The Department of Psychiatry of the University of Wisconsin (UW) School of Medicine is launching a major new initiative in functional brain imaging. We seek to make two **TENURE-TRACK** appointments in this area. The successful candidate for one position should have a Ph.D. in physics or a related discipline or an M.D./Ph.D. Individuals with experience in any aspect of fMRI or PET, especially those who have had experience with behavioral and activation studies, are encouraged to apply. We expect that this individual would hold a joint appointment in the Departments of Medical Physics and Radiology and contribute to the teaching mission in neuroscience of the Department of Psychiatry, as well as participate in the teaching program of the Department of Medical Physics. The successful candidate for the second position will be an M.D. or M.D./Ph.D. who uses functional brain imaging methods in clinical research, particularly in the areas of affective and/or anxiety disorders and the study of basic emotional processes. Please send a curriculum vitae and arrange to have three letters of reference sent to: **Dr. Richard J. Davidson, UW Department of Psychiatry, 600 Highland Avenue, Madison, WI 53792-2475.** *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

BIOLOGICAL SCIENCE, PHYSICAL SCIENCE Boston University

We anticipate two positions in science, a tenure-track position and a one-semester sabbatical leave replacement.

Biological Science: ASSISTANT PROFESSOR. Ph.D. required; tenure-track, to teach general education courses in Biological Science, September 1996. Research required. Deadline: 5 April 1996.

Physical Science: ASSISTANT PROFESSOR. PhD required; tenure-track, to teach general education courses in Physical Science, September 1996. Research required. Deadline: 5 April 1996.

To be considered for either position, send letter, statement of teaching philosophy, curriculum vitae, and three current letters of recommendation to: **Professor Peter E. Busher, Chairman, Division of Science and Mathematics, College of General Studies, Boston University, 871 Commonwealth Avenue, Boston, MA 02215.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF BIOLOGY

TENURE-TRACK position beginning fall 1996. Ph.D. and teaching experience required. Teaching responsibilities include microbiology, immunology; cell biology and genetics helpful; assistance with general biology laboratories. Opportunity to direct undergraduate research and advise students. Saint Joseph's College is a liberal arts college located on Sebago Lake northwest of Portland and two hours from Boston. Send a letter of application, curriculum vitae, statement of teaching philosophy, research interests, transcripts, and three letters of recommendation by April 1, 1996 to:

**Sister Mary Ellen Murphy, Ph.D., Dean
278 Whites Bridge Road
Saint Joseph's College
Standish, ME 04084-5263**



**MOLECULAR/GENETIC EPIDEMIOLOGIST
MAYO FOUNDATION**

The Section of Clinical Epidemiology at Mayo Clinic, in collaboration with the Mayo Cancer Center, is seeking a molecular/genetic epidemiologist to fill a new position in our large and active group. This position presents an exciting opportunity for the successful candidate to conduct population-based molecular epidemiologic studies of the occurrence, etiology, and outcomes of cancers, as well as evaluations of the impact of diagnostic and therapeutic interventions in these conditions.

Applicants should have a strong methodologic training in epidemiology with evidence of research productivity in molecular epidemiology as reflected by peer-reviewed publications and a demonstrated ability to attract extramural research funding. This individual will be expected to develop an independent program of research in collaboration with clinical and laboratory investigators.

The Mayo Clinic, with a research budget in excess of \$130 million per year, provides an outstanding environment for the conduct of molecular epidemiologic research. Resources include: The Rochester Epidemiology Project, with its linkage of medical records for residents of Olmsted County back to the early 1900s, a large referral practice as reflected by over 150,000 cases recorded in the Mayo Tumor Registry, tissue archives from the local and referral practice, and an exceptional collaborative atmosphere among clinicians, basic scientists, epidemiologists and biostatisticians.

Academic rank for the successful applicant will depend on qualifications and experience. There are no clinical practice responsibilities associated with this position. Salary and benefits are most competitive.

Rochester, Minnesota provides a remarkable quality of life, as evidenced by its #1 (1993) and #2 (1994,1995) ranking in Money Magazine.

Qualified applicants should submit a current curriculum vitae to:

**Steven J. Jacobsen, MD, PhD
Head, Section of Clinical Epidemiology
Mayo Clinic, 200 First Street, SW
Rochester, MN 55905
(507)284-5544**

Mayo Foundation is an affirmative action and equal opportunity educator and employer.

POSITIONS OPEN

The Department of Dermatology at the College of Physicians and Surgeons of Columbia University is expanding its clinical, educational, and research divisions. New facilities are being organized with primary commitments to clinical and/or basic science research, and education. Positions are at the level of **INSTRUCTOR, ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR**, or **PROFESSOR** (tenured/non-tenured) depending on qualifications. **RESEARCH STAFF** positions are available for professional and staff officers, postdoctoral research/clinical scientists and fellows. Candidates should be well-trained physicians (Board-certified) and researchers with significant clinical and/or laboratory research experience. Areas of emphasis include dermatopathology and surgery, and research in molecular biology, immunology, gene therapy, drug developments, and clinical trials. Interested individuals should send their curriculum vitae and bibliography to: **David R. Bickers, M.D., Chairman, Department of Dermatology, Columbia University, 630 West 168 Street, New York, NY 10032.** The Department is particularly interested in qualified minority and women applicants. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE AUDITORY PHYSIOLOGY

This position is available for a Ph.D. graduate to study neural mechanisms for the processing of complex communication and/or biosonar sounds in the bat's auditory system. A person with background in neurophysiology and/or neuroanatomy is welcome to apply. Please send 1) curriculum vitae, 2) a brief statement of research interest and experience, and 3) names and telephone/FAX numbers of three references to: **Professor N. Suga, Department of Biology, Washington University, One Brookings Drive, St. Louis, MO 63130.** FAX and Telephone: 314-935-8530; Email: Suga@wustlb.wustl.edu. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR NON-TENURE-TRACK

The University of Tennessee, Memphis, has an open **ASSISTANT PROFESSOR** (non-tenure-track) position in the laboratory of **Dr. Leonard Share** in the Department of Physiology and Biophysics. This position involves research in the role of gonadal steroid hormones in the cardiovascular and renal actions of vasopressin and in hypertension. Candidates should have a Ph.D. or M.D. with four years of postdoctoral experience and a background in cardiovascular techniques *in vivo* and *in vitro*. Applicants responding should reference position number 8787 and send curriculum vitae, copies of three representative publications, and the names of three references to: **Dr. Leonard Share, Department of Physiology and Biophysics, 894 Union Avenue, Memphis, TN 38163.** *An Equal Opportunity/Affirmative Action/Titles VII and IX/Section 504/ADA Employer. Minorities and women are encouraged to apply.*

The Cincinnati Zoo and Botanical Garden invites applications for the **DIRECTOR** of the Carl H. Lindner, Jr. Center for Research of Endangered Wildlife. We are seeking a director for our research program which emphasizes reproductive biology of endangered species. Requirements include a doctoral degree in a relevant field of science, nationally recognized research expertise as measured by a sustained record of peer-reviewed publications and funding, commitments to reproductive research and related disciplines, and the qualifications to participate in university graduate programs in biological and medical sciences. An individual with clearly demonstrated leadership/managerial skill, a collaborative management style, and the ability to maximize corporate and community resources in support of the Center is essential. Field studies, laboratory and zoo experience is desirable. Send résumé and salary history to: **Executive Director, Cincinnati Zoo and Botanical Garden, 3400 Vine Street, Cincinnati, OH 45220-1399.**

POSITIONS OPEN

POSTDOCTORAL POSITION Biology of Malaria at the Molecular Level

Our laboratory studies the molecular basis of hemoglobin degradation and heme polymerization, processes occurring in the digestive vacuole of the human malaria parasite, *Plasmodium falciparum*. Our current work involves a combination of biochemical, cell biological, molecular, and genetic approaches. We are interested in defining and inhibiting this vital metabolic pathway, which is the target of antimalarial agents such as chloroquine. Applicants must have substantial molecular biology experience. Please send a research summary, curriculum vitae, and three recommendation letters to: **Daniel E. Goldberg, M.D., Ph.D., Howard Hughes Medical Institute, Washington University School of Medicine, Department of Molecular Microbiology, Box 8230, 660 South Euclid Avenue, St. Louis, MO 63110.**

POSTDOCTORAL POSITION available immediately to study the molecular biology of retroviral transactivation of cellular genes. Strong background in retroviral molecular biology is required. *Must be U.S. citizen/resident.* Please submit curriculum vitae, including names and addresses of three references, to: **Dr. Douglas V. Faller, Cancer Center, Boston University Medical School, 80 East Concord Street E-124, Boston, MA 02118.** FAX: 617-638-4176. *An Affirmative Action/Equal Opportunity Employer.*

HARVARD MEDICAL SCHOOL Postdoctoral Position/Gene Therapy

Basic and clinical research in vector applications, T cell modifications for cancer therapy. Participate in new clinical grade facility at the Institute of Human Genetics, Harvard Medical School. Retroviral vector experience required. Send résumé, summary of research, and names of at least two references to: **R.P. Junghans, Ph.D., M.D.** FAX: 617-632-0998.

ENVIRONMENTAL SCIENCES FACULTY POSITION The University of Texas-Houston Health Science Center School of Public Health MPH Program at San Antonio

The Environmental Sciences Discipline of The University of Texas-Houston School of Public Health is seeking candidates for a tenure-track position at the Assistant or Associate Professor level to join the faculty of the Satellite MPH program in San Antonio. The satellite program, an integral part of the UT-Houston Health Science Center School of Public Health, is located on the campus of The University of Texas Health Science Center at San Antonio.

Candidates must have a doctoral degree in the environmental sciences or an M.D., M.P.H. with board certification in preventive medicine; demonstrated competence and experience in teaching environmental and occupational health at the graduate level; and evidence of scholarly achievement as indicated by research projects and publications. Experience in the development and administration of environmental health programs at the community or state level is preferred. Responsibilities will include teaching, research, supervision of graduate students and community service. The incumbent ideally will have research interests pertinent to the particular problems of public health in South Texas and the United States-Mexico border region. An opportunity to assume administrative responsibilities may be available for a candidate hired at the Associate level.

Greater detail about this position, The University of Texas-Houston Health Science Center School of Public Health, and The University of Texas Health Science Center at San Antonio may be obtained through the Internet at the following address: <http://utsph.sph.uth.tmc.edu/>

The University of Texas is an Equal Opportunity Employer. Minorities and women are particularly encouraged to apply. The start date is flexible; review of applications will begin immediately and continue until a suitable candidate is selected.

To apply: Send your curriculum vitae to:
George L. Delclos, M.D., M.P.H.
Search Committee Chair, School of Public Health
The University of Texas-Houston Health Science Center
P.O. Box 20186, Houston, Texas 77225

Neuroscientist

Assistant and Associate Professors LSU Neuroscience Center of Excellence

Full-time, tenure track faculty positions available from August 1, 1996. Applicants should have a Ph.D. and/or an M.D., postdoctoral training and a record of research excellence in molecular neurobiology as it relates to plasticity. Candidates should have an established record of extramurally funded research or potential to obtain funding. Joint appointments will be made in basic science or clinical departments and in the LSU Neuroscience Center. The Center, established in 1988, has had an interdisciplinary Ph.D. program since 1993. The Center fosters multidisciplinary research on the neurobiology of disease in stroke, epilepsy, and neurodegenerative diseases such as Parkinson's and Alzheimer's diseases and others. The Neuroscience Center also coordinates a human brain bank for studies of human neurologic and psychiatric disorders. A very attractive package, including space in a new research facility (more than 40,000 ft² of research space) and start-up funds, is available. The LSU Neuroscience Center is located in downtown New Orleans within minutes of the historic French Quarter.

Send curriculum vitae, description of current and future research plans (up to 3 pages) and names and addresses of 3 references to:

Nicolas G. Bazan, M.D., Ph.D.
Director
LSU Neuroscience Center of Excellence
Louisiana State University Medical Center
School of Medicine
2020 Gravier Street, Suite B
New Orleans, LA 70112

LSU is an Equal Opportunity Employer.

ASSISTANT SCIENTIST MATHEMATICAL MARINE ECOLOGIST

Biology Department invites applications for tenure-track position at Assistant Scientist level (equivalent to Assistant Professor) in area of Mathematical Ecology. Must hold Ph.D. and demonstrated expertise in mathematics and biology. Applicants in the areas of population and community modelling, spatial processes, and nonlinear dynamics preferred. Background in biological oceanography or other marine science essential. Will be expected to develop and to obtain funding for an independent research program and to participate in graduate education program. Submit statement of research goals, curriculum vitae and names and addresses of three references to: Woods Hole Oceanographic Institution, Box 54PCI, Woods Hole, MA 02543.

WOODS HOLE
OCEANOGRAPHIC
INSTITUTION



EOE/M/F/D/V.

Molecular Biologist Laboratory Manager

Cayman Chemical Company, an established, innovative manufacturer of eicosanoids and other biochemicals has an immediate employment opportunity for a Ph.D. Molecular Biologist/Biochemist. This full time position requires a minimum of two years' experience in cDNA and genomic probe development, protein expression in both bacteria and mammalian systems, and synthetic gene technology. Good overall knowledge of molecular biology techniques is essential. Duties include development and production of new molecular probes for eicosanoid related enzymes and receptors, cloning and expression of receptors, enzymes, and other binding proteins. The successful candidate will supervise production of cDNA probes and kits and perform research directed towards new product development. Cayman offers a relaxed work environment, competitive compensation and benefits package. Applicants should send a copy of their curriculum vitae by April 15, 1996 to:

Human Resources RD02952
Cayman Chemical Company
690 KMS Place
Ann Arbor, MI 48108

INEX Scientific/Research Opportunities

Inex Pharmaceuticals Corp. is an innovative leader in the development of systems for the targeted delivery of biologically active agents in vivo. This includes the intracellular delivery of antisense oligonucleotides and DNA vectors. Gene therapy is the central focus of the Company. We are seeking highly motivated research staff at all levels, preferably with industrial experience.

Director, Regulatory & Clinical Affairs: MS.c. or Ph.D., with an MD as an asset. Must have 8+ yrs. exp. in industry (clin/reg), FDA (and HPB), GCP, GMP, GLP. Hands on exp. with Phase I-III clinical trails, NDA/NDS, clinical reports, protocols.

QC Section Head: MS.c. or Ph.D. in Chemistry or Biochem. with 5-10 yrs within a Pharmaceutical (Biotech.) industry in Analytical Chemistry/QC. Excellent verbal and written communication skills are required. Management experience an asset.

Molecular Biologist : Ph.D. with 2+ yrs. exp.: Viral Gene Expression and Replication, RNA or DNA virus, dev. of Model Assay Systems, Viral Structure-Function. In vivo Gene Therapy exp and recombinant protein production an asset.

Molecular Biologist: Ph.D. with 2+ yrs. exp.: Eukaryotic Gene Expression, Eukaryotic Promoter Analysis, Recombinant Protein Prod., Inducible or Tissue Specific Gene Expression. Gene Therapy, Transgenic Organisms/in vivo experience are assets.

Biochemist: Ph.D. in Biochem., Cell Bio., or Imm. with 2+ yrs. exp in some of the following: Signal transduction, oncogenes, tumor biology, antisense, ribozymes, immunology, and cell adhesion molecules. Tissue culture, in vivo experience an asset.

Organic Chemist: Ph.D. in Org. Chem. with 4 + yrs exp: Synthesis of novel lipid compounds; antibody modifications, crosslinking of antibodies to liposomes, NMR, HPLC, TLC, generation of patentable products through method or product.

Cell Biologist: Ph.D. in Biochem, Immun., Pharmacol. with 2+ yrs exp: Studying the binding, uptake and intracellular trafficking of molecules that are taken up by receptor mediated endocytosis.

Membrane Biochemist: Ph.D. in Biochem. or Microbio. with 1-5 yrs exp.: Membrane biochem., with either membrane lipids and liposomal drug delivery systems or in membrane fusion peptides of either viral or bacterial origin. Exp. with anticancer or anti-infective agents would be an asset.

Please forward your resume to the : H. R., Inex Pharmaceuticals Corporation, 1779 West 75th Avenue, Vancouver, B.C. Canada V6P 6P2, or FAX: (604) 264-9959 or email: yaroshev@inexpharm.com

POSITIONS OPEN

POSTDOCTORAL POSITIONS Ion Channel Regulation during Fertilization

POSTDOCTORAL POSITION(S) available to study ion channel regulation during mammalian fertilization. Projects include: stimulus-secretion coupling during fertilization, mechanisms of channel modulation, and isolation of channel subunits. Applications are welcome from all relevant disciplines, although candidates with backgrounds in digital image processing-enhanced fluorescence microscopy, in patch clamp methods, or in protein purification are encouraged to apply. Send curriculum vitae and the names of three references to: **Harvey M. Florman, Department of Anatomy and Cellular Biology, Tufts University School of Medicine, Boston, MA 02111. Email: hflorman@opal.tufts.edu.**

POSTDOCTORAL POSITIONS available immediately to study molecular mechanisms of human tumorigenesis and cancer chemoprevention. Applicants must have a Ph.D., M.D., or equivalent degree and a background in genetics, molecular biology, cell biology, or pharmacology. The position offers opportunity for independent research in a well-equipped multidisciplinary laboratory in an attractive work environment. Applications with a curriculum vitae should be sent to: **Dr. Mark A. Nelson, Arizona Cancer Center, University of Arizona Health Sciences Center, 1515 North Campbell Avenue, Tucson, AZ 85724-5024.** Application review begins March 22, 1996 and remains open until filled. *The University is an Equal Employment Opportunity/Affirmative Action/American Disabilities Act Employer. Women and minorities are encouraged to apply.*

The Laboratory for Molecular and Developmental Neuroscience at Massachusetts General Hospital seeks applications for a **POSTDOCTORAL POSITION** to carry out research in the area of characterization of genes and proteins involved in the synthesis and degradation of N-acetyl-aspartylglutamate. Applicants should have a strong background in molecular genetics or molecular biology. Documented expertise in gene structure and gene regulation, polymorphism analysis, chromosomal mapping, expression and characterization of recombinant proteins and tissue culture techniques required. Send curriculum vitae to: **Joseph T. Coyle, M.D., Laboratory for Molecular and Developmental Neuroscience, Massachusetts General Hospital East, CNY 2, Building 149, 13th Street, Charlestown, MA 02129.** *Massachusetts General Hospital is an Equal Opportunity Employer and encourages the applications of qualified women and minorities.*

POSTDOCTORAL POSITION available June 1996 to study the functional role that specific herpes simplex virus proteins and glycoproteins play in virus assembly, pathogenesis, and the immune response. Experience in molecular biology, protein biochemistry, and virology is preferred. Please send curriculum vitae, statement of research interests and experience, and names of three references to: **Dr. Richard Courtney, Department of Microbiology and Immunology, Pennsylvania State University College of Medicine, Department 16, 500 University Drive, Hershey, PA 17033-0850.** *We are an Equal Opportunity/Affirmative Action Employer and encourage minority and female applicants to apply.*

POSTDOCTORAL POSITION MOLECULAR BIOLOGIST

The University of Alabama at Birmingham has a **POSTDOCTORAL POSITION** open for a molecular biologist with a Ph.D. in molecular biology and experience in lipoproteins. Candidate will work as a group player to study human apolipoproteins structure and function with particular emphasis on apo A-I and B. The candidate is expected to conduct research independently. Send résumé to: **Jere P. Segrest, M.D., Ph.D., Professor of Medicine and Director, Atherosclerosis Research Unit, 630 BDB, Birmingham, AL 35294.**

A **POSTDOCTORAL POSITION** is available to study the optical properties of biological materials. UV spectroscopy of a wide range of materials including proteins, bacteria, and phages will be studied as either bulk or aerosol samples. Candidate should have background in microbiology with experience in culturing and sample preparation. Familiarity with optical spectroscopy is also desirable. Contact: **Dr. Jay Eversole, Code 5611, Naval Research Laboratory, Washington, DC 20375. FAX: 202-404-8114; Email: eversole@nrlfsl1.nrl.navy.mil.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW. Deborah Research Institute has a grant-based position for a Postdoctoral Research Fellow to examine the regulation of gene expression and signal transduction in mechanically challenged cardiac myocytes. The position will involve overseeing the direction and performance of experiments in one of several ongoing research initiatives in the laboratory, including 1) molecular studies concerning regulation of cytoskeletal protein and heat shock protein gene expression, and 2) analysis of regulation of type VII adenylyl cyclase through signal cross-talk. The successful applicant will have obtained a Ph.D. or equivalent in physiology, biochemistry, or cell biology and will have experience in cell culture and/or molecular biological research. *Candidates must meet all requirements to work within the United States.* Interested individuals should send a current curriculum vitae and three letters of recommendation to: **Ms. Rebecca S. Stewart, Administrative Assistant, Deborah Research Institute, 20 Pine Mill Road, Browns Mills, NJ 08015-1799. FAX: 609-893-2441.**

POSTDOCTORAL POSITIONS

POSTDOCTORAL POSITIONS available immediately for an NCI training program in molecular and cellular mechanisms of carcinogenesis at The University of Texas (U.T.) M.D. Anderson Cancer Center—Science Park. Research programs focus on the following areas: DNA repair and mutagenesis, carcinogen metabolism and adduct formation, tumor promotion, role of oncogenes and/or tumor suppressor genes in multistage carcinogenesis, normal and tumor cell differentiation, retrovirology, chemoprevention, and nutrition in cancer. *Applicants must be U.S. citizens or permanent residents and must have a Ph.D., M.D., or D.V.M. degree.* For application forms, contact: **Dr. Thomas Slaga, Director, U.T. Science Park-Research Division, P.O. Box 389, Smithville, TX 78957. Telephone: 512-237-2403.** *We are an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITIONS available for research in: (a) DNA photochemistry, (b) high peak power photosensitization mechanisms, (c) specific free radical generators and radical damage mechanisms, or (d) cutaneous photobiology, at the Wellman Laboratories of Photomedicine, a multidisciplinary research institute specializing in interactions of light with biological systems. Candidates should have experience in photochemistry and/or photobiology. Expertise in membrane biochemistry, molecular biology, cell biology, synthetic organic chemistry, or time-resolved spectroscopic techniques is advantageous. Send curriculum vitae and names of three references to: **Robert W. Redmond, Ph.D. or Irene E. Kochevar, Ph.D., Wellman Laboratories of Photomedicine, Harvard Medical School, Massachusetts General Hospital W-224, Boston, MA 02114. Email: Redmond@helix.mgh.harvard.edu or Kochevar@helix.mgh.harvard.edu.** *The Massachusetts General Hospital is an Equal Opportunity/Affirmative Action Employer.*

TAMPA BAY RESEARCH INSTITUTE POSTDOCTORAL POSITION

Available immediately in the laboratory of virology to study the molecular biology of the human herpes viruses. Candidates with a Ph.D. or M.D./Ph.D. and experience in molecular biological techniques are encouraged to apply. Applicants should send a curriculum vitae with bibliography, description of research interests and goals, and names of three references to: **Chairman, Search Committee, Tampa Bay Research Institute, 10900 Roosevelt Boulevard, St. Petersburg, FL 33716.**

POSTDOCTORAL POSITION available immediately for Ph.D. in molecular biology, genetics, or biochemistry to define the role of protein kinase C and retinoic acid nuclear receptors in transcriptional regulation using transgenic and knock-out mouse models. Strong background in molecular genetics/gene cloning, genetic analysis is required. Send curriculum vitae and three references to: **Dr. A. K. Verma, Professor, Human Oncology, University of Wisconsin, K4/532 CSC, 600 Highland Avenue, Madison, WI 53792. FAX: 608-262-6654.**

POSITIONS OPEN

RESEARCH SCIENTIST

Children's Hospital Oakland Research Institute (CHORI), a well-equipped, basic research facility located on the campus of Children's Hospital Oakland, is seeking an individual with a solid record of scientific achievement to develop an independent research program toward the goal of bacterial vaccine development. Applicants with a Ph.D. and/or M.D. and evidence of current (or previous) independent extramural funding are strongly encouraged to apply.

CHORI offers a stimulating scientific environment with minimal teaching or administrative responsibilities. Current research programs encompass molecular biology, biochemistry, immunology, cell biology, biology, and mass spectrometry. We also offer excellent compensation and benefits, combined with an ideal geographic location. Qualified candidates should forward their application to: **Human Resources, Children's Hospital Oakland, 747 52nd Street, Oakland, CA 94609.** *Children's Hospital Oakland is an Equal Opportunity/Affirmative Action Employer.*

DESERT RESEARCH INSTITUTE (DRI) Biological Sciences Center Reno, Nevada

DIRECTOR, Frits Went Laboratory. Newly completed Frits Went Laboratory seeks leadership for growing research program in plant and soil biology, ecology, and modeling. Director will oversee daily operations of state-of-the-art controlled environments, associated labs, and greenhouse; develop own research program; and work closely with other DRI faculty and collaborators. Requires Ph.D. in biological sciences or related discipline; five years of research experience beyond Ph.D.; experience in the use and operation of controlled environment facilities; established record of scientific achievement, i.e. publication in peer-reviewed journals; demonstrated ability to obtain research funding; and successful management of multidisciplinary and multi-institutional research programs. Three-year renewable contract. Application review begins April 30, 1996. For more information contact: **Dr. Robert Wharton, Vice President for Research, Telephone: 702-673-7469; Email: wharton@maxey.dri.edu.** Submit curriculum vitae, letter describing how your qualifications meet position requirements, statement of your research interests, and five references to: **Recruitment Office, Desert Research Institute, University and Community College System of Nevada, P.O. Box 19040, Las Vegas, NV 89132-0040.** *An Affirmative Action/Equal Opportunity Employer employing only U.S. citizens and persons authorized to work in the U.S.*

POSTDOCTORAL POSITION to research the structural basis of serine protease specificity. Ph.D. with background in protein chemistry and molecular biology required. Experience in protein crystallography highly desirable. Send curriculum vitae, statement of interests, and three letters of reference to: **Dr. Michael Blaber, Institute of Molecular Biophysics, Florida State University, Tallahassee, FL 32306-3015.** *Florida State University is an Affirmative Action Employer.*

POSTDOCTORAL POSITION available to develop novel adenovirus vectors for immunization and gene therapy. Experience in tissue culture, molecular biology, and immunological assays desirable. Send curriculum vitae and the names of three references to: **Suresh Mittal, Ph.D., Department of Veterinary Pathobiology, 1290 Lynn Hall, Purdue University, West Lafayette, IN 47907. FAX: 317-494-9830.** *Women and minority candidates are encouraged to apply. Purdue University is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION

Molecular investigation of osteoblast differentiation. Experience in library screening, gene expression required; expression cloning, adenoviral vectors and/or SAGE desirable. Send curriculum vitae to: **Dr. L. Darryl Quarles, Box 3036, DUMC, Durham, NC 27710. Email: Quar1001@mc.duke.edu.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study the molecular mechanisms of homologous recombination reactions. Self-motivated, careful individuals with a background in chemistry or biochemistry are encouraged to apply. Send curriculum vitae and names of three references to: **Dr. Kenji Adzuma, The Rockefeller University, Box 256, 1230 York Avenue, New York, NY 10021. Email: adzuma@rockvax.rockefeller.edu.** No telephone calls. *Affirmative Action/Equal Opportunity Employer.*

Tenure Track And Postdoctoral Opportunities.

The following research training opportunities are currently available at the National Institutes of Health.

Tenure-Track Position Assistant Professor Equivalent

Position available in the Laboratory of Biophysical Chemistry (Dr. Henry Fales, Chief) to develop innovative approaches to the analysis of macromolecular compounds of biological importance, particularly peptides and proteins, by mass spectrometry. Applicants should be able to demonstrate, through publications in peer-reviewed journals, success in the design of specialized equipment or new techniques useful in the analysis of peptides, proteins, oligosaccharides, or nucleic acids. Applications must be received within six weeks of the publication of this advertisement. Please submit a *curriculum vitae*, bibliography, brief statement of research interests, and have three letters of recommendation sent to the: Office of the Scientific Director (OE-115), NHLBI, Building 10, Room 7N214, 10 CENTER DR MSC 1668, BETHESDA MD 20892-1668.

Postdoctoral Positions

Adeno-Associated Virus Robert M. Kotin, PhD

The mechanism of adeno-associated virus (AAV) targeted integration is being studied. This process of non-homologous recombination is dependent on the activities of both viral and cellular proteins, the non-structural proteins of AAV and cell polymerase complex. Other areas of research include: effects of Rep on the cell, recombinant AAV and non-viral gene transfer technologies. Applicants should have a strong background in molecular biology and must have less than five years of postdoctoral experience. Molecular Hematology Branch (OE-115), NHLBI, Building 10, Room 7D18, 10 CENTER DR MSC 1654, BETHESDA MD 20892-1654.

ATM Function in Cell Cycle Checkpoints and Senescence Richard Paules, PhD/Cynthia Afshari, PhD

Signal transduction mechanisms regulating cell cycle checkpoints and cellular senescence are being investigated, focusing particularly on the role of the ataxia telangiectasia mutated (ATM) gene product. Studies focus on the regulation of certain cyclin/cyclin-dependent kinase complexes in response to DNA damage following exposure to selected environmental carcinogens and in response to the normal aging process. Applicants should have experience in molecular biology, cell biology, or biochemistry and must have less than five years of postdoctoral experience. Laboratory of Environmental Carcinogenesis and Mutagenesis (OE-115), NIEHS, P.O. Box 12233, Mail Drop C1-09, Research Triangle Park, NC 27709.

Molecular and Cellular Toxicology Lance R. Pohl, PhD

The molecular and cellular basis of toxicities caused by reactive metabolites of endogenous molecules and drugs are being examined. Current studies involve the elucidation of both immune and non-immune-mediated mechanisms of toxicity caused by chemically altered cellular products. Each problem is approached using modern techniques of chemistry, biochemistry, immunology, cellular biology, and molecular biology. Applicants must have less than five years of postdoctoral experience. Laboratory of Molecular Immunology (OE-115), NHLBI, Building 10, Room 8N110, 10 CENTER DR MSC 1760, BETHESDA MD 20892-1760 or e-mail: pohl@gwgate.nhlbi.nih.gov.

Molecular Biology and Fatty Acid Biochemistry Darryl C. Zeldin, MD

Novel human cytochrome P450 enzymes that metabolize fatty acids are cloned and expressed, and the catalytic properties of the recombinant, purified proteins are evaluated by HPLC. Regulation of gene expression is studied using Northern analysis, RT-PCR, protein immunoblotting, immunohistochemistry and *in situ* hybridization. Applicants should have a strong background in cell and molecular biology and must have less than five years of postdoctoral experience. Laboratory

of Pulmonary Pathobiology (OE-115), NIEHS, P.O. Box 12233, Mail Drop D2-01, Research Triangle Park, NC 27790.

Molecular Carcinogenesis and Papillomaviruses Joseph A. DiPaolo, PhD

In vitro and *in vivo* models are available to study multistage cervical carcinogenesis and human papillomaviruses. Areas of interest are the molecular control of differentiation and cytokine gene expression, molecular cytogenetics, therapy using targeted ribozymes, and immunological intervention. Applicants must have less than five years of postdoctoral experience. Laboratory of Biology (OE-115), NCI, Building 37, Room 2A19, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255 or see www.nci.nih.gov/intra/biology/lbgypage.htm.

Molecular Genetics of Gene Targeting Brian Sauer, PhD

Transgenic animal models using both standard and ES cell gene targeting are being used to study chromosomal position effects on developmental gene expression and DNA recombination. Genetic switches for lineage marking and selective gene ablation using site-specific DNA recombination are also being developed. Applicants must have a strong background in molecular biology, genetics and mammalian cell biology, and less than five years of postdoctoral experience. Laboratory of Biochemistry and Metabolism (OE-115), NIDDK, Building 10, Room 9B15, 10 CENTER DR MSC 1800, BETHESDA MD 20892-1800.

Ion Channel Physiology and Modulation Jerrold L. Yakel, PhD

Ligand-gated (serotonin 5-HT₁ and glutamate) and voltage-gated calcium channels are studied in neurons and cell lines, as well as channels expressed in mammalian cells or *Xenopus oocytes*. Structure-function aspects of these channels are investigated, as well as how intracellular signal transduction pathways modulate the physiological properties of these channels. Applicants must have electrophysiological (preferably patch-clamp) experience and less than five years of postdoctoral experience. Laboratory of Cellular and Molecular Pharmacology (OE-115), NIEHS, P.O. Box 12233, Mail Drop 19-04, Research Triangle Park, NC 27709.

Regulation of Nitric Oxide Synthase by Insulin Michael J. Quon, MD, PhD

Molecular mechanisms of insulin-stimulated production of nitric oxide in vascular endothelial cells are being elucidated. A position is available to study the regulation of nitric oxide synthase by insulin. Insights from these studies will be used to investigate the relationship between insulin resistance and hypertension at a molecular level. Strong background in molecular biology and/or cell biology preferred. Applicants must have less than five years of postdoctoral experience. Hypertension Endocrine Branch (OE-115), NHLBI, Building 10, Room 8C-103, 10 CENTER DR MSC 1754, BETHESDA MD 20892-1754.

Additional Information

An electronic version of the *Postdoctoral Research Fellowship Opportunities* catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: <http://www.nih.gov>). When connected with Gopher, select **Grants and Research Information** and then **NIH Office of Education**. When connected with WWW, select **Grants and Contracts** and then **NIH Office of Education**. If you have further questions, please contact the NIH Office of Science Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (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 Science Education

The NIH is an Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITIONS Structural Basis of Neurobiology

POSTDOCTORAL POSITIONS are available on a training grant in Neurobiology based in the Department of Anatomy and Neurobiology at Boston University School of Medicine. The training, in an active research environment, is designed to strengthen the trainees' knowledge of the structural and functional organization of the nervous system. Training is carried out under the direction of one of the eighteen participating faculty members, who have a wide range of interests. *Fellowships are only available to United States citizens and permanent residents.* For further information please contact: **Dr. Alan Peters, Department of Anatomy and Neurobiology, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118. Telephone: 617-638-4200; FAX: 617-638-4216.** *Boston University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available to study the role of synaptic activity and trophic factors in regulating the molecular phenotype of neurons during development. Transgenic animals and tissue culture models will be employed. Applicants should have extensive experience with molecular biologic techniques such as *in situ* hybridization, PCR, and quantitative analysis of mRNA levels. Send curriculum vitae to: **Robert Kalb, Department of Neurology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520.** *Yale University is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION available for development of recombinant baculovirus insecticides. Research will include genetic engineering and whole organism biology. Molecular experience preferred. Background in entomology/virology desirable. Send letter of application, curriculum vitae, and names, telephone numbers, mailing and email addresses for three letters of reference, to: **Dr. Bryony C. Bonning, Department of Entomology, Iowa State University, 411 Science II, Ames, IA 50011-3222.** Application deadline is 30 April 1996. *Iowa State University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH TRAINEESHIPS IN THE CARDIOVASCULAR SCIENCES

The Cardiovascular-Renal Center of the University of Tennessee, Memphis, announces the availability of **RESEARCH TRAINEESHIPS** in the cardiovascular sciences. Basic science and clinical research encompasses molecular, cellular, and integrative aspects of the cardiovascular system. Applicants must have a doctoral degree and must be citizens or permanent residents of the United States. For information, contact: **Dr. Leonard Share, Director, Cardiovascular-Renal Center, 894 Union Avenue, University of Tennessee, Memphis, TN 38163.** *The University of Tennessee is an Equal Opportunity/Affirmative Action/Titles VII and IX/Section 504/ADA Employer. Minorities and women are encouraged to apply.*

POSTDOCTORAL FELLOWSHIP position at Harvard Medical School. Applications are invited for the position of research associate to conduct work on NIH funded studies of the role of macrophage receptors in atherosclerosis and immune function. Qualified applicants will possess a Ph.D. degree and relevant experience in molecular and/or cell biology. Prior work with transgenic and knock-out mice is highly desirable. The term of the fellowship is two years, with the possibility of extension. Applicants should send a curriculum vitae and the name of their current preceptor, as well as that of at least one other person familiar with their research, to: **Mason Freeman, Department of Medicine, Massachusetts General Hospital, Boston, MA 02114.**

POSTDOCTORAL FELLOWSHIP Washington University School of Medicine

Position available immediately as part of an NIH Training Grant to study human molecular genetics. Emphasis will be on complex genetic traits and technology development. Ph.D. or M.D. required. Experience in molecular, biochemical, and computational techniques desirable. Applications to: **Pui-Yan Kwok, M.D., Ph.D., 660 South Euclid Avenue, Box 8123, St. Louis, MO 63110.** *NIH Training Grant requires U.S. citizenship or permanent residency.*

POSITIONS OPEN



POSTDOCTORALS

A **POSTDOCTORAL POSITION** is available to study the behavior of epidermal stem cells in organotypic culture and in mouse/human xenografts. Applicant must have expertise in mammalian cell culture and gene transfer techniques. Job Code PD1.

A second postdoctoral position is available to work on a project aimed at determining the role of inflammation and remodeling of tissue engineered skin grafts. Applicant should have experience in cellular immunology and/or wound healing expertise in molecular biology; immunohistochemistry and pathology preferred. Job Code PD2. Interested candidates may forward résumés to: **Human Resources, Organogenesis Inc., 150 Dan Road, Canton, MA 02021.**

DUKE UNIVERSITY WETLAND CENTER

Three postdoctoral positions available immediately to study (1) P cycling in the Everglades (radioisotope experience preferred); (2) effects of P and hydrology on macroinvertebrate/food web ecology in the Everglades; (3) field indicators of wetland functions in coastal North Carolina. Send curriculum vitae and three references to: **Curtis Richardson, Director, Duke Wetland Center, Nicholas School of the Environment, Box 90333, Duke University, Durham, NC 27708.** *Equal Opportunity Employer.*

NEUROBIOLOGY OF MUSCARINIC RECEPTOR SUBTYPES

A **POSTDOCTORAL FELLOWSHIP** is available to study the biological consequences of ligand selectivity and receptor activity from the molecular level to the whole animal. The position is funded from an NIH grant aimed at the development of novel and selective muscarinic agonists for the treatment of Alzheimer's disease.

A Ph.D. in neuroscience, pharmacology, biochemistry, or related field is required. Experience with signal transduction mechanisms, neurotransmitter pharmacology, and molecular biology is desirable. The position is available on April 1, 1996 with a starting salary of \$25,725.

Letters of interest and references should be sent to: **William S. Messer, Jr., Ph.D., Department of Medicinal and Biological Chemistry, College of Pharmacy, The University of Toledo, Toledo, OH 43606-3390.** Email inquiries are also welcome at wmesser@uoft02.utoledo.edu. *An Affirmative Action/Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.*

POSTDOCTORAL POSITION

**Viral Vectors and Gene Targeting
University of North Carolina at Chapel Hill**

We are seeking a **POSTDOCTORAL FELLOW** to participate in studies designed to elucidate the role of astrocytes in brain. Viral vectors will be used to deliver knock-down constructs (e.g. dominant-negatives) to specific populations of astrocytes and knock-out strategies will be employed to disrupt astrocytic genes *in vivo*. Applicants should have extensive experience in the theoretical and practical aspects of molecular biology. The selected candidate will work closely with other members of our multidisciplinary neuroscience laboratory. Send curriculum vitae and names of three references to: **Ken D. McCarthy, Department of Pharmacology, CB Number 7365 - FLOB, University of North Carolina, Chapel Hill, NC 27599-7365.** FAX: 919-966-5640.

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS

FELLOWSHIPS available to residents of North America with Ph.D., M.D., or comparable degree and less than one year of postdoctoral laboratory experience by application date for beginning training in basic biomedical research. The three-year award consists of a stipend of \$25,000 for the first year, \$27,000 for the second year, \$29,000 for the third year; \$2,000 per annum research allowance, travel to fellowship location; annual meeting. Application deadline August 15, 1996; fellowships activate July 1997. For application forms, write: **The Helen Hay Whitney Foundation, 450 East 63 Street, New York, NY 10021.** FAX: 212-688-6794.

POSITIONS OPEN

PROGRAM LEADER-ENTOMOLOGIST PROGRAM LEADER-PLANT PATHOLOGIST United States Department of Agriculture (USDA) Cooperative State Research Education and Extension Service (CSREES)

The Cooperative State Research, Education, and Extension Service of the USDA has an opening for an **ENTOMOLOGIST** and a **PLANT PATHOLOGIST** to provide program leadership and evaluation for Research and Extension activities linking Federal programs to the Land Grant University system. Candidates must have a Ph.D. or other degree with major study in plant pathology, entomology, or a closely related field. In addition, other specialized experience is required. Closing dates for both positions is April 15, 1996. For further information and application instructions contact: **Bruce Craig, USDA/ARS, Room 1423 South Building, 1400 Independence Avenue, S.W., Washington, DC 20250.** Telephone: 202-720-6130. *USDA is an Equal Opportunity Employer.*

ELECTRON MICROSCOPE SERVICE ENGINEER

The University of Kentucky anticipates hiring a **SERVICE ENGINEER** to perform routine and emergency repairs on the University's electron microscopes. The successful candidate should have a minimum of three years of experience in field service of electron-optics instrumentation and expertise in trouble-shooting solid state electronic, electromechanical, high vacuum, and microprocessor systems. The position involves working independently to solve all instrument failures, and performing field upgrades and modifications so as to maintain these instruments in state-of-the-art condition. The successful applicant will work with a consortium of faculty and staff who utilize twelve electron microscopes in six sites including tungsten, LaB6, and field emission cathode instruments; oil diffusion, turbo-molecular, ion getter, and molecular drag pumping systems; energy dispersive X-ray detectors; and various supporting systems from a variety of manufacturers. Candidates for this position should send a copy of their curriculum vitae that details their expertise and experience as well as three letters of recommendation to: **David Watt, Vice Chancellor for Research and Graduate Studies, University of Kentucky, 201 Gillis Building, Lexington, KY 40536-0033.** The position will be available as early as July 1, 1996, and a competitive salary and benefits package is offered. *The University of Kentucky is an Equal Employment Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE

Immediate position available to fill a **POSTDOCTORAL POSITION** at Vanderbilt University Medical Center. Areas of investigation will include the molecular biology of NF- κ B/Rel transcription factors and their role in human T-cell growth, development, and HIV gene expression (*PNAS*, 92:11259-11263, 1995). Minimum requirements include M.D. and/or Ph.D. degree(s) and significant research experience in mammalian tissue culture, gene transfection, DNA sequencing, protein purification, and recombinant DNA techniques.

Please send your résumé with the names and addresses of three references to: **Dean W. Ballard, Ph.D., c/o Julie Morris, Vanderbilt University Medical Center, 802 Light Hall, Nashville, TN 37232-0295.** *Equal Opportunity Employer.*

PLANT MOLECULAR BIOLOGY

POSTDOCTORAL POSITION available immediately to study photoregulatory signal transduction in *Arabidopsis*. Experience in molecular genetics and/or cell biology is required. Please send curriculum vitae and three letters of reference to: **Anthony R. Cashmore, Director, Plant Science Institute, Department of Biology, University of Pennsylvania, Philadelphia, PA 19104-6018.** Send Email responses to: alaurino@sas.upenn.edu.

POSTDOCTORAL: NMR studies of protein-peptide complexes involved in signal transduction using Bruker DRX500 with three axis gradients. Send letter of application explaining background and goals, curriculum vitae, and three letters of recommendation to: **Edward A. Dratz, Department of Chemistry and Biochemistry, Montana State University, Bozeman, MT 59717.** Screening begins April 12, 1996. *ADA/Affirmative Action/Equal Opportunity/Veterans Preferred.*

POSTDOCTORAL POSITION IN MOLECULAR NEUROBIOLOGY



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

ALBAC • Danny Thomas, Founder

This laboratory is interested in identifying molecular events that play a defining role in the processes of neural trauma and neuronal degeneration in the central nervous system. Molecules important for the development and maintenance of the nervous system are being analyzed in the mouse, using modern molecular biology techniques including gene targeting, and yeast two-hybrid analysis. Presently the focus of this work concerns extracellular matrix molecules associated with astrocytes and the response to neural trauma, and also the molecular events that underlie the neuronal degeneration that occurs in the hereditary human syndrome of ataxia telangiectasia.

This postdoctoral position would be ideally suited to someone with a neurobiology background who has recently obtained a Ph.D. and/or MD and would like to pursue training in molecular neurobiology.

Support facilities at this institution are exceptional, and the research environment is highly interactive, both within the Research Hospital and at the nearby UT Medical School. This position should provide an outstanding opportunity for training in the molecular neurosciences.

This position is available immediately, and interested candidates should send a curriculum vitae and three letters of recommendation to Peter McKinnon, Ph.D., Department of Genetics, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Affirmative Action/Equal Opportunity Employer.

TARGETED GENETICS CORPORATION Cell Culture Staff Scientist

Targeted Genetics Corporation is a biotechnology company developing integrated gene and cell therapies for the treatment of acquired and inherited diseases. Continued growth has created a new opportunity for a Staff Scientist in the Process Development group. The successful candidate will join a highly interactive group dedicated to the aggressive pursuit of research programs leading to therapeutic products.

We are looking for a cell culture scientist/engineer to develop procedures and technology leading to production of vectors and *ex vivo* expansion of human cells for gene therapy applications. This position will effectively integrate cell culture background, relevant immunology knowledge along with engineering and bioreactor experience to design scaleable cGMP manufacturing processes. Applicants must have proven experience in the development and scale-up of production methods for gene therapy vectors, recombinant therapeutics or vaccines in mammalian or insect cells.

Candidates could also have extensive experience in the *ex vivo* expansion and culturing of hematopoietic, immune or accessory cells. Individual must be able to integrate standard virological, molecular and biochemical techniques to monitor and validate the process. Knowledge of device, quality control, cGMP and regulatory issues is required. Persons applying will need strong communication skills as well as the ability to work as a member of a creative team. Supervisory experience is a plus.

To qualify candidates must have a Ph.D. in cell biology, virology, biochemistry or biochemical engineering and 3-5 years of relevant experience in an industrial setting.

For consideration, please submit your C.V./resume to:

Targeted Genetics Corporation

REF: 300796
1100 Olive Way, Suite 100
Seattle, WA 98101
FAX (206)521-7872
email: sackett@targen.com
We are an Equal Opportunity Employer.

National Cancer Institute Division of Cancer Epidemiology and Genetics Bethesda, Maryland

Opening Date: March 25, 1996
Closing Date: April 29, 1996

Announcement Number: CA-96-0004

CHIEF, VIRAL EPIDEMIOLOGY BRANCH

The Division of Cancer Epidemiology and Genetics (DCEG), National Cancer Institute (NCI), National Institutes of Health (NIH), is seeking candidates to fill the position of Chief of the Viral Epidemiology Branch (VEB). Candidates should be internationally recognized for their expertise, leadership, and collaborative capabilities in the area of viral epidemiology.

VEB is one of six intramural research branches within the Epidemiology and Biostatistics Program, DCEG. The Branch conducts studies aimed at identifying the role of RNA and DNA viruses and other infectious agents in the etiology of human cancer and related outcomes (e.g., AIDS). Emphasis is placed on interdisciplinary studies that integrate epidemiological, clinical, and laboratory approaches.

The Chief plans, manages and directs the activities of VEB, utilizing intramural resources, contracts, interagency agreements, and extramural collaborations. He/she designs, implements and analyzes epidemiologic and interdisciplinary studies, employing morbidity, mortality and registry data from national and international sources to generate hypotheses to cancer etiology, with particular emphasis on patterns suggesting an infectious process. Descriptive and analytical studies are undertaken to elucidate: (1) population prevalence and incidence of infectious agents; (2) serologic and immunologic patterns of infection; (3) modes of transmission; (4) host and environmental co-factors affecting transmission, infectivity, and risk of viral-related cancer; and (5) natural history of viral-related cancer.

Candidates must hold a medical or other doctoral-level degree in a relevant scientific field. In addition, candidates must have extensive interdisciplinary research experience using epidemiologic, clinical and laboratory approaches to study the role of viruses and other infectious agents in the etiology of human cancer and related outcomes. In particular, research experience essential to this position includes: (1) conduct of epidemiologic studies to estimate the prevalence and incidence of infectious agents in a population; (2) identification and characterization of cancer risk among infected individuals; (3) clarification of the modifying effects of co-factors affecting transmission, infectivity, and risk of viral-related cancer; and (4) studies of the natural history of viral-related cancer. Candidates must also have satisfactory experience in the administration and management of a research program in viral epidemiology, which includes clinical and laboratory components. Candidates must be a United States citizen.

The salary range is \$69,300 to \$90,090, plus locality pay, commensurate with education and experience. Qualified physicians who are employed as Medical Officers may be paid a salary range of \$78,540 to \$99,330 and an additional Physician's Comparability Allowance of up to \$20,000 per year.

To obtain information on the application procedures and documents required for consideration for this position, candidates may contact the

NATIONAL CANCER INSTITUTE OFFICE OF HUMAN RESOURCES AND CONSULTING BRANCH (301) 402-2789

To obtain a fax of this information, call 1-800-728-5627 or (301) 594-2953 and enter fax ID# 1819.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

The NIH/NCI is an Equal Opportunity Employer

POSTDOCTORAL POSITION ONCOGENES, TUMOR SUPPRESSORS AND APOPTOSIS

We are currently investigating the role of E2F and p53 in myeloid differentiation, cell cycle control and programmed cell death (MCB 15:6864, 1995). This study represents a joint effort between the laboratories of Drs. Gerard Zambetti, Scott Hiebert and John Cleveland. This position requires a recent Ph.D. and training in molecular biology or biochemistry. Send curriculum vitae with the names of three references to:

Dr. Gerard Zambetti,
Department of Biochemistry,
St. Jude Children's Research Hospital,
332 North Lauderdale, Memphis, TN 38105.
*An Affirmative Action/
Equal Opportunity
Employer.*



THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER

Department of Urology Multidisciplinary Prostate Cancer Research Program

The University of Texas M. D. Anderson Cancer Center is launching a major new integrated multidisciplinary program in Prostate Cancer Research in conjunction with the Departments of Urology, Cell Biology, and Genitourinary Medical Oncology. Ample resources of dedicated laboratory space and research personnel and a substantial financial base is being secured for this program. We are seeking scientists for faculty positions to add to our critical contingent of researchers interested in the biology and therapy of human prostate cancer.

- A position at the **Professor** level for a senior scientist with a record of outstanding achievement in research, extramural funding, administration, and graduate training;
- **Two** positions at the **Assistant** or **Associate Professor** level for scientists with exceptional accomplishments in cancer biology (systemic, cellular, molecular, and biochemical).

Candidates should have a Ph.D. or an M.D. degree with a track record of research in molecular biology and interest in the study of prostate cancer. Applicants should send *curriculum vitae*, a 1-2 page summary of research activities, and the names of three references to:

Andrew C. von Eschenbach, M.D.
Director of the Prostate Cancer Program
Chairman, Department of Urology, Box 110
The University of Texas M.D. Anderson Cancer Center
1515 Holcombe Blvd.
Houston, TX 77030

The University of Texas is an Affirmative Action/Equal Opportunity Employer and encourages minorities and women to apply. Smoke-free environment.

The Center for Drug Evaluation and Research (CDER) announces an opening for the position of Senior Scientist, Office of Review Management. Applications must be received by April 30, 1996. The Senior Scientist (Pharmacology/Toxicology), a staff official unimpeded by responsibility for day-to-day line authority, advises center management, participates in policy formulation, program planning and evaluation; insures that pharmacological/toxicological considerations, as appropriate, are incorporated in all center regulatory and research decisions, policies and activities; chairs the Pharmacology/Toxicology Coordinating Committee; represents the Agency on International Conference on Harmonization committees; conducts research and resolves problems concerned with pharmacology/toxicology issues; provides expert advice and assistance on risk assessment throughout the center; serves on various task forces, committees and seminar groups concerned with his/her areas of expertise and develops and conducts seminars and training programs for center scientists and review staff. This opening is a civil service position in the Senior Biomedical Research Service (SBRs). The SBRs salary range is \$67,941 to \$148,400. Applicants employed by institutions of higher learning who are appointed to the SBRs have the option of participating in the Federal Employee Retirement System or, subject to certain limitations, continuing to participate in the retirement program of their institution. Applicants must have a doctorate in medicine, veterinary medicine, biomedicine, pharmacology, toxicology or a related field; mastery of scientific principles and methodology applicable to the design and interpretation of pharmacologic, toxicologic and pharmacokinetic studies; and mastery of the drug development/drug review processes, regulatory procedures/requirements and public health concerns. Submit application material to **John Anderson, Office of Human Resources and Management Services, Food and Drug Administration, Room 7B-32, HFA-408, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857**. For further information contact Mr. Anderson by phone on (301) 443-1755 or by fax on (301) 443-6703.

CENTER DIRECTOR

The U.S. Department of Agriculture (USDA) is seeking candidates for the position of Director of the Plum Island Animal Disease Center (PIADC) at Greenport, New York. PIADC is the principal USDA laboratory for research and diagnosis of animal diseases which are foreign to the United States. Duties of the Director include direction and coordination of the research and diagnostic programs as well as the overall operation and management of the Center. Research is funded and administered through the Agricultural Research Service (ARS). The Foreign Animal Disease Diagnostic Laboratory is funded and administered through the USDA Animal and Plant Health Inspection Service (APHIS). The Director represents ARS and APHIS in communications in the veterinary and biomedical communities, representatives of other governmental agencies, congressional staff, livestock producers and commodity groups, news media and the general public, on foreign animal diseases.

The successful candidate will have the DVM or equivalent degree, demonstrated skill in organizing and leading multidisciplinary teams of scientists, and a strong record of personal research accomplishments. A Ph.D. or equivalent degree is highly desirable. This is a Senior Executive Service position with a salary range from \$102K to \$123K, depending on qualifications. For further information about the positions please call **Dr. Herbert Rothbart** at 215-233-6593. For application procedures, call **Gwen Donovan** at 301-344-4303 by **March 22, 1996**. Applications must be received by **March 29, 1996**, to be considered.

**USDA/ARS IS AN EQUAL
OPPORTUNITY EMPLOYER**



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

CLINICAL SCIENCE MANAGER

Philips Medical Systems is a world leader in the manufacture of medical equipment. We have an immediate opening in our Shelton location for a manager to direct a team of scientists in Magnetic Resonance Imaging (MRI).

If selected, you will be responsible for facilitating the work flow of scientists at major teaching and research hospitals throughout North America. This will involve establishing clear communication channels between North America and the Netherlands; planning and coordinating project review meetings; and coordinating collaborative research between customers and our product development group. You will also develop your subordinates and facilitate their work.

To qualify, you will need an M.S. or Ph.D. in a technical field, 3 to 4 years research experience, and the ability to travel up to 30% of the time. At least 3 to 4 years managerial experience is required.

We offer the opportunity for career development, together with an attractive salary and benefits package. For consideration, please send your resume/letter outlining qualifications and salary history to: **Human Resources Manager, Philips Medical Systems N.A., 710 Bridgeport Avenue, Shelton, CT 06484.** Principals only. No phone calls please. An Equal Opportunity/Affirmative Action Employer M/F/D/V.

Let's make things better



PHILIPS

The National Institutes of Health National Center for Human Genome Research

The Intramural program of the National Center for Human Genome Research (NCHGR), the National Institutes of Health (NIH), Bethesda, Maryland, is now in operation. Scientists with a unique range of expertise and interests have been recruited to focus on the identification, localization, diagnosis, and treatment of human genetic disease.

We are actively recruiting a tenure-track scientist in the field of

Human and Murine Molecular Cytogenetics

for a position within the Diagnostic Development Branch. The successful applicant will be provided with the space and resources needed to pursue an independent research program in identifying chromosomal aberrations in human and murine solid tumors.

Candidates must have a Ph.D. and/or M.D. as well as advanced training in genome science, including demonstrable expertise in multicolor Fluorescence In Situ Hybridization (FISH) and comparative genomic hybridization, as well as digital imaging and confocal laser scanning microscopy.

Salary range \$54,000 - \$80,000 and benefit packages are available. Please forward curriculum vitae to:

**Molecular Cytogenetics Search Committee
NIH/NCHGR
Building 9 Rm. 1N105
9 Memorial Drive, MSC-0940
Bethesda, MD 20892-0940**

Closing Date: April 15, 1996

NIH IS AN EQUAL OPPORTUNITY EMPLOYER



ASSISTANT PROFESSOR OF BIOLOGY

York College of the City University of New York seeks an Assistant Professor of Biology to join our Natural Sciences Department.

Primary responsibilities include teaching courses in Molecular Developmental Biology, upgrading lab offerings, and developing research with undergraduates. Other faculty duties to be determined by Program Coordinator. Qualified candidates hold Ph.D. in biology, and preferably have postdoctoral experience. Strong commitment to undergraduate teaching and research required. Opportunity to apply to participate in our NIH funded minority research and training programs.

Salary range is \$29,931-\$52,213, commensurate with qualifications and experience. If qualified and interested please send letter, résumé and three references (Names, addresses, phone numbers) to:

**Dr. Cheryl Adams
Chair, Search Committee
York College/CUNY
Department of Natural Sciences
(Biology)
Jamaica, New York 11451**



EOE M/F/D/V

Postdoctoral Research At The Wistar Institute

The Wistar Institute, an independent research organization located on the University of Pennsylvania campus, currently seeks postdoctoral applicants.

Postdoctoral Researcher 1 – Structural studies on viruses, antibodies and enzymes defective in human genetic diseases. Experience in crystallography or EM image reconstruction **Reply to Dr. Roger M. Burnett.**

Postdoctoral Researcher 2 – Study the effects of simulated microgravity on growth and differentiation of cultured human vascular cells as well as on cardiovascular development in a murine model system. These projects are part of a NASA-funded Multidisciplinary Program encompassing seven major labs at Wistar and the University of PA. **Reply to Dr. Elliot Levine.**

Postdoctoral Researcher 3 – Function of TFIIA and TFIID recruitment by activators that disrupt viral latency. **Reply to Dr. Paul Lieberman.**

Postdoctoral Researcher 4 – RNA editing of GluR ion channel gene transcripts in mammalian brain; the molecular mechanism and its relevance to neurological disorders such as Alzheimer's and epilepsy. Previous experience in molecular techniques required. Degree received within last three years preferred. *Proc. Natl. Acad. Sci. USA* 91:11457 (1994). *EMBO J.* 15:34 (1996). **Reply to Dr. Kazuko Nishikura.**

Postdoctoral Researcher 5 – Research focuses on identifying physiological roles of Src tyrosine kinases using gene knockouts in mice. Current interests include T cells, brain, and skin. **Reply to Dr. Paul Stein.**

Interested applicants are requested to send a C.V. and three references to the appropriate faculty member's attention: **The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104.** Equal Opportunity Employer. Minority candidates are strongly encouraged to apply.



Ribozyme Pharmaceuticals Inc., a leader in the development of ribozyme-based products for pharmaceutical and agricultural applications, currently is seeking an experienced scientist to join our Drug Delivery Group at our state-of-the-art facility in Boulder, Colorado:

SCIENTIST

A Ph.D.-level Scientist is desired with 2-5 years of post-graduate experience in the area of nucleic acid delivery. Hands-on experience in formulations development is required with an emphasis on biophysical analysis. Preference will be given to candidates with experience in lipid- and/or polymer-based carriers, receptor-mediated targeting strategies and sustained-release delivery systems. A solid understanding of the principles involved in cellular uptake and biodistribution is essential. This position requires an ability to draw correlations between biophysical, biodistribution and bioactivity studies using cell culture and animal models.

We offer a competitive salary and benefits package, including a stock option plan. For consideration, please refer to Job# 098-SM, send a *Curriculum Vitae*, and the names of three references to: Ribozyme Pharmaceuticals, Inc., 2950 Wilderness Place, Boulder, CO 80301. FAX (303) 449-6995. No phone calls accepted. We are an equal opportunity employer.



SENIOR PROGRAM ASSOCIATE

The American Association for the Advancement of Science is seeking a Senior Program Associate for a new program, "Dialogue Between Science and Religion." Responsibilities: plan and organize program activities in collaboration with Program Directors, including helping to develop agendas, identifying speakers and preparing materials for workshops, training seminars, conferences, and other meeting activities; initiate and conduct research and study projects; prepare proposals and formulate budgets for external funding; research, write, edit, and engage in production of Program publications and other dissemination tools; prepare project reports for publications or presentations; stay informed about issues related to the work of the Program and participate in liaison activities with key groups and organizations; assign and monitor work of junior staff as necessary. **This Is A Full-Time Regular Position For An Initial Period Of One Year (Renewable After One Year).** Position requires extensive university or college level training leading to a Bachelor's degree; graduate training in the field of science or religion preferred, with knowledge of the other field of study as well; five to seven years related work experience in progressively responsible positions and experience in conducting research in program development and management; excellent written and verbal communication skills; good analytical skills and ability to work effectively in multi-disciplinary collaborations; demonstrated knowledge of Program issues; ability to handle multiple priorities and projects; ability to monitor activities of support staff and volunteers. Interested applicants may send résumé and cover letter with salary requirements to the American Association for the Advancement of Science (AAAS), Human Resources Department, 1333 H Street, NW #125-SPA 014, Washington, DC 20005. EOE. Non-smoking work environment.

ENZYMOLOGIST

At Boehringer Ingelheim, our commitment to innovative research and scientific exploration has played a key role in our positioning as a major international pharmaceutical company. Currently, we're looking for a highly-dedicated scientist to join our Immunological Diseases research team.

The successful candidate will conduct innovative research in drug discovery, including in-depth enzyme kinetic analysis and characterization of protein-protein interactions.

To qualify, you must have a Ph.D. in Biochemistry or a related discipline and at least 2 years post-doctoral experience. A background in cloning, protein expression, purification and characterization is required, as is expertise in enzymology, kinetic analysis and protein-protein interactions. Strong communication and analytical skills are vital; while the ability to function in an interactive, interdisciplinary team environment is essential.

Boehringer Ingelheim's facility is located in a campus-like setting in a beautiful area of Western Connecticut, bordering New York State. We offer excellent facilities and a supportive, challenging work environment. For consideration, please send your resume and salary requirements to: **Dept. MH-44-835, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877-0368.** We are an equal opportunity employer.



**Boehringer
Ingelheim**

As a progressive healthcare employer, we have a non-smoking environment.

MOLECULAR BIOLOGIST

The Laboratory of Biochemistry, National Cancer Institute, National Institutes of Health, seeks an outstanding molecular biologist to carry out studies on energy-dependent processes of nucleosome disruption. The position requires a Ph.D. or its equivalent in the area of transcriptional regulation, and a minimum of 3 years of post-doctoral training in the area of chromatin structure and gene regulation. Candidates must have expertise in molecular cloning and protein biochemistry, and research experience in biochemical methods for chromatin assembly and nucleosome disruption in vitro. Experience in purifying ATP-dependent biochemical activities from *Drosophila* that affect nucleosome integrity is also essential. Research experience should be demonstrated by a track record of quality publications. Salary ranges between \$31,000 and \$41,000 depending on experience. United States citizenship or permanent residency is required for this position.

To apply, please send curriculum vitae, reprints, description of research experience, and a list of references within 30 days of publication to:

**Beverly Miller, Laboratory of
Biochemistry, National Cancer Institute
National Institutes of Health
Bldg. 37, Room 4E-28
37 Convent Drive, MSC 4255
Bethesda, MD 20892-4255**

NIH/NCI is an Equal Opportunity Employer. Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation or membership or non-membership in an employee organization.

TIGR Science Education Foundation

GENOMIC SCIENCE SERIES CONFERENCE ON GENE THERAPY

Hyatt Regency Hilton Head • Hilton Head SC • May 9-12, 1996

Conference Cochairs: **James M. Wilson**, M.D., Ph.D., University of Pennsylvania
Inder Verma, Ph.D., Salk Institute

Thursday, May 9, 1996

2:00 pm Registration opens
5:30 pm Cash bar reception
6:00 pm Dinner

7:00 pm Keynote Address:
Harold Varmus, Director, National Institutes of Health
8:00 pm Keynote Address:
David G. Nathan, President, Dana-Farber Cancer Institute

- **Malcolm K. Brenner**, St. Jude Children's Research Hospital
- **Savio L. C. Woo**, Baylor College of Medicine
- **Elizabeth M. Jaffee**, Johns Hopkins University School of Medicine

12:30 pm Lunch
1:30 pm - Posters
4:00 pm Exhibits

Friday, May 10, 1996

8:30 am - **Plenary Session: Adenoviruses**
Noon Chair: **Marshall S. Horwitz**, Albert Einstein College of Medicine
• **Frank L. Graham**, McMaster University
• **James M. Wilson**, University of Pennsylvania
• **Andrea Pavirani**, Transgene S.A.
• **Ronald G. Crystal**, Cornell University Medical Center
• **Eileen White**, Rutgers University

Noon Lunch
1:30 pm - Poster Session
2:30 pm Exhibits

2:30 pm - **Plenary Session: Integrating Viruses**
6:00 pm Chair: **Stephen P. Goff**, Columbia University
• **Theodore Friedmann**, University of California, San Diego
• **Richard "Jude" Samulski**, University of North Carolina at Chapel Hill
• **Inder Verma**, Salk Institute
• **Matthew D. Weitzman**, University of Pennsylvania

6:00 pm Dinner

7:00 pm - **Plenary Session: Central Nervous System / Muscle**
10:00 pm Chair: **Robert Martuza**, Georgetown University Medical Center
• **Joseph C. Glorioso**, University of Pittsburgh
• **Fred H. Gage**, Salk Institute
• **Helen M. Blau**, Stanford University School of Medicine
• **Axel Kahn**, INSERM
• **Leslie Leinwand**, University of Colorado, Boulder

Saturday, May 11, 1996

8:30 am - **Plenary Session: Nonviral Vectors**
10:00 am Chair: **Max L. Birnstiel**, Research Institute of Molecular Pathology
• **Alan E. Smith**, Genzyme Corporation
• **John K. Rose**, Yale University School of Medicine

10:30 am - **Plenary Session: Cancer**
12:30 pm Chair: **Richard Mulligan**, Massachusetts Institute of Technology

4:00 pm - **Plenary Session: Hematopoiesis and Stem Cells**
6:00 pm Chair: **David G. Nathan**, Dana-Farber Cancer Institute

- **Markus Grompe**, Oregon Health Sciences University
- **R. Michael Blaese**, National Center for Human Genome Research
- **Claudio Bordignon**, Istituto Scientifico H.S. Raffaele
- **Donald B. Kohn**, USC School of Medicine
- **John Dick**, University of Toronto
- **William G. Kerr**, University of Pennsylvania

6:30 pm Dinner

7:30 pm - **Plenary Session: Vascular**
10:00 pm Chair: **Russell Ross**, University of Washington School of Medicine
• **Elizabeth G. Nabel**, University of Michigan School of Medicine
• **Jeffrey M. Leiden**, University of Chicago
• **Victor J. Dzau**, Stanford University School of Medicine
• **David A. Dichek**, Gladstone Institute for Cardiovascular Diseases

Sunday, May 12, 1996

8:30 am - **Plenary Session: AIDS**

Noon Chair: TBA
• **Gary J. Nabel**, University of Michigan School of Medicine
• **Douglas J. Jolly**, Chiron Viagene, Inc.
• **Mitchell Finer**, Cell Genesys, Inc.
• **Philip Greenberg**, University of Washington School of Medicine
• **Flossie Wong-Staal**, University of California, San Diego

To register or to receive additional information contact:

Conference Office, 9712 Medical Center Drive
Rockville, MD 20850-3319

301-838-3515 or -3509 • 301-838-0229 FAX • therapy@tigr.org

and look for updated information on the world wide web <http://www.tigr.org>



MAX-PLANCK-INSTITUTE
FOR MEDICAL RESEARCH, HEIDELBERG

POST-DOCTORAL RESEARCH FELLOW

We seek a dedicated biochemist with a strong background in the purification and characterisation of proteins to join a team that employs biophysical, biochemical and molecular biology techniques (e.g. enzyme kinetics, X-ray crystallography, single-molecule fluorescence light microscopy techniques, site-directed mutagenesis, gene targeting) to study the functional behavior and the regulation of molecular motors *in vitro* and *in vivo*.

Please indicate our reference number 5/1996.

Applications, including a full CV and the names of three referees, should be submitted to Dr. D.J. Manstein, Dept. of Biophysics, Max-Planck-Institute for Medical Research, Postfach 10 38 20, 69028 Heidelberg, Germany (email: manstein@mpimf-heidelberg.mpg.de) not later than Friday 12th April.

Handicapped applicants will be given priority; equal qualifications provided.

THE UNIVERSITY OF THE WEST INDIES

Mona, Jamaica

SENIOR LECTURER/LECTURER IN ELECTRONICS

Department of Physics

Applications are invited from suitably qualified persons for the post of Senior Lecturer/Lecturer in Electronics, Department of Physics. The successful applicant will be expected to participate fully in the Department's teaching and research activities.

Duties to be assumed as soon as possible.

Competitive Compensation Package

Detailed applications (two copies) giving full particulars of qualifications and experience, date of birth, marital status, and the names and addresses of three referees should be sent to the Campus Registrar (Attention: Senior Assistant Registrar, Appointments), The University of the West Indies, Mona, Kingston 7, Jamaica. Further particulars are available from the same source or from Appointments (44804), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF (tel 0171 387 8572 Ext. 206; fax 0171 813 3055; email appts@acu.ac.uk), to whom candidates in the UK should also send one copy of their application.

In order to expedite the appointment procedure, applicants are advised to ask their referees to send confidential reports direct to the University without waiting to be contacted.

The final date for receipt of applications is **30 April 1996**.



EUROPEAN
SYNCHROTRON
RADIATION
FACILITY

GRENOBLE - FRANCE INSTALLATION EUROPEENNE DE RAYONNEMENT SYNCHROTRON

In Grenoble, France, the ESRF has constructed a third generation electron storage ring to generate high Brilliance x-ray beams. Financing of the ESRF is shared by 12 countries including Spain. In addition to the ESRF beamlines, some Collaborating Research Group (CRG) directly associated with one or more of the member countries have financed and built CRG beamlines which they are free to exploit for 2/3 of the available time. The CICYT is the Spanish funding agency for scientific research and it is willing to construct and exploit a CRG beamline for the use of Spanish scientists working on fundamental and applied research on the structure of condensed matter and biology. In order to finalize the planning and design of the beamline and prepare a final proposal for approval by the ESRF Council, the CICYT is looking for a:

Beamline Scientist (m/f) for the Spanish CRG

The function: Designing, planning, preparing the detailed care for and eventually building and exploiting a general purpose beamline to be installed on a bending magnet. The beamline will consist of a double crystal monochromator, focusing mirror optics and several end stations. It is planned to build one end station for general purpose diffraction experiments and another for absorption experiments and/or biology. Once the beamline is operational there will be three main activities: assistance to external users in helping set up the experiments; maintenance and further development of the beamline; scientific research in the fields of interest of the beamline scientist.

Qualifications and experience: A PhD in Physics, Engineering or a related field. Substantial experience in x-ray instrumentation and experimentation is mandatory. The successful candidate will have already carried out and published a significant amount of research work. Further, a knowledge of C, UNIX, etc., will be an advantage. A good knowledge of English is essential and knowledge of the French and Spanish languages is desirable.

Our offer: The working place will be at the ESRF in Grenoble, France. This is a 2-year contract, which, if the CRG beamline is approved and built, will normally be extended to five years. The candidate will be legally employed by the ESRF, on behalf of the CICYT. Staff coming from outside the Grenoble area benefit from installation and adaptation allowances, and non-French staff also benefit from an expatriation allowance in accordance with specific ESRF regulations. The planned starting date of the contract is Spring 1996. If you are interested, please send a copy of your CV and two letters of recommendation to: Belen Lopez, Head of Multilateral Service, CICYT, Rosario Pino 14-16 6ª planta, 28020 MADRID. Tel.: 07-34-1 336 04 21. Fax: 07-34-1 336 05 76, e-mail: belen@cicyt.es.

The ESRF is presently recruiting several Beamline Scientists and Post-doctoral Fellows, please find our vacancies on the WWW (<http://www.esrf.fr>) or call +33 76 88 20 19 for further information. Deadline for this offer: 31.03.1996.

in Grenoble FRANCE

UNIVERSAL COMMUNICATION



UNIVERSITY OF
OXFORD

School of Anthropology
Institute of Biological Anthropology

Fixed-term (five-year) University Lecturership in Primate Evolutionary Biology in association with Lady Margaret Hall

As part of a strategic commitment to the development of Biological Anthropology, the University has established a molecular evolutionary component within the Institute of Biological Anthropology. In order to build upon the Institute's existing strengths in population/evolutionary genetics, primate behaviour and human ecology, we now seek an outstanding candidate in the area of *Primate Evolutionary Biology*. The successful applicant will have a primary research focus that uses the techniques of molecular biology to investigate evolutionary questions in non-human primates. She/he will have a broad multi-disciplinary background and will investigate evolutionary questions in any one of the following areas: social behaviour, ecology, demography, conservation, phylogeny, population genetics.

The Institute of Biological Anthropology has a well equipped suite of modern molecular biology laboratories, located in the University's Biosciences area, plus extensive computing facilities. The University salary will be on the age-related scale of £15,154 - £28,215 per annum. A supernumerary fellowship at Lady Margaret Hall may be available.

The post will commence as close to 1 October 1996 as possible.

Applications (12 copies, or one only in the case of candidates resident overseas) including a complete c.v., a statement of teaching interests and research objectives, one set of reprints if available, and the names of three referees should be submitted by the closing date of 15 April 1996 to: Dr. A.M. Knowland, Secretary of the Anthropology and Geography Board (Oriental Institute, Pusey Lane, Oxford OX1 2LE; telephone (01865) 278200; fax (01865) 278190; e-mail: orient@vax.ox.ac.uk), from whom potential applicants are encouraged to obtain the further particulars of both the University and the college posts.

The University exists to promote excellence in education and research, and is an equal opportunities employer.

BIOGEN

OUR EXPANDING UNIVERSE

In May 1995, we filed for U.S. regulatory approval of a new treatment for multiple sclerosis. We are now in the process of building the infrastructure and capabilities we will need to commercialize this drug, which is our first proprietary product. Our record of success to date is based on the hard work and dedication of our employees. We are now seeking a select number of committed professionals with strong values to join the Biogen team.

Group Leader - QC Technical Services

As a key member of our QC Technical Services department, you will lead and manage a group of scientists engaged in analytical technology R&D which supports the development of biopharmaceuticals. In this leadership role, your specific responsibilities will entail participation in product development activities; management of analytical method development and validation; interfacing with our research, process development, quality control and regulatory department staff, as well as project teams; preparation of chemistry and control sections for INDs and PLAs. To succeed in this highly visible position, candidates must have a PhD in Analytical Chemistry or Biochemistry and a minimum of 7 years' biopharmaceuticals development experience, including 2 years in a supervisory capacity. Strong interpersonal, communication and project management skills are essential, as is expertise with technology transfer and quality control

environments. A hands-on working knowledge of FDA regulations for biologics, GMPs, GLPs, and writing chemistry and control for regulatory submissions also required.

Biogen offers what few companies in our industry can - Professional Challenge, Stability, Growth, and one of the strongest financial profiles in the industry. In addition, our compensation and benefits package, including equity participation, is one of the best in the industry, and is designed to attract and retain the finest talent available. If you are one of the best, this is your opportunity to join our expanding universe. Please forward your resume to the address below.

For immediate consideration, we encourage all interested and qualified candidates to forward/fax CVs at your earliest convenience.

Biogen, Inc., Dept. JT, 14 Cambridge Center,
Cambridge, MA 02142. FAX: (617) 679-2546

BIOGEN

Biogen is an Equal Opportunity Employer
<http://www.careermosaic.com/cm/biogen>

TECHNICAL DIRECTOR

SKIN CARE RESEARCH

HILL TOP RESEARCH, INC., worldwide leader in consumer product clinical and laboratory testing has a leadership opportunity as Technical Director of Skin Care Research. This position will be responsible for the direction of safety and efficacy testing technology and will serve as liaison to both clients and trade/regulatory agencies.

Qualified candidates will possess an advanced degree in a biological area preferably in skin science and possess demonstrated experience in the following areas:

- Strong communication and implementation skills in developing and maintaining client relations
- Technical and managerial skills in areas of claim substantiation including bioinstrumentation
- Minimum 7 years of clinical research experience in a contract lab, university or related industry
- Publication and presentational ability

This position offers leadership and growth potential coupled with a competitive compensation package. For consideration please send resume/CV and salary history in confidence to **Dr. Darlene Walley, Hill Top Companies, Inc., P.O. Box 429501, Cincinnati, OH 45242** or fax **(513) 831-1217**. No phone calls please.


HILL TOP RESEARCH, INC. EOE.

CHALLENGING THE BIG PROBLEMS WITH GREAT SCIENCE

Agouron Pharmaceuticals, Inc. is a recognized pioneer and leader in the field of protein structure-based drug design and development. We are headquartered in La Jolla, a flourishing center for scientific research located on the southern coast of California. The following opportunities are currently available:

PHD BIOCHEMIST

COMBINATORIAL CHEMISTRY ASSAY DEVELOPMENT AND SCREENING

Selected candidate will support our combinatorial chemistry program in the area of new assay development and library screening; and work with chemists and biochemists to facilitate efforts in lead identification from chemical libraries. The position requires demonstrated experience in the analysis of activity from mixtures of organic compounds and in state-of-the-art enzyme assay methods. Experience with high throughput screening and/or the assay of combinatorial library pools is desirable. Qualified candidates will have a PhD and at least two years' postdoctoral experience developing and validating a broad range of biochemical assays for screening, along with a record of research accomplishment. Code: BC

CLINICAL PHARMACOKINETICISTS

Selected candidates will support our clinical research group; provide pharmacokinetic and pharmacodynamic support in all phases of clinical drug development for our antiviral and anti-cancer compounds; and perform study design and protocol writing, data analysis, report writing and assembly of pharmacokinetic sections for New Drug Applications. Qualified candidates will have a PharmD or PhD in pharmacological sciences with an emphasis on training in pharmacokinetics. Prior experience will ideally include two or more years' experience in a clinical research or similar environment. Code: CP

We offer competitive salaries and benefits. Please send a resume to:
Human Resources, Agouron Pharmaceuticals, Inc., Code: (see above),
10350 N. Torrey Pines Road, Suite 100, La Jolla, CA 92037; fax:
(619) 622-3297; e-mail: jobs@agouron.com. EOE.



Agouron
Pharmaceuticals, Inc.

INJURY → INFLAMMATION → FIBROSIS

FIBROGEN, INC. is dedicated to the creation and development of novel therapeutics and biomaterials based on connective tissue biology, we have two major development platforms: anti-fibrotics and production of recombinant human collagen.

We need to add the following capabilities to our rapidly growing worldwide team of scientists.

GROUP LEADER (PH.D./MD MOLECULAR BIOLOGY). Experienced molecular biologist, for the cloning and expression of major connective tissue components, cytokines; experience with different expression systems.

SCIENTIST (PH.D.+ IN MOLECULAR BIO/BIOCHEM). Experience in recombinant DNA sequencing and isolation; expression of recombinant proteins.

BIOLOGIST (PH.D.). Experience with the molecular and cellular aspects of fibrosis; animal models, cell matrix interactions, extracellular matrix and/or protein expression.

SCIENTIST (PH.D. TISSUE CULTURE/RECOMBINANT PROTEIN PRODUCTION). Experience with bioreactors; multiple expressive systems, and GMP production.

RESEARCH ASSOCIATE (MS+ IN BIOCHEM) COLLAGEN BIOMATERIALS. Characterization of proteins (collagen); experience in protein biochem.

DIRECTOR RESEARCH OPERATIONS (PH.D. IN BIOLOGY, BIOCHEMISTRY & MOLECULAR BIOLOGY RELEVANT TO CONNECTIVE TISSUE). Supervise the activities of the scientific teams. Ability to directly carry out a relevant development project.

VICE PRESIDENT, BUSINESS DEVELOPMENT (PH.D./MBA). In addition to the above positions, we also seek a high level professional to conduct business transactions and external research collaborations. Prior experience in corporate pre-clinical and clinical development as well as licensing of products.

If you enjoy the challenge of a start-up and thrive in a world of first class science and scientists, send your CV to: FibroGen, Inc., 772 Lucerne Drive, Sunnyvale, CA 94086 or fax to: (408) 720-7212. EOE.

FIBROGEN



Post Doctoral Researchers

The Department of Medicine at Case Western Reserve University (CWRU) School of Medicine is accepting applications for post doctoral positions in the newly created Molecular Cardiovascular Research Center. Qualified individuals should possess an M.D. or Ph.D. in Molecular Biology or Biochemistry. Suitable areas of research include, but are not limited to, the molecular aspects of atherosclerosis, vascular biology, restenosis, thrombosis, and heart failure. Expertise in the molecular biology of signal transduction, apoptosis, nitric oxide biology, and integrins is desirable.

Faculty Position

The Department of Medicine at Case Western Reserve University (CWRU) School of Medicine is accepting applications for a faculty position in the newly created Molecular Cardiovascular Research Center. Qualified individuals should possess an M.D. or Ph.D. in Molecular Biology or Biochemistry. Suitable areas of research include, but are not limited to, the molecular aspects of atherosclerosis, vascular biology, restenosis, thrombosis, and heart failure. Expertise in the molecular biology of signal transduction, apoptosis, nitric oxide biology, and integrins is desirable. A successful candidate will initiate and pursue a program of independent research. Salary and rank will be commensurate with qualifications and experience.

Reply by submission of a curriculum vitae, names, addresses and telephone number of three (3) references to: **Eduardo G. Lapetina, Ph.D., Molecular Cardiovascular Research Center, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, Ohio 44106-4958.**

*CWRU is an equal opportunity/
affirmative action employer.*

IMMUNOLOGY & TOXICOLOGY MOLECULAR BIOLOGIST/ MICROBIOLOGIST Research Leadership

Now in its 67th year, Battelle is an international research leader. Our Health Division is seeking innovative, experienced scientists for project leadership opportunities:

Molecular Pharmacologist: Requires a Ph.D. or equivalent experience in pharmacology or biochemistry and thorough knowledge of molecular pharmacology involving receptors, enzymes and cell signaling systems. Excellent communication skills and project management are essential. Pharmaceutical industry experience is desired. Responsibilities will include supervision of pharmacological profiling of drug candidates, assay development and evaluation of new technologies relevant to the pharmaceutical industry.

Molecular Biologist/Microbiologist: Requires a Ph.D. in molecular biology, microbiology, a related field, or an advanced degree and relevant work experience. An established publication record, excellent communication skills and the ability to work as part of a team are essential. Broad knowledge in medical microbiology combined with experience in molecular methods (e.g., cloning, gene expression and PCR) will be favored. Responsibilities will include designing and leading research tasks and working with professional multi-disciplinary teams on a broad range of programs, including the development of nucleic acid methods for the detection of pathogens, the development and testing of novel therapeutic regimes and drug delivery techniques for infectious diseases.

These positions are located at Battelle's Columbus, Ohio research center and world headquarters. Columbus is at the heart of a dynamic, growing, and economically balanced region noted for diverse, convenient and affordable housing, quality schools, excellent recreational opportunities and a vibrant arts community.

Battelle offers a comprehensive package of compensation and benefits. **Send a cover letter with resume/CV to: Tonya Placke, Battelle, Dept. N57, 505 King Avenue, Columbus, OH 43201-2693.** Battelle is an Affirmative Action/Equal Opportunity Employer M/F/D/V.



... Putting Technology To Work

University of Minnesota Cancer Center Assistant Professor Signal Transduction Research

The University of Minnesota Cancer Center announces a new, tenure track assistant professor position for a research investigator with an existing fundamental program utilizing gene-deficient mice to study the role of signal transduction pathways and/or transcriptional regulation in neoplasia and/or developmental biology. The individual chosen must have a Ph.D. and/or M.D. with a minimum of three years' postdoctoral training to include hands on experience in all aspects of embryonic stem cell based gene targeting technology and demonstrated accomplishment in using this technology to address fundamental questions in neoplasia and/or developmental biology. The successful applicant will be required to actively participate in the research and teaching missions of the University of Minnesota Cancer Center and to interface with the multidisciplinary membership of the Center. An academic appointment will be made in the University department best suited to the individual's background, experience and interests. Substantial start-up package and state-of-the-art laboratory space in the new University of Minnesota Cancer Center research building will be available.

Please send a complete application, to include a curriculum vitae, a summary of long-term research goals, and the names and addresses of three references, to: **Tucker W. LeBien, Ph.D., Chair, Search Committee, University of Minnesota Cancer Center, Box 806 UMHC, 420 Delaware Street SE, Minneapolis, MN 55455-0392, ATTN: Cindy Prange.** The last date for receipt of applications is April 30, 1996.

*The University of Minnesota is an equal
opportunity educator and employer.*

RENAL PHARMACOLOGY

Investigator - Temporary

SmithKline Beecham, a worldwide leader in pharmaceutical research, has an excellent long-term temporary opportunity in our Renal Pharmacology department for an Investigator with a good understanding of molecular biology techniques and a special emphasis on transcription regulation/factors.

While working in a very interactive and collaborative environment, the successful candidate will work with basic research scientists in areas such as renal failure, tissue remodeling and matrix production.

Qualified individuals will have a PhD in Biological Sciences, at least one full term of post doctoral fellowship and 3-5 years' experience in an academic or pharmaceutical research organization. Strong experience in gene cloning, cell biology, *in situ* hybridization and immunocytochemistry are important. A strong track record of publication in high-quality peer-reviewed professional journals is mandatory.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please forward your resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code H6-0098, P.O. Box 2645, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



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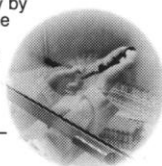
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This is a unique opportunity to use your computer programming skills to support in-depth structural biology research. Utilizing a UNIX workstation environment, you will apply client server techniques to the support of commercial and other third party application systems. This includes developing new algorithms and systems, as well as applying software to modeling studies in the investigation of protein-ligand complexes.

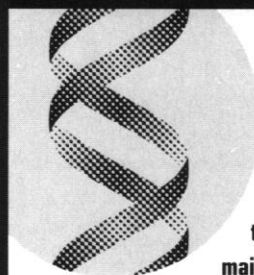
The ideal candidate will have a Ph.D. in Chemistry, Computational Chemistry or equivalent with 4+ years experience in application programming for the sciences, as well as supporting scientific computations. A minimum of 3 years experience in computational chemistry or physics, along with excellent communication skills essential.

With 50,000 employees worldwide and more than \$10 billion in annual sales, we've established ourselves as a respected global business and innovative leader in the changing health care industry. For consideration, please forward your resume and salary history to: Abbott Laboratories, Job # 96-LHD-0563, D583, AP6B.

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Genentech is looking for highly motivated, experienced individuals to work closely with scientists in our research labs to design, implement and support sequence applications and databases. We currently maintain an in-house database and suite of analysis tools and future plans include the

application of Internet-based technologies, parallel programming and object-relational databases. To support our current activity as well as this growth, we are seeking candidates for the following positions.

Senior Level Biologist

You will manage a growing group of Bioinformatics staff and should be familiar with the latest technologies and techniques for sequencing, sequence databases, and sequence analysis. An advanced degree and management or supervisory experience are also required. Job Code: VSDS1

Programmers

We seek three Programmers to develop and maintain applications and databases used to analyze and manage molecular sequences. These positions require demonstrated ability to develop and support applications in C, experience with relational database systems, and a strong understanding of the underlying biological sciences (molecular biology, protein chemistry). BS or MS in Computer Science, Computational Biology, Bioinformatics or equivalent professional experience is also required. Job Code: VSDS2

Technician

You will develop and maintain lab automation systems for our sequencing labs. This position requires experience with lab robots and sequencers and a BS or MS in Computer Science, Computational Biology, Bioinformatics, or equivalent professional experience. Job Code: VSDS3

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Work with a team of scientists developing FISH (Fluorescence In Situ Hybridization) probe products for cancer and other genetic diseases. A Ph.D. with 2-5 years experience in human molecular genetics/biology is required. Candidates should have a good knowledge of human genetics and cancer and be skilled in the use of molecular techniques and genetic databases. The successful candidate must enjoy working at the bench as a team member to develop diagnostic products.

Assay Research Scientists

We are looking for two creative and highly motivated Ph.D. bench scientists, with 2-5 years post graduate experience in Biochemistry, Biophysics, or Molecular Biology, to devise and develop rapid, highly sensitive molecular diagnostic assays for genetic disease. One scientist will concentrate on the prenatal testing of fetal cells, and will require expertise in immunohistochemistry and in situ hybridization. The other scientist will concentrate on multi-analyte analysis of single cells and will require expertise in fluorescence spectroscopy, nucleic acid labeling, label development, and DNA/RNA hybridization. Experience with amplification technologies, high sensitivity detection methodologies, enzymology, immunoassays, and DNA assays is desirable.

Molecular Biologist

A position is available for a scientist with a high level of expertise in basic molecular biological techniques, including cloning and DNA sequencing. Experience with a nucleic acid amplification technology would be advantageous. The work involves intense and diverse activities directed at the generation of novel assay methods based on RNA amplification by Q-beta replicase. The ability to reliably carry out experimental manipulations requiring an extraordinary high level of attention to detail is essential. A bachelor's or master's degree in molecular biology, microbiology, or biochemistry is required.

Technical Services Representative

We have an excellent opportunity available for an individual with a bachelor's degree in Biological Sciences with 2 years of lab experience in cytogenetics and/or molecular biology. Experience in in situ hybridization methods required, experience in lab supervision or technical support services highly desirable. Strong verbal and written communication skills, and computer skills, are essential as you provide technical support and expertise to customers regarding the use of our instrument and reagent products. You'll interface with field sales personnel and customers, provide phone support, and spend approximately 30% of your time in the field troubleshooting technical inquiries and problems.

Research Associates

Candidates should have a B.S. or M.S. in Biology, Molecular Biology, Microbiology, Biochemistry or related science. Two years of lab experience in the areas of Cytotechnology, Pathology, maintaining bacterial cell cultures, DNA extraction, labeling, hybridization, blotting, PCR, in situ hybridization assays, immuno and enzyme assays and fluorescent microscopy preferred.

Respond by submitting a cover letter, curriculum vitae and salary history to the following address:



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SENIOR SCIENTIST

JOB# 9624

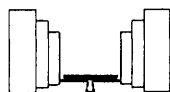
Ciba's Biotechnology Research Unit (RTP) is seeking a creative, analytically rigorous, highly skilled individual to contribute to our Hybridization Technology project team. The successful candidate will be responsible for planning, supervising, and conducting research in plant gene function and regulation.

Position requires a Ph.D in Molecular Biology, Genetics, Biochemistry, or Plant Physiology, with at least 2 years of related postdoctoral experience. Must be an effective communicator and motivator capable of interacting with an interdisciplinary project team. Some international travel will be required.

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Resumes should be forwarded with a cover letter (which should include Job# 9624), and three (3) references to: Ciba Biotechnology Research Unit, Human Resources Department, P.O. Box 12257, Research Triangle Park, NC 27709-2257. **Resume deadline is: APRIL 5, 1996.**

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THE SALK INSTITUTE LABORATORY OF GENETICS

We invite applications for two Assistant Professor positions in the areas of gene transfer and stem cell biology. The application should include curriculum vitae, four references, a brief statement of current scientific research and an outline of future scientific directions. The Salk Institute offers a very interactive environment between research groups working in the areas of signal transduction, neurobiology, gene expression, cancer, endocrinology and higher brain functions.

Applications should be sent by June 1, 1996 directly to:

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Inder M. Verma (Co-Chairs),
Search Committee,
Laboratory of Genetics,
The Salk Institute,
P.O. Box 85800,
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Cortex Pharmaceuticals, Inc., an Orange County-based neuroscience company, is seeking an experienced Pharmacologist/Toxicologist to assist in the ongoing development of its AMPAKINE™ family of compounds for the treatment of neurological and psychiatric disorders. Successful candidate will have an MS/PhD degree from a recognized institution and will have 5 to 8 years of industrial experience.

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The successful candidate will be responsible for the optimization and scale-up of synthetic routes for compounds in preclinical/clinical studies. Applicant will have a BS/MS in chemistry or chemical engineering, 2+ years of experience in an industrial setting, and the ability to execute multistep synthetic sequences with minimal supervision. Candidates must have experience in purification techniques such as column chromatography, HPLC, and recrystallization, as well as working knowledge of NMR and IR.

Interested applicants should send a resume (no phone calls please) to **Dr. Gary Rogers, Vice President of Pharmaceutical Discovery, Cortex Pharmaceuticals, Inc., 15241 Barranca Parkway, Irvine, California, 92718.**

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SYMPOSIUM

SECOND ANNOUNCEMENT

Symposium Stem Cells, Lineage, and Plasticity of the Differentiated State

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Friday May 17, 1996
9am - 5pm

Armed Services YMCA (adjacent to Building 149)
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Scheduled Speakers:

- Nicole M. Le Douarin** Embryogenesis: Stem Cells, Lineage and Plasticity
Elizabeth J. Robertson Zygotes, Embryos and Embryonal Carcinomas.
Irving L. Weissman Development of the Hematolymphoid System from Stem Cells
Katia Georgopoulos Development of the Immune System: Stem Cells and Lineages
Jeremy Brockes Amphibian Limb Regeneration: Plasticity or Stem Cells?
Frank E. Stockdale Muscle Development: Plasticity or Stem Cells?
Elaine V. Fuchs Development of the Epidermis: Stem Cells or Fixed Lineages?
Andrew P. McMahon Development of the Nervous System: Stem Cells, Lineage or Plasticity?

The Symposium is open to the public, but seating is limited. For further information, call 617-726-3145.

Request for Applications US Agency for International Development

The USAID Malaria Vaccine Development Program (MVDP) is soliciting applications for participation in our vaccine development effort. Two separate Requests for Applications (RFAs) are being issued:

RFA OP/A/HRN-96-001:
Preclinical Malaria Vaccine Development

RFA OP/A/HRN-96-002:
Malaria Antigen Identification & Vaccine Development

The RFAs with all forms & instructions are available through the Internet at <http://www.info.usaid.gov>

The point of contact is
Marcus Johnson.
Marcus@USAID.GOV
Tel: (703) 875-1265
Fax: (703) 875-1107



Closing date for applications is 15 May 1996

HEAD DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

The University of Illinois at Chicago College of Medicine invites applications and nominations for the position of Head of its Department of Microbiology and Immunology. The College of Medicine is the largest medical school in the United States and is part of Chicago's Westside Medical Center, a major national medical complex well-known for its large concentration of public and private health care and research facilities. UIC is located just west of the Chicago Loop area and is the largest public comprehensive university in Chicago. The Department, one of six basic science departments within the College, has seventeen full-time faculty members, an active graduate program, and participates in the education of medical students and other health professionals. The Department currently has well-established research programs focusing on integral issues in both prokaryotic and eukaryotic biology. Some major research areas include environmental bioremediation, heavy metal resistance, molecular, cellular and tumor immunology, protein structure and function, and gene regulation. The future directions of the Department will involve expansion of its current research programs to emphasize basic aspects of microbiology and immunology, including infectious diseases, molecular virology, and interactions within interdepartmental initiatives relating to xenotransplantation, cancer, and neurobiology.

Candidates for this position should have a PhD and/or MD degree, a distinguished record of scholarly activity, a nationally recognized research program within the broadly defined area of microbiology and immunology, and the ability to administer a comprehensive academic program. Interested individuals should submit a letter of application, curriculum vitae, which includes a summary of their research activities, and three references to:

Donald A. Chambers, PhD
Chair, Microbiology and Immunology Search Committee
Professor and Head
Department of Biochemistry
University of Illinois College of Medicine
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A unique opportunity to become involved in an ongoing collaborative venture between academia (Loyola University Chicago) and industry (UCB Pharmaceutical, Belgium) is available immediately. The successful candidate will be instrumental in implementing pharmacological and neurochemical strategies for the development of new therapeutic approaches. The position will allow considerable autonomy. All necessary technical and research support will be provided. The research will be conducted at Loyola University, Chicago, in close collaboration with UCB Research in Belgium.

Requirements for this non-tenured position include: 1) formal training in pharmacology, with a Ph.D. degree in pharmacology or a closely allied science; and 2) at least two years of postdoctoral training.

The salary is negotiable, based on prior experience and training. Travel and moving expenses to the work location will be covered by the employer.

Candidates should send their curriculum vitae, three letters of recommendation, representative reprints, and a personal statement to: Dr. Israel Hanin, Chairman, Department of Pharmacology and Experimental Therapeutics, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153. Telephone: 708-216-3261; FAX: 708-216-6596. Affirmative Action/Equal Opportunity Employer.

ECOLOGIST ARBORETUM

University of Wisconsin-Madison

The ARBORETUM ECOLOGIST is responsible for planning the restoration and management of the Arboretum's native Wisconsin biotic communities, designing and carrying out related research, coordinating research in the Arboretum, and providing ecological expertise for others. Ph.D. in ecology or related field, knowledge of ecological restoration and field ecology, two years' experience of natural community management required. Send application with three references to: Gregory Armstrong, UW Arboretum, 1207 Seminole Highway, Madison, WI 53711. PVL Number 25259. Application review begins April 1, 1996. Unless confidentiality is requested in writing, information regarding applicants and nominees must be released upon request. Finalists cannot be guaranteed confidentiality. University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer.

Stem cell RESEARCH SCIENTIST position is available at Immusol, Inc., a San Diego-based ribozyme gene therapy company. Candidates should possess a Ph.D. plus several years of experience in the area of hematopoietic stem cells. We are looking for a team player with a creative mind and an enthusiastic working attitude. Experience in vectorology and catalytic RNA will be considered a plus. Please send a letter of interest describing how you meet these qualifications and your résumé with a list of three references to: Mang Yu, Ph.D., Director, HIV Gene Therapy, Immusol, Inc., 3050 Science Park Road, San Diego, CA 92121.

RESEARCH ASSISTANT—CELL CULTURE

New York City

The Rockefeller University seeks an experienced person to start up and manage a gene targeting core facility after a one-year training period. B.S./M.S./Ph.D., cell culture and managerial experience, organized. We offer a competitive salary, excellent benefits, and a beautiful working environment. Send résumé to: The Rockefeller University, 1230 York Avenue, Box 125, New York, NY 10021. Affirmative Action/Equal Opportunity Employer.

RESEARCH SCIENTIST

Ecogen Inc., an agricultural biotechnology company located in Langhorne, Pennsylvania, has an immediate opening for a RESEARCH SCIENTIST skilled in protein biochemistry and mechanism of action of bacterial toxins. Candidates must have a Ph.D. degree in the appropriate discipline. Postdoctoral experience preferred. Please send your résumé and salary history to: Ecogen Inc., Reference Number 96-13, P.O. Box 3023, Langhorne, PA 19047-3023. Equal Opportunity Employer.

POSITIONS OPEN

Ph.D.'s with a strong background in MOLECULAR BIOLOGY are needed immediately to study molecular aspects of fibrosis, a novel fibrogenic protein (see *PNAS*, 92:2154, 1995). The positions provide excellent career development opportunities in a multidisciplinary laboratory interested in the pathogenesis of fibrotic disorders and developing antifibrotic therapies. Contact: Dr. David J. Wyler, New England Medical Center, 750 Washington Street, Box 041, Boston, MA 02111. FAX: 617-636-7002; Email: david.wyler@es.nemc.org.

ANNOUNCEMENT

ENVIRONMENTAL SCIENCE MINIGRANTS
—The Environmental Defense Fund (EDF), a national non-profit environmental organization, requests proposals up to \$15,000 for research projects related to topics of substantive interest to EDF. This minigrant program is part of EDF's Environmental Science Program to enhance scientific input to public interest environmental organizations. Research topics may be related to climate change, toxic chemicals, wetlands, water quality, environmental economics, etc. We are particularly interested in topics that bear on issues of concern to local communities. Details of the RFP can be obtained via internet (gp@edf.org) or by Telephone: 212-505-0606 x326. Eligibility is limited to scientists at public or private colleges and universities. EDF is an Equal Opportunity Employer.

SYMPOSIUM

FRONTIERS IN BIOACTIVE LIPIDS '96
XVth Washington International Spring Symposium
Washington, DC May 6 to 9, 1996

Topics: fatty acids and esters, eicosanoids, phospholipids, lipid binding proteins, lipid receptors/antagonists. For forms and information: Dr. Jack Y. Vanderhoeck, Symposium Chair, Department of Biochemistry and Molecular Biology, The George Washington University, 2300 I Street NW, Washington, DC 20037-2337. Telephone: 202-994-2929 or 3709; FAX: 202-994-8974; Email: jyvdh@gwis2.circ.gwu.edu.

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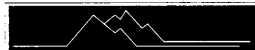
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GENEPAIRS™ Update



Working with various genome centers and overseas investigators, Research Genetics has produced over 6,000 gene-based STSs or ESTs which we market under the tradename GENEPAIRS™. GENEPAIRS™ are a subset of the more than 18,000 human STSs which we currently offer. While many are derived from known genes, most are derived from the I.M.A.G.E Consortium cDNA clones. The expansion and sequencing of this massive resource was recently made possible by a substantial grant from Merck & Co. GENEPAIRS™ consist of two PCR primers which amplify a portion of a specific gene, usually from the 3' untranslated region. Most of these GENEPAIRS™ have been placed on various maps including the MIT Physical Map of the Human Genome, the GENEBRIDGE 4 RH map and/or chromosome assignment using a human-

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