PCR products. The PCR DNA Marker yields bands from 2000 bp to as low as 50 bp. Amresco. Circle 144.

**Protein Minipreps**
Ni-NTA Spin Columns are available in two formats—without reagents or as a complete kit. The spin columns provide a simple method for purification of 6xHis-tagged proteins from small-scale expression cultures. The columns can be used in experimental situations requiring small-scale expression, functional screening, and rapid purification of engineered and recombinant proteins. Each spin column can purify up to 100 µg of 6xHis-tagged protein under native or denaturing conditions. The procedure allows 12 minipreps to be processed in parallel in under 30 min. Qiagen. Circle 145.

**Activated Carbon Filter Pipette Tips**
Solvent Safe pipette tips contain an activated carbon filter to stop the passage of corrosive fumes generated while pipetting strong acids, bases, and volatile organic solvents. Applications include phenol and chloroform extractions and high-performance liquid chromatography. The tips preserve a pipettor's integral components, reduce the frequency of servicing, and protect barrels from embrittlement and breakage. The tips allow safe use of the accurate, economical, and convenient air displacement pipettor as an alternative to expensive and cumbersome positive displacement and serological pipetting systems. Molecular Bio-Products. Circle 146.

**Literature**
Enzymes 95 Catalog features more than 50 restriction endonucleases and DNA modifying enzymes. Clontech Laboratories. Circle 147.

Oligonucleotide Synthesis Service is a flyer on a service that includes enzyme labeling, support of antisense research, and bulk production of oligonucleotides. Custom Services highlights offerings including DNA manipulation, gene construction, and DNA sequencing. R&D Systems. Circle 148.

Sigma-Aldrich Techware: Laboratory Equipment and Supplies 1995–1996 features more than 10,000 products ranging from photography and autoradiography to liquid handling, cell culture, centrifugation, filtration, cryogenics, chromatography, and spectrophotometry. Sigma-Aldrich Techware. Circle 149.

Serotec 1995/6 Product Guide: Immunological Excellence Worldwide includes more than 250 new products, including human CD monoclonal antibodies (mAbs); cell adhesion antibodies; cytokines, chemokines, anticytokines, and recombinant proteins; cell signaling reagents and transcription factors; veterinary CD mAbs; and antibodies to rat leukocyte markers. Serotec. Circle 150.
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POSITIONS OPEN

ASSISTANT PROFESSOR
TOXICOLOGY/PHYSIOLOGY

Department of Entomology, Auburn University. 12-month, TENURE-TRACK POSITION, 75% Research, 25% Teaching. Responsibilities include teaching Insect Toxicology and Insect Physiology; developing strong research program in insect toxicology relating to mechanisms of resistance, physiological responses to toxins, or other aspects of this field; and involving modern approaches and methodologies. Qualifications: Ph.D. in Entomology or related field, with experience in insect toxicology or physiology. Demonstrated success for potential for outstanding teaching and acquiring extramural funding for research. Postdoctoral experience desirable. Application deadline May 1, 1995. Send cover letter, curriculum vitae, statement of research interests, transcripts of all college/university course work, and names/address of three references to: Dr. Gary R. Mullen, Chair, Toxicology Search Committee, Department of Entomology, Auburn University, AL 36849-5413. Telephone: 334-844-2554; FAX: 334-844-5005. Auburn University is an Equal Opportunity Employer.

THEORETICAL EVOLUTIONARY BIOLOGIST

Harvard University invites applications from theoretical biologists whose research addresses mathematical theories of population genetics, molecular evolution, or phylogenetic inference. The anticipated appointment will be in the Department of Organismic and Evolutionary Biology and may be at the level of either ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or FULL PROFESSOR according to the qualifications of the chosen candidate. Prior to August 1, 1995, applicants should submit a curriculum vitae, a statement of research interests and teaching experiences, and the names and addresses of three references to: Professor Daniel L. Hartl, Chair, Theoretical Biology Search Committee, Department of Organismic and Evolutionary Biology, Harvard University, 16 Divinity Avenue, Cambridge, MA 02138. Harvard University is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority candidates.

TENURE-TRACK FACULTY POSITION
HEMATOLOGY DIVISION
DEPARTMENT OF MEDICINE

ASSISTANT PROFESSOR position open immediately to study hematopoietic cell growth and differentiation. Candidates should have a Ph.D. degree and should be experienced in cellular and/or molecular biology as shown by a solid publication record. Previous experience in hematopoietic cell culture desirable. Send curriculum vitae and names of three references to: Dr. Sanford B. Krantz, Director of Hematology, C-311 Medical Center North, Vanderbilt University Medical Center, Nashville, TN 37232. FAX: 615-343-4859. An Affirmative Action/Equal Opportunity Employer.

MOLECULAR/CELLULAR IMMUNOLOGIST

The Virginia Mason Research Center in Seattle, Washington, is recruiting an ASSISTANT/ASSOCIATE PROFESSOR level investigator to establish an independent research program in immunobiology. Preference will be given to applicants with expertise in molecular and cellular immunology, and whose interests interface with the highly interactive research environment at Virginia Mason Research Center, which emphasizes human immunogenetics and autoimmunity. Please reply by June 15, 1995, with curriculum vitae and statement of research interests to: Gerald T. Nepom, M.D., Ph.D., Virginia Mason Research Center, 1000 Seneca Street, Seattle, WA 98101. An Affirmative Action/Equal Opportunity Employer.

Fairmont State College: Anticipated undergraduate tenure-track ASSISTANT PROFESSOR position in Biology. Teaching responsibilities would include introductory biology, botany, field biology and plant physiology. Ph.D. preferred. Preference will be given to candidates with postdoctoral, teaching and computer experience. Review of applications will begin April 15, 1995. Send curriculum vitae and letter of application, which includes your personal philosophy of education, undergraduate and graduate transcripts, and names of three references or letter of recommendation to be sent to: Dr. Albert Magro, Chair, Division of Science, Mathematics and Health Careers, Fairmont State College, Fairmont, WV 26554. Equal Opportunity/Affirmative Action Institution.
The Division of Nephrology, Department of Medicine, University of California, Irvine (UCI), is seeking to recruit a MANAGER with M.D. and/or Ph.D. degree for its research laboratories. The qualified individual is expected to pursue and coordinate investigation of the cellular and molecular bases of hypertension and arteriosclerosis. The individual will be associated with a faculty appointment in the research or research professorial series. Salary is commensurate with experience and the level of appointment. Send curriculum vitae to: N. D. Vaziri, M.D., Professor, Department of Medicine, Chief, Division of Nephrology, University of California, Irvine, Medical Center, Building 53, Route 81, Room 2049, UCI, Irvine, California 92717. UCI: Rooted in Education, Enriched by Diversity.

BIOLGY FACULTY POSITION

ASSISTANT PROFESSOR. The Biology Department of Mercyhurst College has a new non-tenure-track position to teach anatomy and physiology to allied health students. Applicants who have training in microbiology and/or genetics will be considered preferentially. Independent research with biology majors will be encouraged. Ph.D. required. Send curriculum vitae and names of three references to: Dr. Lewis M. Lutton, Biology Department, Mercyhurst College, Erie, PA 16504.

positions open

ADMINISTRATIVE VICE PRESIDENT THE ASPEN CENTER FOR PHYSICS

The Aspen Center for Physics is seeking candidates for the position of ADMINISTRATIVE VICE PRESIDENT. This is a twelve-month position providing administration to the Center, with primary functions primarily during the summer season from late May to early September, and during the month of January when several winter conferences are held. Duties include administrative oversight of admissions, the scientific programs, and housing; staff supervision; the preparation of grant proposals; and leadership for the educational outreach within the Center. Candidates should hold a Ph.D. in physics and preferably have had some administrative experience. The appointment can begin as early as September 1, 1995. It is expected that the appointee will make a substantial contribution to teaching during the half-year for which the position provides salary support, and also to make a full contribution to teaching of physics to medical, dental, biomedical science and other students. Applications must have a medical degree or equivalent or B.S. or equivalent in a related field. A Ph.D. or equivalent; research experience likely to attract funding from grant awarding bodies operating in the University. Information about the position and other qualifications in good publications. Experience teaching desirable. The appointee will also be evaluated.Very informally interested: Professor K. E. Carr, Director of School; telephone: 0123-335798.

POSITIONS OPEN

ENDOWED CHAIR IN NEUROSCIENCE

The Department of Neurology and the Center for Investigative Neuroscience is seeking an outstanding individual with a strong, well-established research program who is using cellular and molecular approaches for study- ing basic neurobiological mechanisms related to neuro- muscular disorders. Areas of special interest include trophic/nutritional aspects, axonal growth and regeneration, synaptogenesis, and neurotransmitter systems. The head and active interdisciplinary Ph.D. program in Neurosciences offers a unique opportunity to interact with a broad range of researchers with diverse interests that comprise part of the Center’s efforts to foster interdisciplinary research. The program includes a graduate program, a fellowship program, and two post-doctoral research training programs. Applications will be considered until the position is filled. Information about the position and other qualifications in good publications. Experience teaching desirable. Informal inquiries to: Dr. Charles H. G. Gray, Professor and Chairman, Department of Neurology, Wake Forest University School of Medicine, P.O. Box 5236, Wake Forest, NC 27120-0349. Telephone: 910-336-9741.

POSITIONS OPEN

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CANDIDATE PHYSIOLOGIST

The University of Kansas Medical Center invites appli- cations for a tenured-track position at the ASSISTANT or ASSOCIATE PROFESSOR level, to be filled as early as September 1, 1995. Primary appointment will be in the Department of Physiology, with a secondary appointment in the Division of Cardiology, Department of Medicine. We are seeking a person who can establish a strong research program in interactions among basic and clinical cardiovascular biology. An excellent salary and laboratory start-up package are available. Candidates should submit a letter of application, curriculum vitae, description of research interests and names of three references to: Norberto C. Gonzalez, M.D., Search Committee, Department of Physiology, University of Kansas Medical Center, Kansas City, KS 66160-7401. Initial screening of applicants will begin May 15, 1995. An Equal Opportu- nity/Affirmative Action Employer.

Molecular Biologist: ASSISTANT PROFESSOR at Montana State University-Billings. One-year, fixed-term faculty position (renewable contingent on funding) to begin Fall Semester 1995 (August). Responsibilities include teach- ing Cell and Molecular Biology to major, General Biology to non-majors, and a specialty course in the incumbent’s area of expertise, but preferably mod- ern Development Biology. Appropriate terminal degree required in Molecular Biology (Ph.D. or comparable) and scholarly accomplishments (teaching and/or research). Review of applications to begin April 21, 1995. Position is open until filled. Send cover letter with statement of teaching abilities, curriculum vitae, list of courses taught, copies of three letters of recommen- dation to: Search No. 95-22, Chair, Molecular Biolo- gy Search Committee, Human Resources/EEO- AA Office, Montana State University-Billings, 1500 North 30th Street, Billings, MT 59101-0298. Tele- phone: 406-657-2278; FAX: 406-657-2120. Affirma- tive Action/ADEA/EEO/Equal Employment Opportunity Employer.

DIRECTOR, PROGRAM IN DIABETES RESEARCH

Department of Medicine at Case Western Reserve Uni- versity, University Hospitals of Cleveland, and the V.A. Medical Center seek an outstanding investigator (M.D. or Ph.D.) to develop and direct a Program in Diabetes Research. Adequate research space and resources to re- cruit three additional faculty will be available. Applicants should submit curriculum vitae and names of three refer- ences to: F. W. Ferris, Chair, Clinical and Molecular Endocrinology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-9851. Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minority groups are encouraged.

Positions open

NON-CLINICAL LECTURESHIP PHYSIOLOGY

The Queen’s University of Belfast School of Biomedical Science

This is a newly created post, tenable from 1 June 1995 or an earlier date as undergraduate research, teaching, and training in physiology and related areas. It is expected that the appointee will make a small contribution to teaching during the summer semester and provide for a small contribution to teaching of physiology to medical, dental, biomedical science and other students. Applicants must have a medical degree or equivalent or B.S. or equivalent in a related field. If a Ph.D. or equivalent research experience likely to attract funding from grant awarding bodies operating in the University. Further details can be obtained from the Head of the Department. Further information about the position and other qualifications in good publications. Experience teaching desirable. The closing date for applications is 19 May 1995.

Informal inquiries to: Professor K. E. Carr, Director of School; telephone: 01232-335798.


The University is a community, established in 1845 to advance education. Committed to an Equal Opportunities policy and selec- tion on merit, it welcomes applications from all sections of the community. Under the Act it particularly welcomes applications for women from under-represented groups.

OREGON HEALTH SCIENCES UNIVERSITY (OHSU)

Center for Research on Occupational and Environmental Toxicology (CROET)

Growing multidisciplinary research institute focused on the brain and behavior invites applications for FACUL- TY POSITIONS IN CHEMISTRY, ENVIRONMENTAL TOXICO-LOGY. Interactive, team-oriented, independent scientists focused on chemical perturbations of gene expression in neurodegeneration, development or aging are sought. Start-up funds, competitive salaries (50% start-up support), and generous benefits package. Applications accepted by: Dr. P. S. Spencer, Center for Research on Occupational and Environ- mental Toxicology, Oregon Health Sciences University, Portland, OR 97201-3098. OHSU is an Equal Opportunity/Affirmative Action Employer.

University of Wisconsin-Madison. The Department of Psychiatry is seeking applicants for a position with signifi- cant responsibilities in the area of Neuro-imaging. Candi- dates must have an M.D. or Ph.D. for a tenure-track appointment. Responsibilities include establishing an inde- pendent research program in the area of the functional neuroanatomy of emotional and cognitive processes relat- ed to psychopathology. Candidates should have appropri- ate experience to conduct research with PET and/or fMRI. Other duties include medical student and resident training, service on appropriate department and Medical School committees and participation in other departmental activities. Send curriculum vitae and cover letter to: Dr. Ned Kalin, 666/250F, Forensic Psychiatry, Univer- sity of Wisconsin Medical School, 600 Highland Avenue, Madison, WI 53792. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

The Creighton-Nebraska Department of Psychiatry is seeking an individual with an Ph.D. and postdoctoral train- ing in neuropharmacology or a related discipline. The applicant should have achieved some recognition in re- search related to the area of potential application to the understanding and treatment of human psychopathology. It is expected that the successful candi- date for this position will establish an independent research program capable of attracting external funding. FACULTY rank and salary commensurate with experi- ence. Send curriculum vitae, statement of research interest, and three letters of recommendation to: Dr. William Burke, M.D., Director of Research, Department of Psychia- try, 600 South 42nd Street, Omaha, NE 68198- 5575. Women and minorities are encouraged to apply. Equal Opportunity/Affirmative Action Employer.
Tenure-Track And Postdoctoral Opportunities.

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

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**Tenure-Track Positions**

**Assistant Professor Equivalent**

**Immunology**

Stephen E. Straus, MD

A tenure-track position is available for an MD or MD/PhD scientist to develop an independent research program on the nature and regulation of mucosal immune responses to viruses or bacteria. A record of imaginative bench research is required. Subspecialty training in Allergy/Immunology or Infectious Diseases is desirable. Space, a technician, postdoctoral fellows, research budget, and competitive salary are committed. Applicants must be US citizens or permanent residents. A two-page statement of research interests and goals should be submitted in addition to three letters of recommendation. Laboratory of Clinical Investigation (OE-74), NIAID, Building 10, Room 11N228, 10 CENTER DR MSC 1888, BETHESDA MD 20892-1888.

**Molecular Genetics**

Clifton Bogardus, MD

A position is available in Phoenix, Arizona to develop an independent research program into the genetic causes of diabetes mellitus in the Pima Indians in Arizona. Candidates should have experience in human molecular genetics including PCR-based genotyping, physical mapping, gene isolation and identification, and gene expression. Support by a technician, postdoctoral fellow and a fully equipped laboratory (~600 sq. ft.) will be provided. A two-page statement of research interests and goals should be submitted in addition to three letters of recommendation. Clinical Diabetes and Nutrition Section (OE-74), NIDDK, 4212 North 16th Street, Phoenix, AZ 85016.

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**Postdoctoral Positions**

**Immunology**

Rachel R. Caspi, PhD

The research focuses on cellular and molecular mechanisms in T cell-mediated autoimmunity affecting the retina. The goal is to understand the normal development and the pathological breakdown of self-tolerance to retinal antigens, and to use this information to develop immunotherapeutic approaches to uveitis. Rodent models and clinical material are available. Applicants must have experience in cellular and/or molecular immunology. Laboratory of Immunology (OE-74), NEI, Building 10, Room 10N222, 10 CENTER DR MSC 1858, BETHESDA MD 20892-1858.

**Signal Transduction and Oncogenesis**

Jacalyn H. Pierce, PhD

The role of oncogenes, growth factors, growth factor receptors and “downstream” mitogenic signal transducing molecules in neoplastic and normal cell proliferation is being studied. Emphasis is placed on signaling pathways mediated through cytokine and tyrosine kinase-containing receptors. Candidates should have experience in molecular and/or cellular biology techniques and less than five years of postdoctoral experience. Laboratory of Cellular and Molecular Biology (OE-74), NCI, Building 37, Room 1E24, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

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**Structural and Molecular Biochemistry**

Kiyoshi Mizuuchi, PhD

A position is available to work on a structural and molecular biochemical study of the mechanism of the transpositional recombination reaction of phag Mu. Candidates should have a strong background in X-ray crystallography, enzymology, or molecular biochemistry and have less than five years of postdoctoral experience. Laboratory of Molecular Biology (OE-74), NIDDK, Building 5, Room 237, 5 CENTER DR MSC 0540, BETHESDA MD 20892-0540.

**Transcriptional Gene Regulation**

Keiko Ozato, PhD

Mechanisms of action of transcription factors involved in gene regulation mediated by interferon/virus or by retinoids/vitamin are studied. Functional interactions of these factors with the basal transcriptional machinery are studied using in vitro transcription assays. Genomic footprinting is used to study promoter occupancy in cells with targeted gene disruption. Candidates should have less than five years of postdoctoral experience. Laboratory of Molecular Growth Regulation (OE-74), NICHD, Building 6, Room 2A01, 6 CENTER DR MSC 6753, BETHESDA MD 20892-6753.

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**Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet (wyburl.cu.nih.gov) or modem (1,301-402-2221 or 1,800-358-2221) with parameters set at "?Even,1". When connected to NIH, type in "vlt00" for terminal emulation, "FSE" for initials, and "ALL1" for account number.

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

To Apply

If you hold a doctoral degree (e.g., PhD, MD/PhD, MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, curriculum vitae, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.
Teaching Position—Ecologist/Environmental Scientist. The Department of Biology, Emory University, invites applications for a teaching position at the ASSISTANT PROFESSOR rank for a non-tenure track, one-year term starting Fall 1995, with a possibility of renewal for up to three years. The successful applicant should have teaching and research experience. Ph.D. is required, but candidates must show promise of productive research. Send curriculum vitae, a statement of research plans, and three letters of recommendation to: Dr. Michael Blatt, Department of Biology, Emory University, Atlanta, GA 30322. Review of applications will begin immediately and the position will remain open until filled. Emory is an Equal Opportunity/Affirmative Action Employer.

BIOLGY FACULTY POSITION. The Minnesota Academy of Medicine and the Minnesota Science Museum invites applications for a biology faculty position available in July 1995. Applicants must be broadly trained biologists, specializing in environmental biology. The Academy is the nation’s first private, non-profit institution dedicated to accelerating and enriching mathematics, science and technology programs to motivated and talented students. The Academy is a member of Minnesota Private School Education consortium composed of Cotter High School, The Academy, The Preparatory School for the Arts, De La Salle Institute, and Saint Olaf College of Minnesota, located in Winona, Minnesota. The successful candidate will show exceptional promise to provide vision, focus, and innovation to the biology curriculum. Effective teaching and the ability to guide student research is essential. Ph.D. preferred. Please send a curriculum vitae, a brief description of teaching philosophy and educational objectives, three letters of recommendation to: Search Committee, The Academy, 1165 West Broadway, Winona, MN 55987. The search committee will begin its evaluation on May 1, 1995. The Academy is an Equal Opportunity/Affirmative Action Employer.

DEPARTMENT OF NUTRITION CASE WESTERN RESERVE UNIVERSITY We seek a FACULTY member to conduct basic and clinical investigations in nutritional biochemistry and metabolism. We are particularly interested in (i) the intra- and intercellular regulation of nutrients, (ii) the use of stable isotope techniques for investigating these processes, and (iii) the design and testing of synthetic nutrients. The appointee will develop independent research programs in areas relevant to basic teaching and training of graduate and postgraduate students. Send curriculum vitae, representative reprints, outline of research program and names of three references to: Dr. Zdenek Strnad, Department of Nutrition, Case Western Reserve University, is an Equal Opportunity Employer and encourages applications from minorities and women.

MEMBRANE STRUCTURE/FUNCTION POSTDOCTORAL POSITION available immediately supported by NIH grant to study the effect of omega-3 fatty acids on membrane structure/function. Interdisciplinary project will investigate the potential role of membrane-bound omega-3 fatty acids as antioxidants. Experience in either immunology or membrane biosynthesis is preferred. Send (FAX preferred) curriculum vitae and three references to: Dr. William Stillwell, Department of Biology, Indiana University, 723 West Michigan, Indianapolis, IN 46202-5132. FAX: 317-274-2846.

POSTDOCTORAL POSITION To study molecular mechanisms of renal signal transduction in development and disease. Candidates with a Ph.D. degree in cell biology and knowledge of molecular biology should send their curriculum vita to: Magnus Pahl, Ph.D., Saint Louis Regional Cancer Center, 1100 North Tongue Pines Road, Suite 250, La Jolla, CA 92037. FAX: 619-623-9628.

Florida International University ASSISTANT PROFESSOR: Comparative Vertebrate Anatomy. The Department of Biological Sciences has a tenure-track position available in Vertebrate Anatomy. Candidates must possess a Ph.D. degree and postdoctoral experience. Applicants with teaching experience in Human Anatomy will have preference. The candidate will establish an independent, productive research program and teach Human Gross Anatomy, and a specialty course to graduate students. The position is assigned to the Human and Natural Ecology Program where responsibilities are teaching introductory and advanced courses in environmental studies and ecology, advising undergraduate and graduate students, and conducting basic research. Send curriculum vitae, a statement addressing how you meet our criteria for a candidate, and three letters of recommendation to: Marsilé, Human and Natural Ecology Program, Emory University, Atlanta, GA 30322. Review of applications will begin immediately and the position will remain open until filled. Emory is an Equal Opportunity/Affirmative Action Employer.

VISON RESEARCH POSITION MOLECULAR AND CELL BIOLOGY The Department of Ophthalmology, Duke University Medical Center, is seeking a full-time, tenure-track, ASSOCIATE PROFESSOR position in genetic vision research. Applicants should have a Ph.D. and an established, independent investigator with demonstrated ability to build a research program targeted toward gene therapy for ocular diseases. Applicants must also have extensive experience in molecular and cellular biology and immunology with particular expertise, especially those virally directed. Preference will be given to applicants with expertise in vision research and ophthalmic pharmacology, and an interest in applying genetic approaches to diseases of glaucoma, and a primary interest in the molecular biology of eye tissues. Qualified applicants should send curriculum vitae to: David L. Epstein, M.D., Professor and Chairman, Duke University Medical Center, Box 3802, Durham, N.C. 27710-3802. Duke University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the genetic and biochemical basis for targeting antifungal agents to DNA damage to inducible gene promoters (see Mol. Cancer Res., 8:34-43, 1993; Mol. Cancer Res., 10:189-198, 1994; Am. J. Physiol. 30:1-10, 1994). This position requires previous experience in molecular biology and cell culturing techniques. A strong background in the areas of chemical carcinogenesis, experimental therapeutics or molecular biology is helpful (a). Send a letter of application, curriculum vitae, and names of three references to: Dr. Joshua W. Hamilton, Department of Radiation Oncology, 7650 Kemeny, Dartmouth Medical School, Hanover, NH 03755-3835. Email: josh.hamilton@dartmouth.edu. U.S. citizenship or permanent residency is required. Dartmouth Carolyn Bramhall, Women’s Work. Women and minorities are encouraged to apply.

GENE Tablet UNIVERSITY Molecular Neurosurgery Laboratory Two POSTDOCTORAL POSITIONS (NIH-funded) are available immediately to study gene therapy in the brain using viral vectors: (1) Gene therapy for seizures in a rodent model requiring experience working with animal models, as well as neuro-anatomical and immunohistochemical techniques, and (2) Viral therapy for brain tumors requiring a background in virology and molecular biology. Send curriculum vitae and names and telephone numbers of three references to: Dr. Samuel D. Rakbin, Department of Neurosurgery, Georgetown University Medical Center, 3800 Reservoir Road, NW, Washington, DC 20007. FAX: 202-687-3744.

POSTDOCTORAL POSITIONS are available to study the regulation of virulence gene expression and the mechanisms of resistance to antimicrobial peptides in Saccharomyces cerevisiae. Experience with the biochemical genetics or protein biochemistry is desirable. Send curriculum vitae, names, addresses and telephone numbers of three references to: Dr. David C. Fare, Department of Molecular Microbiology, Washington University School of Medicine, 660 South Euclid Avenue, Campus Box 8230, St. Louis, MO 63110. The University is an Equal Opportunity/Affirmative Action Employer.

TWO POSTDOCTORAL POSITIONS MEDICAL PARASITOLOGY Two positions are immediately available at the Swiss Tropical Institute (funded for two years). (A) In Filariasis research to study the role of recombinant allergens in immunotherapeutic approaches. Candidates should have a strong background in immunology/pathology and experience with immunological and molecular techniques and knowledge of the nematode Dirofilaria. (B) In Trypanosomiasis research to study the mechanisms of drug resistance. Candidates should have a strong background in molecular biology (gene cloning, gene expression, sequencing). Previous experience with drug-resistant parasites preferred but not essential. Applicants should send their curriculum vitae, description of research interests, and names of three references to: Prof. Nikolaus Weiss, Head, Department of Medical Parasitology, Swiss Tropical Institute, P.O. Box CH-4002 Basel. FAX: +41 61-2718654.

UNIVERSITY OF PENNSYLVANIA POSTDOCTORAL POSITION Molecular Biology/DNA Damage Repair POSTDOCTORAL POSITION available September 1, 1995, in the Department of Radiation Oncology to study DNA damage and recombination. Highly motivated candidates with an interest in improving gene therapy are encouraged to apply. Experience required in molecular biology, cell biology, and radiation biology. Gene therapy experience or skills in in situ hybridization would be helpful. Send curriculum vitae and names and addresses of three references by May 1, 1995, to: Craig Stevens, Department of Radiation Oncology, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104. Email: stevens@msnail.xrt.upenn.edu. The University of Pennsylvania is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS. Three postdoctoral positions are available July 1, 1995, to study cell-wall assembly in Neurospora crassa. Two projects involve isolating genes necessary for wall synthesis and the third a B-1,3-glucan synthase that may function, if necessary, as a wall-morph gene. All three projects require previous experience in fungal genetics and cell biology. Send curriculum vitae and three references to: Claude P. Slettenrufkoff, University of Colorado Health Sciences Center, B-111, Denver, CO 80262. Email: claude@essx.hsc.colorado.edu. The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

POSTDOCTORAL POSITION Molecular and Cellular Tumor Immunology To study molecular and gene therapy approaches to cancer immunotherapy in animal systems and in human translated models. Candidates must possess a Ph.D. and demonstrate experience in molecular and cellular biology. The third requires previous protein chemistry and purification experience. Send curriculum vitae and arrange for three letters of recommendation to be sent to: Jonathan A. Lewis, M.D., Ph.D., Immunology Program, Box 126, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. FAX: 212-794-5847. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

LAB RESEARCH ASSOCIATE Hoag Cancer Center, the leading provider of cancer care in Orange County, is seeking a RESEARCH ASSOCIATE with experience in growing human lymphocytes for use in adoptive immunotherapy. The ideal candidate would also have experience growing human tumor cells in tissue culture. Qualified candidate will possess a bachelors degree in biology or equivalent and work with minimum supervision, be able to supervise research assistants, and possess excellent verbal and written communication skills. Must be able to work closely with other members of the laboratory with some flexibility in work schedule to accommodate patient needs and R&D.

Hoag offers excellent benefits including paid time off (vacation, sick), 401(k) plan, health benefits. Send resume to: Teresa LeBeau, Human Resources, Hoag Hospital, 301 Newport Boulevard, Box 6100, Newport Beach, CA 92658-6100. FAX: 714-760-5863. Equal Opportunity Employer.
SCIENCE AND MEDICINE AT FOX CHASE:

WHERE TODAY’S DISCOVERIES LEAD TO TOMORROW’S HOPE

Research conducted by scientists and physicians at Fox Chase has led to ground-breaking discoveries that have an impact on science and medicine today. Past achievements include formulation of the Patterson function in crystallography; demonstration of pluripotence in animal cells; discovery of hepatitis viruses and their identification as retrovirus; elaboration of the tumor-suppressor gene; and discovery of the SCID mouse.

Current research interests of our faculty are wide-ranging and include gene expression; molecular aspects of oncogenesis; viral molecular biology and pathogenesis; molecular structure and function analysis; pharmacology and therapeutics; regulation and development of the immune system; cell cycle control; and human genetics, including the Human Genome Project.

An energizing environment with research as its major focus, the Center has more than 60 independent laboratories where investigators enjoy a unique advantage—to pursue their passion for discovery full-time, with minimal distractions by administrative or teaching responsibilities.

Tenure Track Faculty Positions:
At this time we are welcoming applications from outstanding independent investigators to fill Assistant and Associate Professor-level positions in genetics, cellular and developmental biology, and immunobiology. We are interested in people using model experimental systems capable of exploiting the exploding genetic data bases. Fox Chase offers excellent shared core facilities, such as transgenic mouse, hybridoma, tissue culture, cell sorting and electron microscopy facilities, and a wide range of biotechnology and computational support services.

As a new faculty member, you will receive a generous start-up package including funds for equipment, technical assistance and operating expenses. You will have the opportunity to recruit postdoctoral trainees from our intramural program and to obtain adjunct faculty positions at nearby medical and scientific centers.

Interested candidates should send a C.V., summary of research interests and at least three references to: Search Committee, c/o Dr. A.M. Skalka, Director, Institute for Cancer Research, Fox Chase Cancer Center, 7701 Burholme Ave., Philadelphia, PA 19111.

Postdoctoral Training:
Fox Chase Cancer Center also offers competitive postdoctoral fellowships for advanced laboratory training in a variety of disciplines compatible with our faculty’s broad research interests. Trainees have access to the Center’s core facilities for specialized technical training and to faculty-directed specialized tutorials in topics reflecting a broad scope of biomedical research interests. For information and an application, contact Dr. C. Seeger, Postdoctoral Office, Fox Chase Cancer Center, 7701 Burholme Ave., Philadelphia, PA 19111.

Fox Chase Cancer Center is an Affirmative Action/Equal Opportunity Employer.
POSTDOCTORAL POSITIONS

POSTDOCTORAL POSITIONS are available in the University of Medicine and Dentistry of New Jersey (UMDNJ), Department of Molecular Biology. The first area is under Dr. S. Biswas, Professor, and includes (1) the study of enzymes involved in chromosomal DNA replication and (2) the role(s) of estrogen receptor in the development of breast cancer. These projects will employ a variety of molecular biological and biochemical approaches.

The second area is under Dr. K. Battaglia, Assistant Professor. This position is available to study membrane fusion processes in photoreceptor cells. The project utilizes biochemical and molecular biological approaches to study lipids and protein mediated regulation of membrane fusion.

The ideal candidate will be trained and motivated individual with an independent work ethic and a desire to work independently as well as a part of a team. A strong background and publications in the relevant areas are required. UMDNJ offers an excellent research environment in a growing department with new laboratories and modern research facilities. Send curriculum vitae, description of past research accomplishments and research interests and three letters of reference to Dr. R.M. Weeks, Department of Molecular Biology, University of Medicine and Dentistry of New Jersey, New Jersey Medical School, University Heights Drive, Newark, NJ 07103. UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minority/Female/Disabled/Veteran, and a member of the University Health System of New Jersey.

POSTDOCTORAL POSITIONS PENN STATE

Position to study blood cell interaction and adhesion to endothelium in the microcirculation using techniques of intravital microscopy. Candidates should have a Ph.D. in bioengineering, physiology, or related disciplines and experience in working with anesthetized animals, microsurgical techniques and image processing. Send curriculum vitae and the names of three references, by May 1, 1995, to: Dr. Herbert H. Lipowsky, Department of Bioengineering, Pennsylvania State University, 233 Holloway Drive, University Park, PA 16802 or Email to: hlhbio@engr.psu.edu. An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

T-CELL TRAFFIC IN THE BRAIN

POSTDOCTORAL POSITIONS to study leukocyte motility in the nervous system. Available January 1996. Include brief, specific description of relevant experience, the basis for your interest, and fellowships for which you are eligible. Reply to: Dr. L. Lampson, Laboratory of CNS Immunology and Tumor Biology, Department of Neurology/LMRC 116, Brigham and Women's Hospital, Boston, MA 02115.

UNIVERSITY OF WISCONSIN

POSTDOCTORAL POSITIONS: To study protein and biophysical aspects of cell-cell regulation of the cell cycle, secretion/vascular trafficking. See JBC, 270:2881; Nature, 374:173; PNAS. 89:9454. Send curriculum vitae and three letters of reference to: Dr. Richard A. Anderson, University of Wisconsin, Molecular and Cellular Pharmacology, 3710 MSC, 1300 University Avenue, Madison, WI 53706.

POSTDOCTORAL position available to study mechanisms regulating the beginning of gene expression and the process of reprogramming during mammalian embryonic development. Experience in molecular biology/developmental biology preferred. Send curriculum vitae and names of references to: Sadhan Majumder, Departments of Neuro-Oncology and Molecular Genetics, University of Texas M.D. Anderson Cancer Center, Box 316, 1515 Holcombe Boulevard, Houston, TX 77030. Telephone: 713-792-8920, FAX: 713-794-4999. Equal Opportunity Employer/non-smoking environment.

A POSTDOCTORAL position is available immediately to study molecular mechanisms of protein damage by sugars in aging and diabetes. Candidates should have a Ph.D. in biochemistry or chemistry, with expertise in protein chemistry background. Experience with 1H-13C-NMR and mass spectrometry desirable. Send curriculum vitae and names of three references to: Dr. Charles N. Collen, Department of Biochemistry, University of Washington, Seattle, WA 98195; Telephone: 206-548-8862, FAX: 206-548-6685.

POSTDOCTORAL POSITIONS—Molecular and Cellular Physiology

Positions are available on an NIH Training Grant in various areas of molecular and cellular physiology, including cardiovascular, vascular smooth muscle, endothelial cells, pulmonary, neurophysiology, renal, membrane transport, thrombospondin mechanisms, and reproductive endocrinology. An M.D. is required. A strong emphasis is placed on modern molecular biological approaches to investigations of physiological mechanisms in transgenic and "gene knockout" mice and cell systems. Applicants must be U.S. citizens or permanent residents. Send resume to: Dr. David Millhorn, Chairman of Department of Molecular Biology/Physiology, College of Medicine University of Cincinnati, Cincinnati, OH 45267-0576.

POSTDOCTORAL POSITION

Department of Microbiology and Immunology University of British Columbia POSTDOCTORAL POSITION available for studies on the role of the cell cycle in cell type determination in Dicyostelium. Experience with gene manipulation techniques is essential and experience with protein and immunological methodologies would be an asset. The position is available immediately but the exact starting date is negotiable.

Send curriculum vitae with names of references to: G. Weeks, Department of Microbiology and Immunology, University of British Columbia, Vancouver, BC V6T 1Z3. FAX: 604-822-6041; Email: gweeks@unixg.ubc.ca.

POSTDOCTORAL POSITION

A research position is available for an experimental hematologist to collaborate with a multidisciplinary team investigating the role of altered stem and progenitor cell regulation in drug- and chemical-induced bone marrow toxicity and leukemogenesis. A recent Ph.D. with experience investigating differentiation of hematopoietic stem and/or lineage-committed progenitor cells at cellular and molecular levels is required. Specific background and interest in signal transduction events and changes in gene expression in response to cytokines is preferred. Send resume by April 27, 1995, to: Dr. Richard D. Irons, University of Colorado Health Sciences Center, Anschutz Medical Campus, Box C235, Denver, CO 80262. The University of Colorado is committed to Equal Employment Opportunity and Affirmative Action.

POSTDOCTORAL POSITION

Available for purification and cloning of human aldehyde dehydrogenases. Recent graduates are encouraged to apply. Submit curriculum vitae and three letters of reference to: Dr. Regina Pietruszko, Ph.D. Center for Alcohol Studies Rutgers University P.O. Box 967 New Brunswick, NJ 08903. Telephone: 1-732-792-9920. FAX: 713-794-4999. Equal Opportunity Employer/non-smoking environment.

POSTDOCTORAL POSITIONS—Cellular Vascular Biology. A two-year postdoctoral position is now available to use molecular approaches to identify and characterize unique transporters in the human endothelial cell. Experience in molecular biology, preferably including sequencing and mammalian cell expression. Please send curriculum vitae with the names and telephone numbers of three references to: Dr. L. R. Drewes, Biochemistry and Molecular Biology, School of Medicine, University of Minnesota, 10 University Drive, Duluth, MN 55812. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION SIGNAL TRANSDUCTION

A POSTDOCTORAL position is available immediately to study: (1) role of transmembrane receptor-like protein tyrosine phosphatases in mammalian signal transduction, or (2) protein kinases and phosphatases in yeast signal transduction, with a major emphasis on the role of a two-component sensor-regulator in the activation of an MAP kinase cascade. Applicants should have a strong background in molecular biology and/or cell biology. For project two, knowledge in yeast genetics is essential. Submit curriculum vitae, brief research summary, and three letters of recommendation to: Dr. Haruo Saito, Division of Tumor Immunology, Dana-Farber Cancer Institute, Harvard Medical School, 44 Binney Street, MA 02115. FAX: 617-632-4569. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE POSITION

Available July 1, 1995 in the Section of Nephrology to study the cellular and molecular biology of the Na/Ca exchanger in kidney. Candidates must hold either an M.D. or Ph.D. degree, and have a strong background in cellular and molecular biology. Previous experience in the generation and testing of conditional and/or cell specific transgenic or targeted mice is desirable. Salary negotiable depending on experience. Send resume and three letters of reference to: Robert E. Reilly, M.D., Yale University School of Medicine, Department of Internal Medicine, P.O. Box 208029, 333 Cedar Street, New Haven, CT 06520-8029. FAX: 203-937-4728; Email: Reilly@biomed.med.yale.edu. Yale University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

These second positions are available immediately to investigate an recently discovered Kapoos's sarcoma associated herpes-like virus (Simons, 266:1865, 1994). Ph.D. and/or M.D. virologists, molecular biologists and immunologists are needed to isolate, purify and characterize the virus and, to investigate the mechanisms involved in transmissibility and oncogenesis. Submit curriculum vitae and three references by mail or FAX: to: Dr. Daniel M. Knowles, Professor and Chairman of Pathology, Cornell University Medical College, 152 East 68th Street, New York, NY 10021. FAX: 212-746-8191. Equal Employment Opportunity/Affirmative Action/Minority/Female.

PROTEIN CRYSTALLOGRAPHERS

POSTDOCTORAL RESEARCH projects on control of reactive oxygen species, DNA repair, and cell cycle. Superior abilities in protein purification and crystallography desired. Send curriculum vitae with names of three references to: Dr. John Tainer, Molecular Biology MB4, The Scripps Research Institute, La Jolla, CA 92037. Email: jet@scripps.edu. Minority applicants encouraged.

POSTDOCTORAL position available to investigate mechanical, biochemical, and physiological aspects of smooth muscle contraction. Studies include isolated contractile proteins, detergent and alpha-toxin permeabilized fibers, and intact tissues to examine Ca2+ dependent regulation of contraction and protein dependent signal transduction pathways with an emphasis on kinase/phosphatase regulation, specifically MAP kinases and protein kinase C. Experience in muscle research desirable but not necessary. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: Dr. Robert S. Moreland, Bocsk Research Institute, Graduate Hospital, 415 South 19th Street, Philadelphia, PA 19146.

POSTDOCTORAL POSITION—Signaling by G-protein coupled receptor. An opportunity is available to study the molecular basis of specificity and signaling for the parathyroid hormone/glucaon subfamily of G-protein coupled receptors. A Ph.D. with experience in molecular biology, preferably including sequencing and mammalian cell expression. Please send curriculum vitae with the names and telephone numbers of three references to: Dr. John McCammon, Department of Pharmacology, University of California, San Francisco, VAMC (111N), 4150 Clement Street, San Francisco, CA 94112. FAX: 415-750-6929; Email: micha@itsa.ucsf.edu. Equal Opportunity/ Affirmative Action Employer.
**PROTEIN BIOCHEMISTRY**

**Senior Scientist - Biophysical Chemistry**

You will interact with a structure-based drug design team to evaluate the binding of lead immunosuppressive compounds to target receptors. Includes determination of affinity, stoichiometry, specificity and effects on target receptor structure. Requires Ph.D. in Chemistry/Biochemistry with 2+ years postdoctoral experience studying ligand binding to proteins, preferably utilizing various spectroscopic techniques (fluorescence/CD/UV-VIS/BIA-core).

In addition to extensive business and academic affiliations, we offer state-of-the-art facilities, support for your continuing career development, and an outstanding compensation and benefits package that includes incentive stock options. Please send your curriculum vitae to: Director of Human Resources, Procept, Inc., 840 Memorial Drive, Cambridge, MA 02139. We are an equal opportunity employer.

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**EARLE. A CHILES RESEARCH INSTITUTE**

**PORTLAND, OREGON**

The Earle A. Chiles Research Institute, located at Providence Portland Medical Center and a member of the Oregon Cancer Center, is a not-for-profit, academic organization committed to translational research in biological cancer therapy. Research programs, under the direction of Bernard A. Fox and Deric D. Schoof, include basic human and animal tumor immunobiology, tumor vaccine development, clinical immunotherapy and gene therapy. Applications are being accepted for the following positions:

- **POSTDOCTORAL FELLOWSHIP IN CANCER IMMUNOLOGY** (2 positions available) Applicants must have a Ph.D. or M.D. degree with experience in cell culture, animal tumor models or molecular and cell biology.

- **GRADUATE TRAINING PROGRAM IN TUMOR IMMUNOLOGY** Applications are invited for a program of study leading to a Ph.D. from the Department of Molecular Microbiology and Immunology at Oregon Health Sciences University.

Salary is commensurate with experience. Please send curriculum vitae and the names of three references to: Research Staff Committee, Earle A. Chiles Research Institute, Providence Medical Center, 4805 NE Glisan Street, Portland, OR 97213, email: kalezm@ohsu.edu. An equal opportunity/affirmative action employer.
positions open

postdoctoral researcher

Molecular Evolution

 Museum of Natural Science

 A postdoctoral researcher position in molecular evolution is anticipated at Louisiana State University, New Orleans, beginning in Fall 1995, pending final approval. Required Qualifications: Ph.D. or equivalent degree in Biology, Zoology, Botany or related discipline. The successful candidate will work with one or more of the following investigators: Dr. J. E. ellis (fungi insect associations), R. Chapman (phytology/bryology), and D. F. Holt (population genetics). D. Good (herpetology), M. Hafner (helminths evolution), D. Pales (insect plant interactions), F. Sheldon (avian systematics), M. Stine (forest genetics), L. Urbatsch (vascular plant systematics). Applications will be accepted until April 30, 1995, or until a candidate is selected. Interested persons should contact: Fred Sheldon, Museum of Natural Science, Louisiana State University, Baton Rouge, LA 70803 to receive application information. Telephone: 504-388-2855; FAX: 504-388-3075; Email: fsheld@hsvm.snc.lsu.edu.

positions open

postdoctoral position available to study signal transduction by integrins. Experiments focus on the role of tyrosine phosphorylation on the beta1 integrin, using the FAK in the process as well as the role of FAK/p135 interactions in growth factor modulation of cytoskeleton and cell migration. Experience in molecular biology, protein biochemistry, or signal transduction is preferred. Please send curriculum vitae and names of three references to: Dr. R. J. Hynes, School of Medicine, Dartmouth Medical School, 105 Pierce, Hanover, NH 03755. Equal Opportunity Employer.

positions open

RESEARCH FACULTY

Structural Biology

Two positions are available immediately to study (1) structural determinants of recognition in telomeric DNA complexes and (2) functional properties of prokaryotic viral proteins. Both positions will involve use of laser Ram and UVRR spectrophotometers to probe biomolecular structure in situ. Some experience in molecular biology/physics or molecular biology is preferred. English proficiency is required, as some supervision of graduate students is expected. Please send curriculum vitae and three letters of reference forwarded to: Dr. George J. Thomas, School of Biological Sciences, SB-403, University of Missouri, Kansas City, MO 64110. University of Missouri Kansas City is an Equal Opportunity/Affirmative Action Employer.

assistant scientist

postdoctoral fellow

Mammary Cancer Genetics

Two positions are available for research involving mapping and characterization of mammally malignancy susceptibility genes. The positions will involve use of Laser and UVRR spectrophotometers to probe biomolecular structure in situ. Some experience in molecular biology/physics or molecular biology is preferred. English proficiency is required, as some supervision of graduate students is expected. Please send curriculum vitae and three letters of reference forwarded to: Michael N. Gould, Ph.D., University of Wisconsin, Department of Human Oncology, K1/332 Clinical Sciences Center, 600 Highland Avenue, Madison, WI 53792. Telephone: 608-263-6615.

postdoctoral fellow

research associate

The Department of Neurology, Columbia University offers a full-time laboratory-based research position for two years beginning July 1, 1995, in the neuromunology laboratory of Norman Latov, M.D., Ph.D. Applicants should have a Ph.D. or M.D. with experience in molecular biology and immunology. The candidate will be expected to participate in ongoing research efforts investigating immune mechanisms of peripheral nerve demyelination with particular emphasis on the pathogenesis of multiple sclerosis. Send curriculum vitae with names of three referees to: Saudi A. Sadikot, Ph.D., Department of Neurology, Columbia University, 622 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

positions open

postdoctoral fellowship

Available immediately to study mechanisms of dementia associated with human prion disease using FDD PET, MRI, and neuropsychological methods. A strong neuroscience background including training in neuroanatomy, research experience in computer science or statistics and computer skills is required. Experience in image analysis techniques is desirable. Position is located at Lawrence Berkeley Laboratory. Send curriculum vitae and names of three references to: Dr. Rees, Lawrence Berkeley Laboratory, 222-481 and William J. Jagust, UC Davis Alzheimer’s Disease Center, Alta Bates Medical Center, 2001 Dwight Way, Berkeley, CA 94720. Telephone: 510-204-4550. Equal Opportunity Employer.

postdoctoral fellow

Available immediately to study new approaches to protein sequence analysis that use a combination of enzymatic proteolysis and mass spectrometry. Ph.D. in biochemistry or chemistry required. Background in enzymology with experience in enzyme kinetics, protein chemistry, and protein engineering preferred. Send curriculum vitae along with names and telephone numbers of three references to: Professor Brian T. Chait, The Rockefeller University, 1230 York Avenue, New York, NY 10021. Telephone: 212-754-7272; Email: bchait@rockva.rockefeller.edu. The Rockefeller University is an Equal Opportunity/Affirmative Action Employer.

postdoctoral fellowship

Position available to study the mechanism of gene regulation by transcription factors belonging to the steroid/thyroid receptor superfamily. A strong background in molecular biology and cell culture is required. Undergraduate background in biochemistry or molecular biology is preferred. Experience with mammalian cell culture, transfection, and protein purification is required. Send curriculum vitae and names of three references to: Dr. Milan Sajdera, The Population Council, Center for Biomedical Research, 1230 York Avenue, Box 273, New York, NY 10021.

research associate/postdoctoral fellowship

available to study the biochemistry-molecular basis of DNA double-strand break repair in mammalian cells and its possible association with transcription and cell cycle regulation using in vivo repair systems and various repair deficient mutants (JBC, 169:15991, 1994). Applicants should have a strong background in biochemistry and molecular biology. The Lankenau Medical Research Center is located in the suburbs of Philadelphia in the Greater Philadelphia Research Center, equipped to support state-of-the-art biomedical research. Send curriculum vitae and three letters of recommendation to: D. Stamatou, Ph.D., The Lankenau Medical Research Center, 100 Lancaster Avenue, Wynnewood, PA 19096, or 610-645-2888. Equal Opportunity Employer.

biochemistry/molecular biology

Henry Ford Health System

Biochemist/Molecular Biologist. A staff OPENING exists at the Henry Ford Health System, Division of Biochemical Research, One Ford Place-5D, Detroit, MI 48202. An Equal Opportunity/Affirmative Action Employer.

biochemistry/molecular biology

Henry Ford Health System

Biochemist/Molecular Biologist. A staff OPENING exists at the Henry Ford Health System, Division of Biochemical Research, One Ford Place-5D, Detroit, MI 48202. An Equal Opportunity/Affirmative Action Employer.

research associate

to collect clinical and basic science data in patients with breast cancer. Experience in a breast cancer center is a plus. Send curriculum vitae and names of three references to: Dr. John Broudy, Department of Medical Oncology, 8000 Evergrene Place, West Palm Beach, FL 33401.
**SENIOR SCIENTIST**

Strain Improvement Program

For over 116 years, scientists at Eli Lilly and Company have been developing novel, high quality pharmaceutical products. With a current yearly investment of over $900 million in R&D programs, our continued success in reducing the time required to get new drug candidates to market requires the finest scientific talent available.

The Senior Scientist we seek will be part of a team charged with providing improved fermentation processes and microbial strains, and will have responsibility for the successful operation of an automated empirical screen for microbial gain mutants. This requires expertise in microbial physiology and genetics, as well as reasonable proficiency in process statistics, robotics, and fermentation development. The successful candidate will serve as a scientific mentor to those who drive and carry out the screen and will supervise up to 10 associates and technicians. The ability to envision and drive multiple complex processes and scientific rationales that have different and demanding customers is required. Additionally, the individual will participate on other efforts within the Strain Improvement Team, specifically the rational screen and process development laboratories.

Qualified candidates should submit a letter of application along with their curriculum vitae to: Ms. Sally Runyon, Corporate Recruitment SM/495, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285.

Eli Lilly and Company is an equal opportunity employer committed to diversity in the workplace.

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**COME TO NIH AND HELP SHAPE THE FUTURE OF NEUROSCIENCE!**

**HEALTH SCIENTIST ADMINISTRATOR**

The National Institute of Neurological Disorders and Stroke (NINDS), located in Bethesda, Maryland, seeks a science administrator in the Division of Fundamental Neurosciences. The person holding this position will advise and assist NINDS grantees doing fundamental research related to neurological diseases, and will be responsible for evaluating and planning the extramural research program of the Institute in this scientific area. Applicants are expected to have broad knowledge of, and interest in, contemporary neurobiological research. Successful applicants must possess a Ph.D. or M.D. (or equivalent degree) with postdoctoral training in research. Experience as head of a research laboratory with evidence of independent achievement is highly desirable, but not required.

This is a GS-13/14 Civil Service Position with a salary range of $51,557 to $79,200 per year for Ph.D.s and $60,281 to $84,710 for M.D.s. Physicians may additionally be eligible for a Physician’s Comparability Allowance.

Applicants should submit a curriculum vitae, bibliography and a brief statement of your career plans to: Ms. Christine Steyer, National Institutes of Health, NINDS Personnel Office, Building 31, Room 8A23, 31 Center Dr., MSC 2540, Bethesda, MD 20892-2540, or you may fax your application to (301) 402-2818. For more information on the position or qualifications requirements, contact Ms. Steyer at (301) 496-6334. U.S. citizenship is required.

Applications must be submitted by May 1, 1995.

National Institutes of Health / Public Health Service Department of Health and Human Services

NIH is an Equal Opportunity Employer

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**FACULTY POSITION**

**BERNE B. CARTER CENTER FOR IMMUNOLOGY RESEARCH**

**UNIVERSITY OF VIRGINIA**

The Berne B. Carter Center for Immunology Research seeks applicants for a tenure track junior faculty position in immunobiology. We seek candidates with expertise and interest in the cell and molecular biology of cytokines (including cytokine receptor signaling, cell adhesion molecules, or in lymphocyte development. Applicants should have postdoctoral experience and be expected to develop a strong independent research program while teaching in graduate and medical courses will also be expected.

Current areas of research interest among Berne B. Carter Center for Immunology Research faculty include Antigen Processing and Presentation, MHC and Antigen Receptor Structure, Lymphocyte Activation, Autoimmunity and Allergy, and the Immunology of Infectious Diseases. The University of Virginia provides excellent research facilities in an exceptional locale. Centers for research in Cancer Biology, Molecular Biology and Cell Signaling, Retrovirus and AIDS, and Cardiovascular Physiology are present on campus. Berne B. Carter Center for Immunology Research faculty are actively encouraged to collaborate with faculty in these related disciplines.

Applicants should send a curriculum vitae, a summary of present and future research interests, and the names of 3 referees. Completed applications should be sent to:

Dr. Thomas J. Braciale
C/O Administrator
Berne B. Carter Center for Immunology Research
University of Virginia
MR4/Box 4012 Health Sciences Center
Charlottesville, VA 22908

The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

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**THE RUSSELL AND BURCH AWARD**

The Humane Society of the United States announces its fifth annual award to scientists who have made outstanding contributions to the advancement of alternative methods in biomedical research, testing, or higher education. Alternative methods are those that can replace or reduce the use of animals in specific procedures, or refine procedures so animals experience less pain or suffering. The award carries a monetary prize of $5,000.

Ideal candidates are scientists who: (1) have made an outstanding contribution toward developing or validating alternative methods, (2) were motivated - at least in part - by humane considerations, and (3) have a history of laboratory work that is above reproach on humane grounds.

Send applications/nominations by June 1 to Laboratory Animals Section, The HSUS, 2100 L Street, NW, Washington, DC 20037, USA (tel. 202-452-1100). No special forms are necessary. Persons nominating themselves should include a curriculum vitae and relevant publications. Persons nominating others should arrange to have such documents forwarded.

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**REQUEST FOR PROPOSALS**

**RETNAL CELL RESCUE AND TRANSPLANTATION**

**THE FOUNDATION FIGHTING BLINDESS** invites proposals for new and/or continuing initiatives directed toward retinal cell rescue and transplantation. Preservation of sight and/or restoration of sight lost due to retinal degeneration, including retinitis pigmentosa and allied disorders, Usher syndrome and macular degeneration, are the twin goals of this program. A fuller statement of identified research needs is available upon request.

All applications will be reviewed for program relevance and scientific merit by a special panel of consultants to The Foundation. Awards will average $80,000 per year for up to three years. Significantly larger budgets must be carefully justified.

Applicants should submit a letter of intent. In it, briefly summarize the proposed research and background of the laboratory, and give an approximate budget. A curriculum vitae of the principal investigator(s) should be included. Following a preliminary review, detailed proposals will be requested from a limited number of applicants. Deadline for letters of intent is June 1, 1995; for applications September 1, 1995. Awards will begin January 1, 1996.

Address letters of intent to: Jeanette S. Felix Ph.D., Director of Science, The Foundation Fighting Blindness, 1401 Mt. Royal Avenue, Baltimore, MD 21217. Telephone: 410-225-9400.
CAROLINA WORKSHOP COURSES

RANDOM PEPTIDE LIBRARIES
May 14 - 26, 1995
This hands-on Workshop will feature the use of both biologically generated and synthetic random peptide libraries for identifying peptides ligands to target molecules. Participants will learn how to construct and screen M13 bacteriophage-displayed random peptide libraries as well as methods for characterizing binding phase and peptides. Participants will also learn how to generate and screen synthetic 96 pin-format peptide libraries. The various libraries will be screened with antibodies and cellular proteins. Additionally, participants are encouraged to bring in their own targets for screening. The course will provide detailed protocols for all relevant techniques and will be accompanied by lectures from invited speakers.
Tuition is $2,150.00 Deadline: April 26, 1995
Instructors: Brian K. Kay, Department of Biology, University of North Carolina, N. Joe Magr, & Iainstic Pocal, Chime Mimospepe Peptide Systems, Melbourne, Australia & San Diego, California

LIGHT MICROSCOPY FOR THE BIOMEDICAL SCIENCES
July 9-July 14, 1995
An introduction to the basic concepts and practical applications of light microscopy. Students will have opportunities for extensive hands-on experience with state-of-the-art equipment for optical imaging, video recording and digital image processing guided by experienced academic and commercial staff. Lectures and laboratory exercises will include: geometric and wave optics of image formation; microscope alignment; phase contrast, reflection interference contrast, polarization, and differential interference contrast microscopy; fluorescent microscopy and fluorescent probes; video imaging and contrast enhancement by analog and digital image processing; imaging of calcium and other ions in cells; and laser scanning confocal microscopy. Students are encouraged to bring their own specimens for analysis.
Tuition is $950.00 Deadline: May 12, 1995
Instructors: Edward Salmon, Ph.D., Brian Herman, Ph.D., and John Lenamatt, M.D., Ph.D., UNC-CH

CAROLINA WORKSHOPS are intensive hands-on laboratory courses designed to teach cutting edge methods in molecular biology and biotechnology. Four or five courses on different topics are offered each year. Most applicants to the Carolina Workshops already hold M.D. or Ph.D. degrees, or are advanced pre-doctoral students. The courses are designed for novice as well as experienced molecular biologists. All participants benefit from in-depth interaction with the instructors.
TO APPLY, send a curriculum vitae and a brief letter describing your research interests. Full consideration will be given to applications received by the stated deadline. For further information or to apply, contact:
Dr. Wayne Lkater, Faculty Director
The University of North Carolina at Chapel Hill
Program in Molecular Biology & Biotechnology
Chapel Hill, North Carolina 27599-7100
TELEPHONE: (919) 966-1730 FAX: (919) 966-6821

The University of North Carolina at Chapel Hill
CAROLINA WORKSHOP COURSES

GENE TARGETING IN ES CELLS AND TRANSGENIC MICE
July 23 - August 4, 1995
Students will be introduced to the mouse as a developmental system, and will learn molecular genetic manipulations of this mammal. Specific techniques include embryonic stem cell culture, electroporation and selection, blastomere injection, ES Cell aggregation, embryo isolation and microinjection, embryo culture and transfer, oviduct and uterine transfer operations, vasectomy, and expression analysis. These tools are the bases for generation and analysis of mutant mice via microinjection and embryonic stem cell manipulation and transfer. We will discuss the uses of these technologies in studies of mammalian development and in generating animal models of disease. A seminar series on the application of gene targeting and transgenesis in various research areas will also be given concurrently with the course.
Tuition is $2,500.00 Deadline: May 29, 1995
Instructors: Ron Stehner, Glaxo Research Institute, Paula Oliver, Kathy Mohr, and Victoria Bausch, University of North Carolina at Chapel Hill, Andrew Reaume, Cephalon

Northwestern University Medical School and Institute for Neuroscience

Three tenure-track faculty positions for outstanding neuroscientists in the areas of Molecular Biology, Neumorophy, and Neurophysiology are now open, with joint appointments in the intercampus Northwestern University Institute for Neuroscience (NUIN) and in the Medical School in downtown Chicago. These new positions represent an increased commitment by the University to the neuroscience program and complement three additional positions in the Department of Neurobiology and Physiology on the Evanston campus. We are especially interested in young neuroscientists at the Assistant Professor level with significant postdoctoral experience, although senior candidates will be considered in exceptional circumstances. The appointees will ideally bridge basic science and clinical Departments and Centers through research and training endeavors related to neurobiology of disease, development, and regeneration. Appointees are expected to have a Ph.D. or M.D. or equivalent degree and participate in the teaching of health science and graduate students. (Search 1)

The Institute also invites applications for two non-tenure track positions:

Assistant Director. Duties include initiation and development of Institute strategies for seeking funds for academic and research programs, project management, responsibility for upkeep and renewal of facilities, computer assisted administrative procedures, linkage with other Centers and Programs, editing a newsletter for the NUIN faculty and sustaining members, and coordination of activities on the Evanston and Chicago campuses. Candidates must have a Ph.D. degree in the life sciences and previous successful experience in writing research grant proposals. Academic administrative experience is preferable but not required. Research Assistant Professor. Duties primarily include management of the Director's laboratory. Candidates must have a Ph.D. degree in the life sciences and rigorous postdoctoral training. Candidates experience in experimental neuroanatomy, immunocytochemistry, advanced electronmicroscopic techniques, and image analysis systems are particularly encouraged to apply. (Search 2)

Screening of applications and nominations will begin June 1, and continue until the positions are filled. The positions are available July 1. In the cover letter please specify the position requested; include curriculum vitae with a statement of research interests, list of publications, and 3-5 representative reprints; indicate funding history; and arrange for three references to be sent to: NUIN Search, c/o Enrico Migliavasi, M.D., Ward 5-305, 303 E. Chicago Ave., Chicago IL 60611. Women and members of minority groups are encouraged to apply. Northwestern University is an AA/EOE Employer. For information inquiries: e-mail- nuin@nwu.edu

DIRECTOR OF NEUROSCIENCE RESEARCH
The Aitken Neuroscience Institute invites applications from Ph.D. or M.D. scientists. Individuals may qualify for an academic position at Cornell University Medical College. The Aitken Neuroscience Institute is a nonprofit organization which combines a neuroscience research laboratory, the Brain Trauma Foundation and clinical neurosurgeons and neurologists from Cornell-New York Hospital Medical Center in one location on the upper eastside of Manhattan. Through basic science, clinical research, patient care and public education, the institute's mission is to improve the outcome of patients with neurological injury. The Aitken Laboratory has developed expertise in studying the cerebral microcirculatory response to traumatic brain injury as well as the role of inflammatory mediators in delayed cell death using astrocyte culture models. Current research efforts are toward understanding the mechanism of secondary damage following ischemic and traumatic cerebral injury. The successful candidate will continue and expand on the current scientific investigation and supervises postdoctoral fellows, residents, medical students and technicians. The candidate must have a strong record of scientific achievement, funding and effective communication skills. Please send curriculum vitae and three letters of recommendation to Mr. Peter Quinn, Executive Director of the Aitken Neuroscience Institute and the Brain Trauma Foundation, Suite 2001, 555 Madison Avenue, New York, N.Y. 10022; fax # (212) 753-0149.
Research Positions

Molecular Neurobiology of Drug Abuse
George R. Uhl, M.D., Ph.D.

Fellow and senior fellow positions are available to pursue the molecular neurobiology and genetics of drug abuse. Candidates should have expertise in molecular biology and/or molecular genetics, with preference given to experience in neuropharmacology. Ongoing work examines the structure and function of the dopamine transporter/cocaine receptor, μ opiate receptor/heroin receptor, genes regulated by abused drugs, and genes important for interindividual differences in substance abuse vulnerability in animal models and humans. If you hold a doctoral degree(s) and would like to be considered for a position, please send a cover letter, curriculum vitae with bibliography, statement of research interests and goals (not to exceed two pages), and three letters of recommendation to:

G.R. Uhl, M.D., Ph.D.
Molecular Neurobiology Branch
Division of Intramural Research
National Institute on Drug Abuse
National Institutes of Health, Box 5180
Baltimore, Maryland 21224

Competitive salary levels will full federal benefits - an equal opportunity employer. Candidates must be U.S. citizens or permanent residents.

ASSISTANT VICE PRESIDENT
RESEARCH ADMINISTRATION

Saint Louis University Health Sciences Center, a division of Saint Louis University, invites nominations and applications for the position, Assistant Vice President for Research Administration. As the chief research officer reporting directly to the Vice President for the Health Sciences Center, this individual will provide resources throughout the Health Sciences Center to encourage and promote research activities, will coordinate the exchange of information across departmental boundaries; will provide advice and counsel to the Institutional Review Board and the Animal Care Committee; and will foster collaboration among researchers. Also, this position will be responsible for overseeing research programs with specific responsibilities in the following areas: use of human and animal subjects in research; research laboratory safety issues; coordinator of patient activities, intellectual property rights, royalty agreements and copyrights; conflict of interest issues and material transfer agreements. This Assistant Vice President will develop and monitor research policies which will comply with both University and statutory regulations and provide leadership to the Health Sciences Center Research Administration Office.

The Health Sciences Center is seeking an individual who has a proven record in collaboration and success in a complex academic research environment. Relevant experience with NIH, NSF, AHCPR, VA HSR&D or with other research sponsors will be an important consideration. Proven success is essential in developing effective working relationships with financial officers, government and community representatives, legal counsel, as well as researcher/investigators.

Candidates will be required to possess an earned doctorate (Ph.D., M.D./Ph.D., or the equivalent) in science medicine, dentistry, nursing, allied health professions, public health, health services, research or a related discipline. Several years of relevant health-sciences research is important with experience in university level research administration. Effective interpersonal and management skills will be important for success in this key position.

Send resume to Search Committee, Assistant Vice President for Research Administration:

c/o Janette Taaffe, Recruitment Supervisor
Saint Louis University
Health Sciences Center
3635 Vista at Grand
P.O. Box 15250
St. Louis, Mo. 63110-0250

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ANNOUNCEMENT

GRANT PROGRAM

Molecular Devices Corporation offers a limited number of equipment grants to both U.S. and International academic/government institutions performing basic research in mammalian cell biology. The intent of this grant program is to provide academic/government researchers access to the Cytosensor® Microphysiometer technology at a substantially reduced cost, thereby providing them an opportunity to make novel discoveries using the Cytosensor System, with the ultimate goal of publication.

Briefly, the Cytosensor System is the latest tool for studying the physiological consequences of receptor activation; it has been shown to be particularly useful for drug discovery and signal transduction research. The System can monitor receptor-mediated responses from living cells in minutes, providing functional dose responses in just a few hours. Receptor activation can be studied even without previous knowledge of the signal transduction pathway.

For a comprehensive information package including guidelines for grant submittal scientific publications, Application Notes, Technical Bulletins and a Reference Guide please contact:

Molecular Devices Corp.
1311 Orleans Drive
Sunnyvale, CA 94089
PH: (408) 747-3545
FX: (408) 747-3602

Deadline for Grant Submission is June 1, 1995

COURSES • COURSES • COURSES

Techniques for Characterization of Complex Carbohydrates

Laboratory Courses

Four courses will be offered at the Complex Carbohydrate Research Center (CCRC) of the University of Georgia. Course 1 (August 7 - 11, 1995), “Separation and Characterization of Glycoprotein Oligosaccharides”, is intended for scientists with little experience in carbohydrate analysis. Course 2 (August 14 - 18, 1995), “Structural Analysis of Oligosaccharides”, is intended for scientists with some experience with glycoconjugates or for those who have completed the first course, and will focus on techniques of composition and linkage analysis. Experience with basic biochemical techniques is a prerequisite for participation in the courses. Course 3 (July 31 - August 4, 1995) “MS and MS/MS Analysis of Glycoconjugates” is intended for scientists with an interest in MS and some experience with glycoconjugates. Experience with MS is beneficial but is not required. Course 4 (September 11 - 15, 1995) “NMR of Carbohydrates” will focus on 1H and 13C, one and two-dimensional NMR spectroscopy as applied to carbohydrates. Some basic skills in operating an NMR spectrometer are required. All courses will consist of hands-on laboratory work, demonstrations and lectures; a laboratory manual including selected analytical techniques and references will be provided. Each course is limited to 10 participants. The cost of registration per course is $500 for individuals from non-profit institutions, $1,100 for others. Registration includes lunch but not lodging and travel expenses.

The courses are supported jointly by the Department of Energy Plant and Microbial Carbohydrate Center, and the NIH Biomedical Carbohydrate Resource Center of the CCRC. For further information or to apply for the courses contact: Dr. Roberta K. Merkle, Technical Director for Biomedical Carbohydrates, Complex Carbohydrate Research Center, 220 Riverbend Road, The University of Georgia, Athens, Georgia 30602-4712. Phone: 706-542-4402. Facsimile: 706-542-4412.
**Postdoctoral Scientist (Biocatalysis)**

For more than 116 years, scientists at Eli Lilly and Company have been developing novel, high-quality pharmaceutical products. With a current yearly investment of over $900 million in research and development programs, our continued success in reducing the time required to get new drug candidates to market requires the finest scientific talent available.

As a postdoctoral scientist, you will gain in-depth research training and experience while becoming acquainted with the pharmaceutical industry. You will provide creative input and actively participate in program design. In addition, you are encouraged to publish, attend at least one major conference a year, and interact with other Lilly scientists through our seminar series and informal meetings.

The program involves using enzymes in process chemical development. The goal of the program is to fully characterize enzymes that are currently being used in large-scale chemical processing. It is anticipated that discovery of new catalysts and application of known catalysts will also be part of the assignments. Responsibilities include enzyme purification and characterization, enzyme kinetics, some chemical synthesis and enzyme immobilization. A background in biocatalysis with some molecular biology is highly desired.

The position is for one year, renewable for second, third and fourth years upon mutual agreement. Eli Lilly and Company offers a competitive compensation and benefits package and a highly professional environment. Candidates with no more than one previous postdoctoral position are encouraged to send a CV to: Ms. Sally Runyon, Corporate Recruitment M2495, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285.

For further information about the program, contact Dr. Milton Zmijewski at zmijew@lilly.com. Eli Lilly and Company is an equal opportunity employer committed to diversity in the workplace.

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**Health Scientist Administrator/ Medical Officer**

GS-601/602-12/13/14

The Pharmacological and Physiological Sciences Branch of the National Institute of General Medical Sciences, National Institutes of Health is seeking a Health Scientist Administrator and/or Medical Officer to serve as a staff specialist responsible for stimulating, planning, advising, directing, and evaluating program activities for a portfolio of research grants covering basic and clinical investigations in areas of physiology, immunology, biochemistry, and medicine and surgery as they relate to trauma and burn research, including systemic trauma and burn injury sequelae and a portfolio of institutional postdoctoral training grants in the area of trauma and burn.

Applicants interested in applying must have a knowledge of trauma and burn injury and sequelae, ability to analyze in one or more of the following areas: physiology, immunology, biochemistry, or medicine and surgery; ability to write about complex scientific topics for both scientific and non-scientific audiences; and ability to work effectively as part of a team or organization.

For interested and qualified individuals, the opportunity exists to also participate in the administration of the Medical Scientist Training Program, which provides support to individuals seeking the combined M.D./Ph.D. degree.

For application package, qualification requirements and additional position information, contact: National Institute of General Medical Sciences, Personnel Office, 45 Center Drive - MSC 6200, Bethesda, MD 20892-6200; (301) 594-2749. TDD (301) 402-6327

Closing data May 1, 1995. U.S. Citizenship is required.

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**Scientist/Senior Scientist**

Genentech is a pace-setting international biotechnology company that discovers, develops, manufactures and markets pharmaceuticals for significant unmet medical needs.

We’re seeking a Scientist to apply existing multiantigen immunoadsorption methods for purity analysis of protein pharmaceutical products for clinical trials. In addition, you’ll develop new methods and technologies for direct assay of impurities/contaminants.

Requires a PhD and 3+ years’ relevant experience. Must have experience with immunoadsorption development and protein analytical methods (HPLC, electrophoresis, immunoblotting, affinity chromatography, etc). Immunochromatography methods development will be helpful. Familiarity with the biotech industry (preferably purification and/or characterization) highly desired.

Genentech offers an excellent salary and benefits package which includes child care resources, free health club membership and fully paid medical, dental and vision coverage. For immediate consideration, please send your resume to: Genentech, Inc., Human Resources, Dept. CSAJ, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

Genentech, Inc.

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**Microbiologist**

The Upjohn Company, Fermentation Production, has a full-time position available for a Microbiologist in the Fermentation Technical Support Unit. We seek an individual who will oversee many aspects of production-scale antibiotic fermentations and steroid bioconversions; monitor and analyze key variables related to process performance of seeds and fermentations. The incumbent will also participate with Bioprocess Research and Development personnel in process scale-up and experimental programs. The position requires periodic holiday and weekend duty in support of the continuous operation of Fermentation Production.

We seek individuals with a minimum of a Bachelor’s Degree in biological science, preferably Microbiology, and at least three years of related experience; or an MS in Microbiology and a minimum of one year of relevant experience.

This position offers the opportunity for a challenging career in a dynamic industry and includes a competitive salary package, a comprehensive benefits program and relocation assistance. The Upjohn Company is located in Kalamazoo, Michigan, a medium-sized university city midway between Chicago and Detroit with varied cultural and athletic activities and a moderate cost of living.

For confidential consideration, please send your resume to: The Upjohn Company, Corporate Recruiting, Position #260, 7000 Portage Road, Kalamazoo, MI 49001. We are an equal opportunity employer with a commitment to workplace diversity.

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**Johnson & Johnson Clinical Diagnostics**

**Research Scientists**

Johnson & Johnson Clinical Diagnostics, formerly a division of Eastman Kodak Company, has recently joined the Johnson & Johnson family of healthcare companies. The Nucleic Acid Diagnostics program is an expanding business directed at developing automated in vitro diagnostic assays for human infectious disease, genetic disease, and oncology based upon nucleic acid amplification and nonisotopic detection. The Chemistry Research and Development group, located in Rochester, NY, is currently seeking Research and Development Scientists to fill the following positions:

**Nucleic Acid Diagnostics Scientist**

The successful candidate will function across several multifunctional teams in assessing and developing technology useful for nucleic acid diagnostics including sample preparation, amplification, and detection. The position requires a Ph.D (or equivalent experience) in Molecular Biology, Chemistry, Biochemistry, Microbiology, or a related field. Preference will be given to candidates with experience in PCR or other amplification technologies including RT-PCR and/or quantitation, nonisotopic detection formats, and DNA/RNA isolation. Excellent communication skills and ability to interact with colleagues in a team environment are required. The individual must be flexible and willing to accept new challenges.

**Clinical Microbiologist/Molecular Biologist**

The successful candidate will work as part of a team to develop practical methods for nucleic acid extraction from a variety of clinical specimens for PCR. The position requires a degree (B.S., M.S. or Ph.D.) in Microbiology, Molecular Biology, Biology, Biochemistry, Chemistry or related field with 4+ years experience in all aspects of a clinical microbiology laboratory including virology and mycobacteriology and 2+ years experience in molecular biology including nucleic acid amplification and hybridization techniques. Also desired are excellent problem-solving abilities, communications, and computer skills, and the ability to function as part of a team in a changing environment.

JJCD offers an excellent compensation package which includes generous life and health insurance benefits and a company-matched 401(k) plan. If you are interested in becoming part of a highly motivated, product-oriented team, submit your resume, a cover letter, and a list of references to:

John Findlay Manager, Technology Platform Nucleic Acid Diagnostics Johnson & Johnson Clinical Diagnostics Bldg. 82, 4th Floor Rochester, NY 14650-2117

JJCD is an equal opportunity employer.

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**Senior Research Manager**

Avid Corporation, which is comprised of Quality Biotech Inc. (a world leader in contract research and biosafety testing for the biopharmaceutical industry) and Avid Therapeutics Inc. (an anti-viral drug discovery and development company) seeks a Senior Research Manager with a Ph.D in the Life Sciences (Virology, Microbiology or Molecular Biology). A minimum 5-8 years relevant experience managing a laboratory staff, a record of independent scientific leadership and excellent communication skills are essential. Familiarity with FDA regulations and biotech drug development process is desirable.

Avid Corporation offers excellent opportunities for professional growth, a competitive salary, relocation assistance, health benefits, 401 (k) and Flexible Benefit plans. Please send resume and salary requirements to: Avid Corporation, Human Resources-SC1, 3401 Market St., Suite 300, Phila., PA 19104. EOE
First Annual Conference on Minority Recruitment

"Unlocking Opportunities: Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries"

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This is a unique opportunity to be part of an exciting forum where professionals from industry, government, universities and associations will discuss and share strategies related to the recruitment, retention and professional development of minority scientists.

Sponsored By: The American Association for the Advancement of Science
Location: Washington D.C. (Crystal City Marriott, Arlington, Virginia)

Cost*: • $260 per person pre-registration fee (register by 31 March),
      • $210 per person registration for organizations that have more than one person attending,
      • $395 after pre-registration deadline.
Price includes full conference, opening cocktail reception, continental breakfast and lunch.
(*Does not include hotel accommodations).

For information call: Janis Crowley (212) 496-7704

The conference is supported by a grant from the DeWitt Wallace-Reader's Digest Fund.
Nothing Short of Brilliant.

IDEXX, a leader in the development of advanced biotechnology-based detection systems for animal health and food and environmental applications, currently has the following opportunity available:

Research Scientist
The successful candidate will be responsible for developing microbiological applications of ATP-based tests. To qualify, you must have a Ph.D. in Biochemistry or Enzymology, 2+ years of experience in studying luciferase reaction mechanisms, development of ATP-based hygiene tests or application of ATP-based tests.

Interested candidates should send a resume with references to:
IDEXX Laboratories, Inc., Human Resources, Code SCI-RS, 1 IDEXX Drive, Westbrook, ME 04092. We are an equal opportunity employer M/F/D/V.

Research Assistant/Associate
The R. W. Johnson Pharmaceutical Research Institute (RWJPRI) is a worldwide leader in research and development organization within Johnson & Johnson, the world’s largest and most comprehensive provider of health care products. RWJPRI performs R&D activities for the Johnson & Johnson companies... Cilag, Ortho Biotech and Ortho-McNeil Pharmaceutical.

We have a high-visibility position immediately available at our campus-like facility in central New Jersey for a candidate with a BS/MS in pharmacy or related area and at least three years’ experience developing parenteral formulations, including viscosity measurement. A knowledge of protein/peptide chemistry is desired. Computer literacy is required.

The successful candidate will develop parenteral formulations including stability studies and drug interaction testing, as well as write the development sections of INDs and NDAs. Excellent written and verbal communication skills are required. Good interpersonal skills are needed to train and supervise junior personnel.

To apply for this opening and/or to be considered for future opportunities with Johnson & Johnson companies, please forward a copy of your resume, suitable for scanning into our database (i.e., clean/clear, no graphics and preferably unfolded). Send to: Dept. 253, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the workplace.

Chairperson of Biochemistry and Molecular Biology
Applications and nominations are invited for the Chair of the Department of Biochemistry and Molecular Biology at the University of Massachusetts Medical School in Worcester. We seek a candidate with an internationally recognized research program, a record of academic leadership, a desire to foster the development of strong research programs, and a commitment to graduate and medical education. Researchers in the fields of biochemistry or molecular, cellular or structural biology will be considered. The Department of Biochemistry and Molecular Biology currently has a well-funded research program and an active graduate program.

Candidates should include a curriculum vitae, description of research interests, and the names of three references. Letters of application or nomination should be sent to: Edward Bresnick, Ph.D., Vice Chancellor for Research, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.

Women and minorities are encouraged to apply.

The University of Massachusetts is an Equal Opportunity/Affirmative Action employer.

POSTDOCTORAL RESEARCH
Drug discovery at Isis Pharmaceuticals exploits two fundamental technologies. One focus is on antisense technology, the inhibition of gene expression by modified oligonucleotides. The second and complementary technology at Isis is combinatorial drug discovery. We seek 3 Scientists at the postdoctoral level to participate in these innovative discovery programs.

MOLECULAR PHARMACOLOGY
Postdoctoral positions are available to do innovative research on the molecular pharmacology of antisense oligonucleotides. Our research programs relate to RNA structure, processing translation and the identification of novel therapeutic targets for antisense oligonucleotides within these processes. (Code 204)

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The selected candidate will design, synthesize and analyze Peptid Nucleic Acids (PNAs) as part of the Isis antisense research program on novel oligonucleotides. Experience in the synthesis, purification and conjugation of peptides or oligonucleotides is highly desirable. (Code 201)

COMBINATORIAL CHEMISTRY
Positions are available on a team working on synthesis and characterization of combinatorial libraries, and require innovative implementation of new chemistries and techniques with strong emphasis on synthetic chemistry. Experience in synthesis and characterization of small molecules required; experience in solid-phase synthesis highly desired. (Code 202)

Based in north San Diego County, Isis offers competitive salaries, excellent benefits and equity participation. Please send cover letter and c.v. to: Isis Pharmaceuticals, HR Dept., Code (see above), 2292 Faraday Ave., Carlsbad, CA 92008. EOE.
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Listed below are some of the outstanding research training opportunities that are currently available at the National Institutes of Health.

**Adipocyte Metabolism**
Constantine Londos, PhD

Cell biology, biochemistry, and molecular biology of adipocyte metabolism in normal and pathophysiological states is being studied. Areas of concentration include cloning, expression, and function of genes and proteins involved in lipid metabolism, hormone signalling, and enzyme trafficking. A background in molecular biology/biochemistry is desirable. Applicants must have less than five years postdoctoral experience. Laboratory of Cellular and Developmental Biology (OE-75), NIDDK, Building 6, Room B1-15, 6 CENTER DR MSC 2715, BETHESDA MD 20892-2715.

**Behavioral Genetics**
Jacqueline N. Crawley, PhD

A position is available to conduct behavioral analyses of transgenic and knock-out mice, and of genotypes with rare genotypes, relevant to neuropsychiatric disorders. Opportunities exist for collaborations with investigators from several NIH Institutes on the Bethesda campus to test new mutations in neurotransmitters, receptors, developmental, and structural genes. Experience in behavioral genetics and behavioral neuropharmacology are required. Section on Behavioral Neuropharmacology (OE-75), NIMH, Building 10, Room 4N212, 10 CENTER DR MSC 1380, BETHESDA MD 20892-1380.

**Gene Transfer**
Bruce J. Baum, DMD, PhD

A position is available to study mechanisms facilitating cell type-specific expression of transferred genes. Target tissues are absorptive and secretory epithelia using in vivo and in vitro models. Clinical applications are to gene therapy (biological repair of damaged salivary glands) and gene therapeutics (secretion of biopharmaceuticals). Applicants should have a strong background in molecular and cellular biology and must have less than five years of postdoctoral experience. Clinical Investigations and Patient Care Branch (OE-75), NIDR, Building 10, Room 1N113, 10 CENTER DR MSC 1190, BETHESDA MD 20892-1190.

**Human Cardiac Physiology and Magnetic Resonance**
Steven Wolff, MD, PhD

Magnetic resonance imaging and spectroscopy at 4 tesla are being used to investigate human cardiac physiology. The project will mainly focus on pulse sequence development to study cardiac perfusion. Although prior experience in NMR imaging is not necessary, applicants should have training in basic NMR spin physics and have less than five years of postdoctoral experience. Laboratory of Cardiac Energetics (OE-75), NHLBI, Building 10, Room 81D161, 1 CENTER DR MSC 0105, BETHESDA MD 20891-0105.

**Molecular Genetics**
Pablo V. Gejman, MD

A position is available for the study of genetics of schizophrenia and pharmacogenetic traits. Opportunities exist for participation in a clinical collection of affected sibpairs with schizophrenia for systematic genome scan and mutational analysis of candidate genes. Applicants must have experience or education in genetics and/or molecular biology and have less than five years of postdoctoral experience. Unit on Molecular Clinical Investigation, Clinical Neurogenetics Branch (OE-75), NIMH, Building 10, Room 4N320, 10 CENTER DR MSC 1274, BETHESDA MD, 20892-1274.

**Molecular Immunology**
Charles E. Egwuagu, MPH, PhD

A position is available to participate in one of two projects: 1) transcriptional regulation of gamma interferon (γIFN)-response elements in transgenic rats with ectopic γIFN-expression in the lens; 2) analyses of T cell receptor V-gene usage in human and rat intracocular autoimmune diseases. A strong background in molecular biology and/or immunology is required. Applicants must be US citizens or permanent residents and have less than five years of postdoctoral experience. Laboratory of Immunology (OE-75), NEI, Building 10, Room 10B10, 10 CENTER DR MSC 1850, BETHESDA MD 20892-1850.

**Regulation of Nitric Oxide Synthesis in CNS**
Sheldon Milstien, PhD

Production of catecholamines, serotonin, and nitric oxide all require tetrahydrobiopterin for activity. The co-regulation of both nitric oxide and tetrahydrobiopterin synthesis is being examined in glial cells and neurons and in animal models of inflammatory neurological diseases, such as sepsis and AIDS. Experience in cell biology, molecular biology, and neurochemistry is preferred. Applicants must have less than five years of postdoctoral experience. Laboratory of Neurochemistry (OE-75), NIMH, Building 36, Room 3D30, 36 CONVENT DRIVE MSC 4096, BETHESDA MD 20892-4096.

**Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet (wylbur.cu.nih.gov) or modem (1,301-402-2221 or 1,800-358-2221) with parameters set at "7,Even,1". When connected to NIH, type in ",vt100" for terminal emulation, "FSE" for initials, and "A11" for account number.

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

**To Apply**

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

Publishing 11 August 1995

Every year, SCIENCE has devoted an issue to women in science. On 11 August 1995, we will take an in-depth look at a topic that has received a lot of attention: women's health. In this important cover story, SCIENCE goes beyond the popular myths and the rhetoric to examine questions such as:

- are women included in major research studies less frequently than men?
- has women's health been ignored by the medical establishment?
- what kind of research needs to be done to improve women's health?
- what are the health problems of women in developing countries?

This is an excellent opportunity to showcase your company as an ideal work environment for women and to confirm your company's commitment to women's health care research by placing a full page recruitment advertisement in this issue.

For advertising information, please call Janis Crowley at (212) 496-7704 or fax to (202) 682-0816.

Full page advertisements will receive extra visibility by being listed on an index attached to the covers of the issues distributed to the Association for Women in Science. In addition, full page recruitment ads will be grouped together in the issue and highlighted by an advertisement listing all of the full page advertisers and saluting industry efforts to promote women in science and women's health care issues. Don't miss this outstanding opportunity to feature your company's recruitment message in this once-a-year special issue!

Women's Health Care Research publishes:
11 August 1995.
Recruitment advertising space reservation deadline:
THE AMERICAN ASSOCIATION FOR CANCER RESEARCH PRESENTS

An Important Educational Opportunity for
Predoctoral and Postdoctoral Fellows
Contemplating Careers in Basic Cancer Research

HISTOPATHOBIOLOGY OF NEOPLASIA

The Edward A. Smuckler Memorial Workshop
Supported by a Generous Grant from the National Cancer Institute

Keystone Conference Center
Keystone, Colorado
July 9 - July 16, 1995

1. Intensive training in the histopathology and biology of neoplasia.

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4. Extensive written course materials that will serve as valuable references in the future.

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Stephen Baird*, Veterans Administration Medical Center, San Diego, CA
Edward Bresnick, University of Massachusetts Medical Center, Worcester, MA
Arthur R. Brotherman, University of Utah, Salt Lake City, UT
Betty DeMasters, University of Colorado School of Medicine, Denver, CO
Helen Feiner*, New York University School of Medicine, New York, NY
Isaiah J. Fidler, UT M.D. Anderson Cancer Center, Houston, TX
Mark A. Israel, University of California, San Francisco, CA
John H. Lehman*, Albany College of Medicine, Albany, NY
Michael W. Lieberman, Baylor College of Medicine, Albany, NY
Reuben Lotan, UT M.D. Anderson Cancer Center, Houston, TX
Robert Low*, University of Colorado School of Medicine, Denver, CO
Harold L. Moses, Vanderbilt University School of Medicine, Nashville, TN
G. Barry Pierce, University of Colorado School of Medicine, Denver, CO
Timothy L. Ratliff, Washington University School of Medicine, St. Louis, MO
Stewart Sell, University of Texas Medical School, Houston, TX
Patricia Thomas, University of Iowa Hospital and Clinics, Iowa City, IA
Ann D. Thor, University of Vermont at Burlington, Burlington, VT
Frederick Waldman, University of California, San Francisco, CA

Additional Faculty to be Announced

*Member of the Workshop Executive Committee

APPLICATION DEADLINE: MAY 5, 1995

Further Information: American Association for Cancer Research • Public Ledger Building
150 S. Independence Mall West • Suite 816 • Philadelphia, PA 19106-3483
Telephone: (215) 440-9300 • FAX: (215) 440-9313
The Monsanto Plant Science Technology Group has an immediate opening for highly motivated individuals to conduct research in the area of plant biochemistry and modification through genetic engineering. Successful candidates will have a BS with at least three years of research experience or MS degree with at least one year of research experience in biochemistry and/or molecular biology. Experience in membrane protein biochemistry and enzymology is a plus. The ability and willingness to work in a multidisciplinary research team environment is required.

The Monsanto Plant Science Technology group is a world class organization with strong commitment to the discovery of novel traits for crop plants using biotechnology. The qualified individuals will join scientists with expertise in gene expression, plant development, plant growth regulators, plant transformation, molecular biology, and biochemistry to contribute to research to develop products that provide value to agriculture worldwide.

Monsanto is an equal opportunity employer. Minority/Female/Disabled/Veteran. We provide reasonable accommodations upon request.

For consideration, please forward your resume to:

Michael Fromm, AA2G
Monsanto Agricultural Group
700 Chesterfield Village Parkway
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FAX: (314) 537-6759
Email: metfrom@ccmail.monsanto.com

POSTDOCTORAL TRAINING PROGRAM IN THE BIOCHEMISTRY AND PHYSIOLOGY OF ARTERIOSCLEROSIS

Advanced research training positions are available to join an established group studying lipid and lipoprotein metabolism, and cardiovascular physiology. The projects emphasize problems relevant to atherosclerosis and heart disease. The approach is multidisciplinary and collaborative, drawing from cell biology, molecular biology, enzymology, physical biochemistry, protein chemistry and vascular physiology. Areas of investigation under the direction of 10 preceptors include: APOLIPROTEIN STRUCTURE AND FUNCTION, LIPOPROTEIN BIOSYNTHESIS, APOLIPROTEIN GENE EXPRESSION, CELL BIOLOGY AND ENZYMOLOGY OF CHOLESTEROL METABOLISM, TRANSPORT AND FUNCTION OF LIPID ANTIOXIDANTS, CHOLESTEROL AND ARTERIAL WALL FUNCTION. Candidates should be U.S. citizens or permanent residents, committed to a career in research and hold a Ph.D. or M.D. degree. Appointments to begin as early as JUNE 1, 1995 are normally for 2 years with starting annual salaries in the range $25,000 to $29,000. Send current curriculum vitae, a short summary of research experience and future research objectives, and names of 3 references to Dr. Michael C. Phillips, Department of Biochemistry, Medical College of Pennsylvania and Hahnemann University, 2900 Queen Lane, Philadelphia, PA 19129. The Medical College of Pennsylvania and Hahnemann University is an affirmative action/equal opportunity employer.

MEDICAL COLLEGE OF PENNSYLVANIA

FUNCTIONAL IMAGING SCIENTIST

University of Pennsylvania Department of Radiology is seeking a clinical scientist with major research and clinical interest in cognitive and functional imaging to work in a large academic department. Research resources include two PET cameras, 20 MeV cyclotron, and 3 full-time research MR whole body scanners one of which operates at 4 Tesla. Also available are two animal MR scanners operating at 2.0 and 4.7 Tesla. Applicants must have M.D. or Ph.D. degree and be fully qualified at level of tenure track Associate Professor or Professor. Individuals should also have track record of previous research funding. Apply to Stanley Baum, M.D., Chairman, Department of Radiology, Hospital of the University of Pennsylvania, 3400 Spruce Street, Phila, PA 19104. The University of Pennsylvania is an equal opportunity affirmative action employer. Female and minority applicants are encouraged.

Special Advertising Supplement

MEETING THE CHALLENGES:
Careers in Biotechnology and Pharmaceuticals for Scientists with Disabilities

On 23 June, SCIENCE will publish a special advertising section devoted to career opportunities for scientists with disabilities. This section will examine the steps being taken by companies and institutions in the biopharmaceutical industry to make their work environments accessible to all scientists.

• What are companies and institutions doing to create barrier-free buildings and work stations?
• How do companies and institutions utilize the thousands of devices designed to accommodate people with special needs?

By advertising in this special section, your company or institution can send a recruitment message and show support for hiring scientists with disabilities.

Meeting the Challenges publishes: 23 June 1995.

Bonus Distribution
This issue will be distributed, along with a letter highlighting the special career section and recruitment advertisements, to the AAAS Resource Group of Scientists and Engineers with Disabilities.

Benefits of Full Page Advertisements
This issue is an excellent opportunity for full page advertisers to get extra attention:
• Full page recruitment advertisements will receive placement throughout the career-related special advertising section.
• A directory of full page recruitment advertisements will be published in this issue referring readers to your ad in the special section by listing your company name and the corresponding page number on which your ad appears.
• Names of the full page recruitment advertisers will be listed on an index affixed to the covers of the magazines being mailed to the AAAS Resource Group of Scientists and Engineers with Disabilities.

To advertise call Janis Crowley at (212) 496-7704 or fax to (202) 682-0816.
DEPARTMENT OF BRAIN AND COGNITIVE SCIENCES
FACULTY POSITION IN EXPERIMENTAL NEUROPSYCHOLOGY

The Dept of Brain and Cognitive Sciences at the Massachusetts Institute of Technology intends to make a faculty appointment at the Assistant Professor level in experimental neuropsychology. Applicants should have a strong experimental research program, and should be knowledgeable about the effects of brain lesions on motor, sensory, and cognitive functions. The person filling this position will be expected to maintain an active research program and to participate in the Department's educational programs at the undergraduate and graduate levels.

Applications should include a brief cover letter stating the candidate's research and teaching interests and experience, a curriculum vitae, and at least three letters of recommendation; representative reprints may be included. Please send applications to Professor Suzanne Corkin, Department of Brain and Cognitive Sciences, E10-003A, MIT, 77 Massachusetts Avenue, Cambridge, MA 02139-4307.

Qualified women and minority candidates are encouraged to apply. MIT is an Affirmative Action/Equal Opportunity Employer.

PROGRAM DIRECTORS FOR DIABETES HEALTH SCIENCE ADMINISTRATORS

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is seeking applicants for two positions:

The Director for the Non-Insulin-Dependent Diabetes Mellitus (NIDDM) Research program is responsible for a multimillion dollar portfolio of basic and clinical research grants and contracts related to NIDDM, encompassing insulin resistance, glucose metabolism, the mechanism of insulin action, and the genetic and environmental basis of NIDDM. The position involves program planning and development, close interaction with the scientific community, and the opportunity to organize scientific meetings.

The Director for the Insulin-Dependent Diabetes Mellitus (IDDM) Clinical Trials Program is responsible for multicenter clinical trials on IDDM and its complications, supported under research grants, cooperative agreements, and contracts. Duties include formulating solicitations and budgets; participating in trial design; monitoring and coordinating activities of clinical and coordinating centers and central resource units; and convening external monitoring committees.

Applicants should be scientists (Ph.D., M.D. or an equivalent combination of education and experience), with a record of biomedical research accomplishment relevant to the responsibilities described above, and with strong interpersonal and written communications skills. The salary range for these permanent, full-time positions (GS-12-13-14) is $43,300 to $84,700 per annum commensurate with qualifications. Physicians may be eligible for a Physician Comparability Allowance up to $20,000 per year. The deadline for applications is May 31, 1995. For position descriptions and requirements, and to apply, contact:

Mr. Ronald Sleyo, Personnel Officer
NIDDK-NIH
Building 31, Room 9A34, Bethesda, MD 20892
(301) 496-4231

U.S. Citizenship Required / NIH is an Equal Opportunity Employer
Minority and Women applicants are encouraged to apply.

BIOCHEMICAL TOXICOLOGIST

With a current research investment of over $900 million in R&D programs, Eli Lilly and Company is making a significant commitment to the development of pharmaceuticals, biotechnology products and products for animal health. And nowhere is that investment more evident than in the Lilly Toxicology division, a part of Lilly Research Laboratories.

We seek an investigative toxicologist to head-up the hepatotoxicology laboratory. This is a senior scientist position which reports to the Head of Biochemical Toxicology. This individual will have responsibility for conducting and directing mechanistic research to support drug discovery and drug development with principal focus on hepatotoxicity. He or she will be expected to use state-of-the-art methodologies to generate scientific perspective to aid in human risk assessment and speed selection of novel therapeutic candidates for preclinical development. Supervision of a group of associates is also involved.

The successful candidate will have a Ph.D. in toxicology with post-doctoral experience in investigating mechanisms of toxicity. Additional academic and/or industrial experience is desired. Expertise in addressing issues of hepatotoxicity is essential.

Located in a campus-like setting in Greenfield, Indiana (a suburb of Indianapolis), our Toxicology facility is one of the largest and more modern of its kind in the world. Qualified candidates should submit a letter of application along with their curriculum vitae to:

Ms. Sally Runyon, Corporate Recruitment
TOX/495, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285.

Eli Lilly and Company is an equal opportunity employer committed to diversity in the workplace.
Faculty of Science at Kuwait University seeks qualified candidates in Botany and Microbiology (Applied Microbiology - with experience in environmental aspects, Molecular Biology - with research experience in microorganisms, Microbial Genetics - molecular genetics of Eukaryotic microorganisms, Plant Pathology - fungal/plant diseases and host parasite relationships, Plant fine structure and Anatomy, Phycology, Plant Ecology - vegetation ecology, Plant Physiology - growth hormones and regulators) with a strong commitment to high quality teaching and research for appointment at the positions of Associate Professor and Assistant Professor.

Required Qualifications: Ph.D. or its equivalent, in the required area; research experience and publications, University teaching experience; excellent knowledge of English.

Kuwait University offers: TAX FREE Salary (approximate ranges: Associate Professor - KD 875-1035 and Assistant Professor - KD 680-840) depending on years of experience and number of accompanying dependents (spouse and children under 18). [1 KD equivalent to approximately US $3.5]. Fringe benefits include: furnished air-conditioned accommodation, annual air tickets, free National Health Medical Care, paid mid-term holidays and summer vacations and gratuity, New appointees can apply for financial support for research projects. Excellent academic environment.

Contracts effective from September, 1995, for a two year initial period.

Application should be accompanied by: A complete C.V. including: mailing address including phone, fax, and e-mail; academic qualifications, teaching, research and professional/work experience, and list of publications in professional journals; names and addresses of three persons well-acquainted with the academic and professional work of the applicant. An English translation of all documents in other languages should be enclosed. For appointment to the position of Assistant Professor, a very good performance in the B.Sc. is required (minimum GPA 3 points out of 4). Please send copies of all transcripts.

Applications may be obtained from Kuwait University Office, 3500 International Dr., NW, Washington, DC 20008, phone (202) 363-8055.

Applications should be sent by express mail/courier service to:

The Dean, Faculty of Science
Kuwait University, P.O. Box 5969
Safat, 13060, KUWAIT

For inquiries use: Fax: (965) 4836127; E-Mail: SINNO@KUC01.KUNIV.EDU.KW

Closing date for receipt of applications: April 30, 1995.
POSTDOCTORAL FELLOW

The Liver Unit at QIMR has a vacancy for a scientist with a major interest in cell and molecular biology. The successful applicant will join an active group working in iron and ferritin metabolism and will be responsible for developing research strategies which include the cloning and expression of genes involved in metal ion transport across membranes.

The Liver Unit is a large Research Unit at the Institute. It is part of the Joint Liver Program with the Department of Medicine at The University of Queensland which includes both clinical and basic scientists.

Applicants should have a PhD or equivalent and an excellent record in research appropriate to the field, with particular experience in molecular biology and gene cloning. The position is available immediately for an initial term of five (5) years and will be renewable on review. The level of appointment, which will depend on qualifications and experience, is negotiable in the range $37,345 to $40,087 per annum.

For further information on the position please contact Professor June Halliday, Head Liver Unit, ph. (61 7) 362 0170 or fax (61 7) 362 0191.

Applications including curriculum vitae, copy of academic record and the names of three referees familiar with the applicant's work should be forwarded to:

Mr Michael Barry, Secretary
Queensland Institute of Medical Research
PO Royal Brisbane Hospital Qld 4029
Australia

Closing date for receipt of applications is 20 May 1995 (QIMR ref. 05/95).
POSITIONS OPEN

The Laboratory of Structural Biology Research of the National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Public Health Service, is seeking an outstanding COMPUTATIONAL BIOLOGIST to carry out structural studies of proteins and their biological assemblies by three-dimensional image analysis and sequence-based structural prediction. The candidate must have a doctoral degree in a relevant academic discipline, several years of postdoctoral training, and a record of accomplishment demonstrated by major publications in the designated field of research. The candidate should combine a thorough background in advanced computer science skills including algorithm design and implementation; three-dimensional reconstruction of electron micrographs; electron image acquisition and display; and system network management and parallel programming, with a working familiarity of sequence analysis algorithms and structure prediction methods; the physical chemistry of proteins and viruses; and electron microscopy. In addition to primary research activity, the appointee will be expected to assume responsibility for computer system management, maintenance, and renewal, and the guidance of trainees. Starting salary in the range of $40,000 to $50,000 per annum, depending on qualifications. Interested candidates, U.S. citizen only, should respond within 30 days of date of advertisement by submitting curriculum vitae, three letters of recommendation, and names of three references to: Ms. Lyn Eyre, NIAMS/IRP, Building 6, Room 408, 6 Center Drive, MSC 2751, Bethesda, MD 20892-2751. NIH is an Equal Opportunity Employer.

INFORMATION SYSTEMS MANAGER

Harvard University is seeking an Information Systems (IS) MANAGER to provide strategic planning, system analysis and leadership for the development and maintenance of information systems for the University’s botanical and zoological collections. The IS Manager should have a strong background in academic computing, and must be able to communicate with detailed operating knowledge of relevant Internet applications. The individual will have oversight responsibility for server system management, including technical diagnosis and resolution of hardware and software failure. The individual will supervise a Microcomputer Systems Specialist who would provide direct technical support for collections’ staff. This IS Manager will participate in collections’ community collaborative projects, including major involvement in institutional proposals for extramural funding of such projects. Requirements: Higher degree in bio- logical or computer science with biological orientation. Preference includes experience with biological databases and network operations at the post-graduate or postdoctoral levels. At least four to eight years of experience depends upon education and experience with system administration of a Novell network and/or a Unix network. Send inquiries or requests for further information to: Dr. Robert E. Cook, Harvard University Herbaria, 22 Divinity Avenue, Cambridge, MA 02138. Telephone: 617-542-1718 ext 102; Email: bcook@arnarb.harvard.edu.

NMR MANAGER—Washington State University has a NMR Manager opening for its Center for NMR Spectroscopy. The Center houses a Varian VXR-500 systems NMR, a Chemagnetics CMX-400 solids NMR, and a Bruker AMX-300 solids NMR. A 600 MHz machine will be added as soon as funds become available. The NMR Manager will be responsible for daily-to-day operation, user training and instruction, data interpretation, scheduling, and installation of new equipment. A proven service spectra. Some limited opportunities for collaborative research available, although this role is secondary. Demonstrated knowledge of current multidimensional NMR methods is essential, and experience with solutions NMR desirable. Good customer service attitude and interpersonal skills are desirable. A Ph.D. degree in Chemistry is required. Starting salary is positions. Interested applicants should send CVs to NMR Spectroscopy, Department of Biochemistry and Biophysics, Washington State University, Pullman, WA 99164-4660. Applications must be received before May 19, 1995. Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply.

POSITIONS OPEN

BEHAVIORAL SCIENTIST

Independent, established but team-oriented INVESTIGATOR in Behavioral Neurotoxicology or Behavioral Pharmacology with courses to be given with research emphasis on toxic mechanisms relevant to occupational health is sought by growing multidisciplinary research institute focused on the brain and behavior. Start-up funds, competitive salaries (50% state-supported), and generous benefits package. Applications accepted until position filled; reviews to begin May 1, 1995. Send curriculum vitae, references, and a statement of research interest to: W. Kent Anger, Chair, Behavioral Scientist Search Committee, Center for Research on Occupational and Environmental Toxicology L606, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201. Oregon Health Sciences University is an Equal Opportunity/Affirmative Action Employer.

ANNOUNCEMENTS

American Institute for Cancer Research

ANNUAL RESEARCH CONFERENCE
“Dietary Phytochemicals in Cancer Prevention and Treatment”
August 31 and September 1, 1995
Washington, DC
For more information please call the AICR Research Department at 202-328-7744 or 1-800-843-8114 or Email: jcohn@capcon.net

RESEARCH INQUIRIES INVITED

The Smokeless Tobacco Research Council, Inc. invites inquiries regarding grant applications. The Council sponsors independent research into questions of smokeless tobacco and health. Research support is through a program of grants-in-aid. Grant applications are evaluated by the Scientific Advisory Board to the Council and will be judged solely on the basis of scientific merit and relevance. Deadlines for submission of grant applications are December 31 for July 1 funding and June 30 for January 1 funding. Address inquiries or requests for applications to: The Smokeless Tobacco Research Council, Inc., 80 Lexington Avenue, New York, NY 10170 Telephone: 212-697-3485

PRE-PROPOSALS—Deadline: 1 July 1995. International Foundation for Ethical Research (IFER) has grants available for research into alternatives to the use of live animals in research, testing and teaching. Projects must take into account the three R’s: Refinement, Reduction, and Replacement plus a fourth R. Responsibility. For information and format write: IFER, 53 West Jackson Boulevard, Department J, Chicago, IL 60604, or call: 312-427-6025.

COURSES AND TRAINING

COURSE IN INTERDISCIPLINARY PHYSICS
July 11-August 5, 1995
La Jolla International School of Physics, The Institute for Advanced Physics Studies, La Jolla, California, Graduate School for Interdisciplinary Physics is offering a Course in Interdisciplinary Physics for graduate students, postdocs, and faculty. The institute will be held July 11-August 11, 1995. Topics: Laser Neuropsychology; Laser Biophysics; Molecular Psychology and Psychiatry; Physics of DNA. A one month condensed course, to be given by world renowned researchers, is designed for advanced graduates and active researchers interested in pursuing careers in interdisciplinary physics. Write: Secretary, La Jolla International School of Physics, 7825 Fay Avenue, Suite 350, La Jolla, CA 92037. Telephone: 619-456-5737; FAX: 619-454-2679.

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