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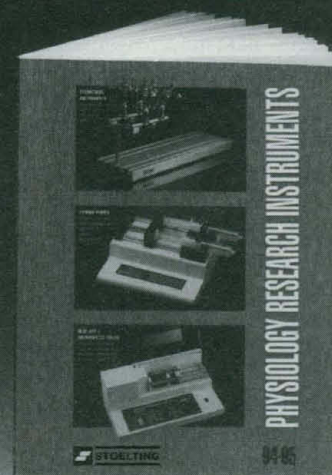
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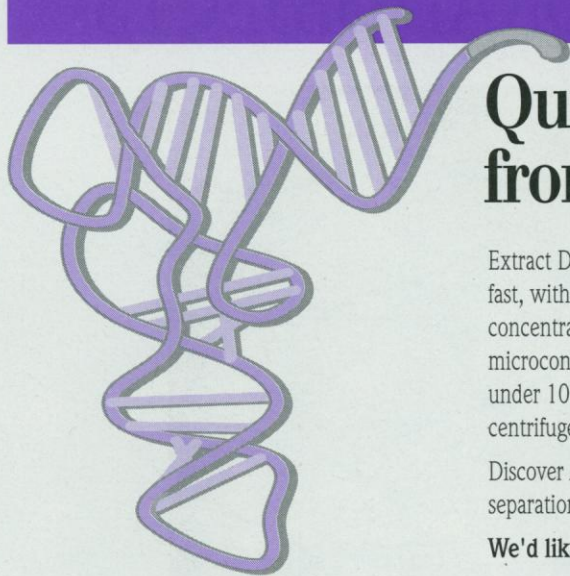
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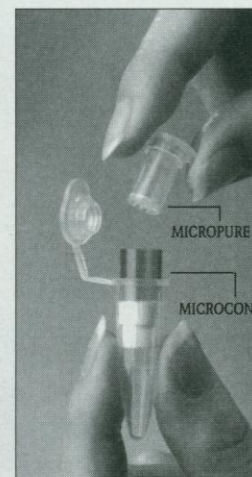
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1996 McKNIGHT NEUROSCIENCE SCHOLAR AWARDS

The McKnight Endowment Fund for Neuroscience is soliciting applications in preparation for awarding McKnight Scholar Awards which commence July 1, 1996.

The McKnight Scholar Awards were initiated in 1976 to stimulate research in neuroscience especially as it pertains to memory and, ultimately, to a clearer understanding of diseases affecting memory. Over the years this mandate has been interpreted broadly to permit support of work in many relevant areas of neuroscience. The McKnight Endowment Fund for Neuroscience administers its awards programs through a Board of Directors comprised of eminent scientists and representatives from the Board of Directors of The McKnight Foundation which is the source of the Endowment Fund.

Up to six 1996 McKnight Scholars will be selected from applicants who hold the M.D. and/or Ph.D. degree and have completed formal postdoctoral training. Candidates should have demonstrated meritorious research in areas pertinent to the interests of The McKnight Endowment Fund for Neuroscience and should be in the early stages of establishing their own independent laboratory and research career. Candidates must be citizens or lawful permanent residents of the United States. Award payments will be made directly to a sponsoring institution which must be located within the U.S.

Each McKnight Scholar Award provides \$50,000 annually in 1996, 1997 and 1998. Funds may be used in any way that will facilitate development of the Scholar's research program. Funds may not be used for indirect costs.

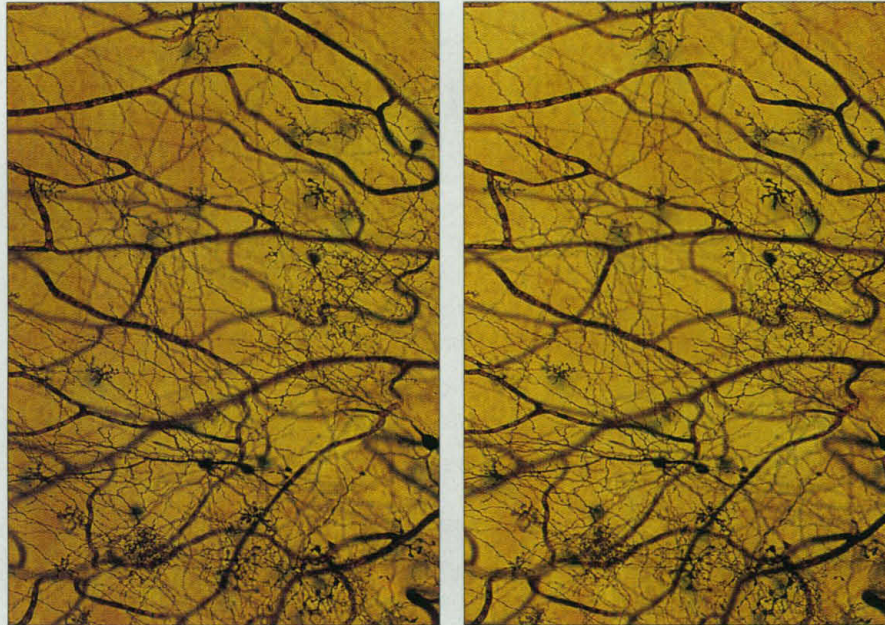
Applications will be evaluated by a review committee which will recommend to the Board of Directors of the Endowment Fund candidates for appointment. Award announcements will be made on or before April 30, 1996.

Potential applicants should write or call the office of The McKnight Endowment Fund for Neuroscience to request application forms and guidelines. Completed applications must be postmarked no later than January 2, 1996.

THE MCKNIGHT ENDOWMENT FUND
FOR NEUROSCIENCE
600 TCF TOWER • 121 SOUTH EIGHTH STREET
MINNEAPOLIS, MINNESOTA 55402
612-333-4220

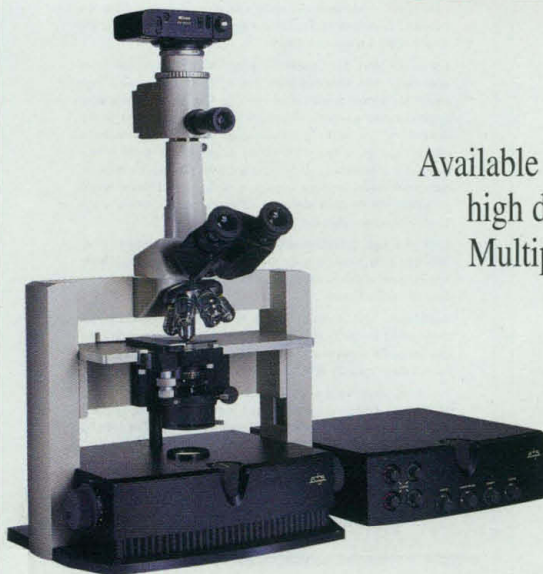
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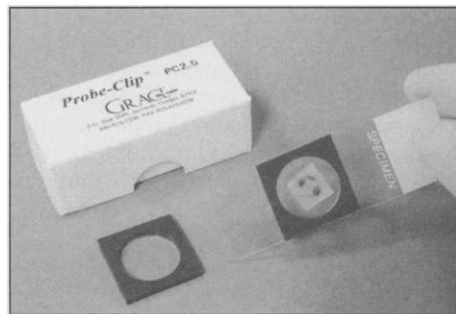
PRODUCTS & MATERIALS

Scientific Graphing Software

CoPlot 3.0 is a new version of a DOS program for creating publication-quality scientific graphs. The new version adds customizable maps and many other features. CoPlot 3.0 has three new kinds of graphs for making maps with different projections: orthographic, Mercator, and Alber's conic. The program comes with several world map data fields with specially encoded data for drawing nations, states, cities, oceans, rivers, and lakes. A second set of detailed map data files contains information for sections of the United States. The map menus in CoPlot let users choose the projection, specify the extent of the map, control what geographic information appears on the maps, and specify how that information is represented. The mapping capabilities are new additions to a program for creating publication-quality two-dimensional and three-dimensional graphs, with features including error bars, unusual graph types, unusual axis types, control of details, and support for data files of any size. The program comes with a PIF file so it can be run easily from Windows. **CoHort Software. Circle 136.**

Imaging Chambers

A Probe-Clip can be pressed to a microscope slide to form a sealed chamber to contain mounting medium without messy adhesives



or leaking. The chambers are designed to stabilize and support thick and free-floating biological specimens for internal fine-structure resolution and marker analysis by light

or fluorescence microscopy without compression or movement artifacts. Probe-Clips are made of optically clear, polycarbonate cover slips bonded to inert silicone. The chambers are easily removed and reapplied without damage to specimens. **Grace Bio-Labs. Circle 137.**

Numerical Analysis and Visualization Software

Version 2.2 of HiQ numerical analysis and data visualization software for Macintosh and Power Macintosh computers includes an improved user interface, controls and indicators such as switches and buttons, data communication capabilities, high-resolution printing, and automation features. Scientists and engineers can use the integrated analysis, data visualization, and documentation capabilities to build interactive analysis, simulation, and modeling applications using data fitting, linear algebra, signal processing, statistics, and differential equations. **National Instruments. Circle 138.**

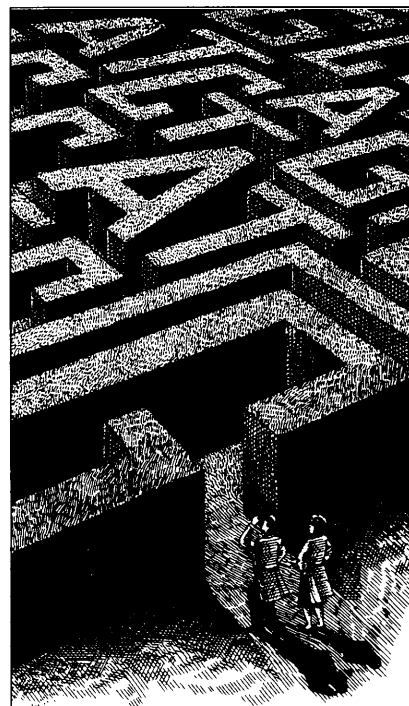
Mini-Gel Box

A smoke-gray stage incorporated into electrophoresis boxes makes gel loading easier. This new feature creates clearly distinguishable sample wells, virtually eliminating loading error concerns. Because the gel-casting tray is ultraviolet-transparent, the user does not have to handle the gel to analyze it. One simply removes the tray from the gel box, carries it to the dark room, and photographs it. If the gel needs to run longer, one can return it to the gel box by setting the tray back in the gel box, a particularly attractive feature for working with delicate low-melt agarose. **Molecular Bio-Products. Circle 139.**

Centrifuge Rotors

New centrifuge rotors made of composite materials offer corrosion resistance, longer life, and half the weight of conventional

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



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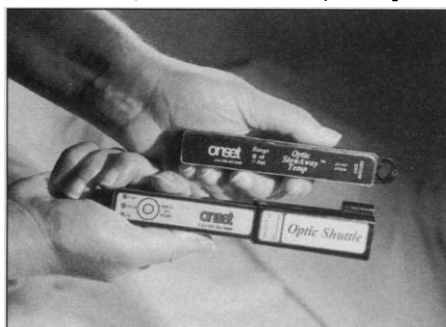
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metal-based products. Because they are lighter, they are easier to handle and safer to lift, and wear and tear is minimized on the centrifuge motor. Unlike metal rotors, which can explode into dangerous fragments when they fail, the new materials are virtually free of fatigue and stress corrosion. The FA-14c is a high-speed fixed-angle rotor with a 1.5-liter capacity that can generate 30,100g at its maximum speed. The FA-21c and FA-45c are ultra-speed fixed-angle rotors. The FA-21c has a capacity of 1.5 liters and can generate 67,500g. The FA-45c has a capacity of 600 ml and can generate 236,500g. **Piramo Technologies. Circle 140.**

Temperature Logger

The Optic StowAway is a battery-operated miniature temperature logger that can be placed virtually anywhere to continuously measure water or air temperature. Data can be recovered by connecting the logger to a personal computer or by using the pocket-sized Optic Shuttle to read out and relaunch up to 16 loggers in the field. With the waterproof Optic Shuttle, data can be transferred even under water, then transferred to a com-

puter. The temperature loggers are available in two ranges, -5° to $+37^{\circ}\text{C}$ or -39° to $+75^{\circ}\text{C}$. They come with a 10-year replace-



able battery and memory sizes that can record up to 8000 or 32,000 measurements. **Onset Computer. Circle 141.**

TLC Scanner

With the TLC Scanner scanning densitometer, thin-layer chromatography plates and gels can be scanned in reflectance or in transmittance mode by absorbance or fluorescence, with selectable spatial resolution from 25 to 200 μm and a spectral range of 190 to 800 nm. The scanning speed of up to 100

mm/s makes plate optimization, rescanning, and spectra recording an easy routine. Complete control is afforded by a personal computer. **Camag Scientific. Circle 142.**

Literature

Separation of Enantiomers in Capillary Electrophoresis is a comprehensive overview of this emerging technology by an experienced researcher. **Thermo Separation Products. Circle 143.**

Beta-RAM Micro describes a radioisotope detector for micro-flow high-performance liquid chromatography. The detector can handle flow rates of 50 to 300 μl per minute. **IN/US Systems. 144.**

A Guide to Kjeldahl Nitrogen Determination Methods and Apparatus (a 12-page booklet). **Labconco. Circle 145.**

Products for Life Science Research 1995/96 Catalog includes these sections: transfer and immobilization products, nonisotopic detection products, DNA purification, high-performance liquid chromatography, and filtration and analytical products. **Schleicher and Schuell. Circle 146.**

Novocastra Laboratories New for 1995 features monoclonal and polyclonal human antibodies for immunohistochemical, enzyme-linked immunosorbent assay, protein immunoblot, and flow cytometry applications as well as probes for in situ hybridization. Notable new products include a CD3 monoclonal antibody that is effective on paraffin sections, a Ki67 antibody that allows assessment of proliferation in paraffin-embedded material, and fluorescein-labeled probes. **Vector Laboratories. Circle 147.**

1995 Research Products Catalog offers a complete line of more than 150 mouse and human cytokine products including recombinant proteins, growth factors, receptor reagents, cell adhesion products, paired antibodies, and enzyme-linked immunosorbent assay kits. **Genzyme Diagnostics. Circle 148.**

Packed Column Application Guide is a 96-page reference pamphlet on finding the best approach to designing packed-column analyses. The guide includes chromatograms of 179 packed-column applications, organized under 30 different compound classes. **Supelco. Circle 149.**

AMPLIFICATIONS: A Forum for PCR Users is a newsletter on polymerase chain reaction products, reagents, and systems. **Perkin-Elmer. Circle 150.**

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Nanosphere Size Standards are calibrated in billionths of a meter (nanometers) and are available in 22 sizes from 21 to 900nm—all traceable to the National Bureau of Standards. Nanospheres are part of our complete line of spherical particles from 0.02 to 2000 micrometers in diameter. They are used as standards for instrument calibration, quality control, filter checking, and in numerous biotechnology applications. At Duke Scientific—established in 1971—we have the expertise and resources to meet any of your requirements for microspheres and particles. Call us today for information.

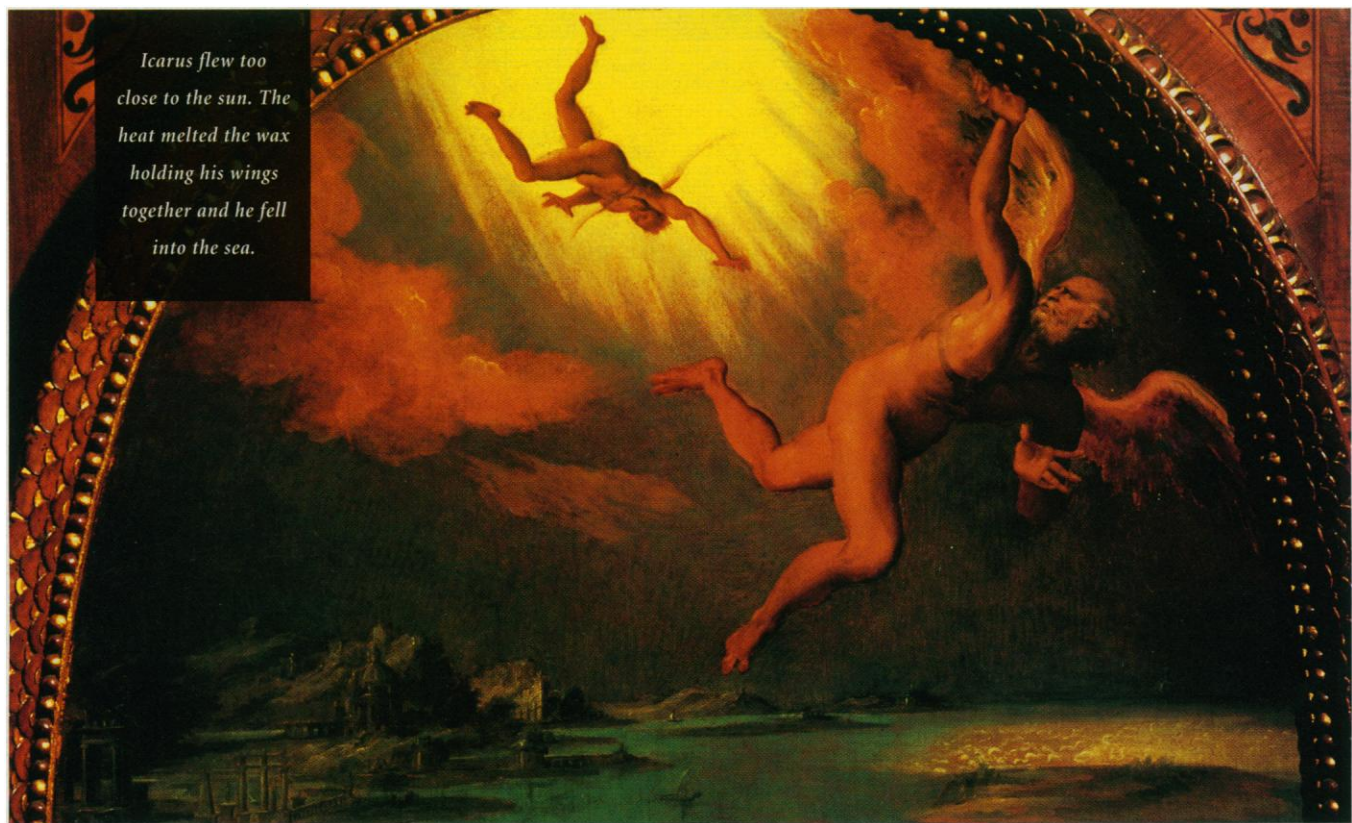


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The Division of Cancer Etiology

National Cancer Institute

Announces to the Scientific Community the Availability of the Following Resources/Services for Cancer Related Research As Noted Below:

Biological Resources

■ Cell Culture Identification Service. Using Isozyme Analysis, Immunofluorescence, Karyotypic Analysis (Chromosome Banding), Fluorescence In-Situ Hybridization and DNA Fingerprinting.

Contact: Dr. Joseph Kaplan
Children's Hospital of Michigan
3901 Beaubien Boulevard
Detroit, MI 48201
(313) 745-5570
(313) 993-7158 FAX

Citing Contract #N01-CP-33063

Cost: Reasonable; inquire with specific requests.

■ Goat Antisera Against: Avian, Bovine, Feline, Murine, and Primate Intact Viruses and Viral Proteins; Antibodies to Immunoglobulins for a number of species. Pre-immune Sera are available to match Antisera for some Viruses.

Contact: Steven R. Per, Ph.D.
BCB Repository
Quality Biotech, Inc.
1667 Davis Street
Camden, NJ 08104
(609) 966-8000
(609) 342-8078 FAX
Citing Contract: #N01-CP-15665

Cost: \$75.00/5 ml. Antisera
\$25.00/5 ml. Preimmune Sera
\$65.00/100 ml. Immunoglobulins
(Frozen material)
(Plus Shipping and Handling)

■ Viruses: Avian, Feline, Murine, and Primate Viruses Produced in vivo and in vitro.

Contact: Steven R. Per, Ph.D.
BCB Repository
Quality Biotech, Inc.
1667 Davis Street
Camden, NJ 08104
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Cost: Reasonable; inquire with specific requests.

■ Monoclonal Antibodies are available with specificities for synthetic peptides representing the amino acid sequences of the left end, right end and active site of the oncogene products of avian and mammalian retroviruses. Blocking peptides are also available, as are a limited number of cell lines producing the monoclonal antibodies.

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Cost: Peptides -\$25.00/mg.
Ascites Fluid -\$45.00/ml.
Cell Culture -\$100.00/culture
(Plus Shipping and Handling)

■ Human sera from donors with various malignancies (including nasopharyngeal carcinoma), nonmalignant disorders and from normal individuals.

Contact: Program Director, Special Activities/Research Resources
Biological Carcinogenesis Branch
DCE, NCI, NIH
Executive Plaza North
Room 540
Bethesda, MD 20892-7398
(301) 496-1951
(301) 496-2025 FAX

Cost: Shipping and handling charges only.

■ The Division of Cancer Etiology's Registry of Experimental Cancers announces the availability of 16 different study sets containing histologic slides of rodent tumors. The study sets, with accompanying syllabi, illustrate a variety of spontaneous and induced tumors, chiefly of rats, mice, and mastomys.

Contact: Registry of Experimental Cancers
National Cancer Institute
Building 41, Room D311
National Institutes of Health
Bethesda, MD 20892
USA

Cost: Each set is available to cancer investigators worldwide, without charge, for up to two months.

Environmental Cancer

■ NCI's Chemical Carcinogenesis Research Information System (CCRIS) is available on-line through the National Library of Medicine's Toxicology Data Network (TOXNET) system. Through an interagency agreement between NCI and NLM, the CCRIS database has been built and will be maintained and updated as one of TOXNET's sponsored databases in the broad areas of chemistry, toxicology, and hazardous waste information. The CCRIS database contains evaluated data and information on carcinogens, mutagens, tumor promoters, cocarcinogens, metabolites of carcinogens, and carcinogen inhibitors derived from published review articles, ongoing current awareness survey of primary literature, NCI/NTP's short- and long-term bioassay studies, the IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man, and special studies and reports.

Contact: Ms. Inge Blackwood
Division of Cancer Etiology
National Cancer Institute
Executive Plaza North
Room 712
Bethesda, MD 20892
(301) 496-1625

Cost: Inquire

■ The National Cancer Institute, along with the National Institute of Environmental Health Sciences, the Centers for Disease Control, and the Food and Drug Administration, has, for many years, supported a study by the Michigan Department of Public Health dealing with an accidental exposure to polybrominated biphenyls.

The Michigan Long Term PBB Study is a well-maintained longitudinal database on 4,000 participants from rural farms in Michigan. This group was exposed to polybrominated biphenyls through consumption of contaminated farm animals and food products. The cohort was enrolled and characterized in 1975-76, establishing a database containing demographic, health history, medical condition, reproductive history, blood and tissue analyses, and chemical/environmental exposure information. Major life events—birth, death, cancer and major illnesses have been confirmed and updated annually. The project has currently completed a detailed recharacterization of all cohort members and their children. Analysis of the new data is still underway. This longitudinal database is available for collaborative research investigating biological and human health outcomes from halogenated biphenyl exposure.

Contact: Dr. Harold E. B. Humphrey
Michigan Department of
Public Health
Division of Health Risk Assessment
3423 North Logan, P.O. Box 30195
Lansing, MI 48909
(517) 335-8350

Cost: Free to qualified investigators.

■ The Special Assistant for Environmental Cancer, Office of the Director, announces the availability of a limited number of copies of the following publication, which has been prepared under contract to NCI:

Survey of Compounds Which Have Been Tested for Carcinogenic Activity, PHS-149. 1991-1992.

Contact: Dr. Victor Fung
Division of Cancer Etiology
National Cancer Institute
Executive Plaza North
Room 712
Bethesda, MD 20892
(301) 496-1625
(301) 496-1743 FAX

Cost: Free

Epidemiology Resources

■ The Tumor Virus Epidemiology Repository (TVER) contains sera and other biological samples from more than 13,000 patients and controls obtained in 12 countries. The TVER was established primarily to support collaborative research on the role of Epstein-Barr virus (EBV) in Burkitt's lymphoma and related diseases. Sera characterized for human herpes virus 6 (HHV) antibodies are also available. The TVER collection is available for new collaborative studies and some independent research. The most extensive collections are serum samples from patients with Burkitt's lymphoma.

Contact: Dr. Charles Rabkin
Viral Epidemiology Branch
DCE, NCI, NIH
Executive Plaza North, Room 434
Bethesda, MD 20892
(301) 496-8115

Cost: Free to Collaborating Investigators;
Others: Dependent on Processing Time.

■ The Epidemiology and Biostatistics Program of the National Cancer Institute and the Industrywide Studies Branch of the National Institute for Occupational Safety and Health have created a Computerized Occupational Referent Population System (CORPS) which contains data from occupational cohort studies conducted in the past by either agency. This new large population of employed persons can be used in place of the general population as the referent group in occupational cohort studies to ameliorate the healthy worker effect. Populations from standardized mortality studies and proportional mortality studies have been assembled. Potential users may request mortality rates in the format required by software commonly used to analyze epidemiologic occupational data (i.e., Monson, NIOSH Life Table, OCMAP, O/E). Rate files may be requested by race, gender, blue/white collar status, minimum employment duration, state, and other characteristics.

Contact: Shelia Hoar Zahm, Sc.D.
Occupational Studies Section
EEB, EBP, DCE, NCI, NIH
Executive Plaza North, Room 418
Bethesda, MD 20892
(301) 496-9093
(301) 402-1819 FAX
E-mail: zahms@epndce.nci.nih.gov

Cost: Free

■ Human fibroblast cultures from individuals at high risk of cancer, selected members of cancer-prone families, and some normal family members are available. The collection is historical with unknown viability and contamination status. Catalog of cell lines unavailable and followup on many individuals is unavailable. Information requests should include potential use of cultures.

Contact: Chief, Genetic Epidemiology Branch
DCE, NCI, NIH
Executive Plaza North, Room 439
Bethesda, MD 20892
(301) 496-4375

Cost: Free to Collaborating Investigators.
Others: \$70/cell line.

■ The Epidemiology and Biostatistics Program of the National Cancer Institute (NCI) has developed an Occupational Mortality Analysis software system which calculates Proportionate Mortality Ratios (PMR), Proportionate Cancer Mortality Ratios (PCMR), or Mortality Odds Ratios (MOR) using the occupational information on the death certificates from 24 states for 1984-1989. The mortality data were assembled through a collaborative effort involving the National Center for Health Statistics, the National Institute for Occupational Safety and Health, and the NCI. The program is user friendly and allows the user to analyze the data by (1) occupation, industry, or occupation/industry combinations; (2) exposures (20 chemicals); (3) age groups; (4) states or geographic regions; (5) race groups (black and white); and (6) sex, using reference populations based U.S. general population or special population custom prepared from the 24 states. The program is written in Wylbur Command Procedures and exportable to most mainframes.

Contact: Mustafa Dosemeci, Ph.D.
Occupational Studies Section
EEB, E&BP, DCE, NCI, NIH
Building EPN, Room 418
Bethesda, MD 20892-7364
(301) 496-9093
(301) 402-1819 FAX
E-mail: dosemecm@epndce.nci.nih.gov

Cost: Free

■ The Epidemiology and Biostatistics Program of the National Cancer Institute (NCI) has developed a computer-aided occupational and industrial code searching program (CODESEARCH) which allows the code assigner to select appropriate codes from existing classification systems for job or industrial titles from work histories of the study subjects. The program is user friendly and allows searches from four occupational classification systems (1977 Standard Occupational Classification Manual [SOC]; 1980 SOC; 1970 Bureau of Census Occupational Classification System [BOCOC]; and 1980 BOCOC), and four industrial classification systems (1972 Standard Industrial Classification System [SIC]; 1987 SIC; 1970 Bureau of Census Industrial Classification System [BOCIC]; and 1980 BOCIC). The program is written using PC-Clipper Software and exportable to most 486 PCs.

Contact: Mustafa Dosemeci, Ph.D.
Occupational Studies Section
EEB, E&BP, DCE, NCI, NIH
Building EPN, Room 418
Bethesda, MD 20892-7364
(301) 496-9093
(301) 402-1819 FAX
E-mail: dosemecm@epndce.nci.nih.gov

Cost: Free

■ The National Institute of Allergy and Infectious Diseases and the National Cancer Institute have developed a repository of biological specimens from homosexual men. The specimens were collected through cooperative agreements with four major U.S. universities for studies of the natural history of acquired immune deficiency syndrome (AIDS). Information about applying for collaborative use of these specimens is available from the NIAID Project Officer or the NCI Co-Project Officer.

Contact: Chief, Epidemiology Branch
Division of AIDS, NIAID
Solar Building, Room 2C10
National Institutes of Health
Bethesda, MD 20892

or to Chief
Extramural Programs Branch, EBP
Division of Cancer Etiology, NCI
Executive Plaza North, Room 535
Bethesda, MD 20892

Chemical Resources

■ Analytical support for the collection, separation, and elucidation of environmental carcinogens including combustion and smoking-related exposures. A contractor with experience in the development of analytical methods for the determination of constituents of cigarette smoke and cigarette smoke condensates, and of specialty instrumentation for inhalation toxicology is available to assist qualified investigators with particular interest in human and animal model exposure to environmental and sidestream smoke. Extensive chemical information on smoke and smoke condensate components is available.

Contact: Harold E. Seifried, Ph.D.
Chemical and Physical
Carcinogenesis Branch
DCE, NCI
Executive Plaza North, Room 700
Bethesda, MD 20892
(301) 496-5471
(301) 496-1040 FAX

Cost: Inquire

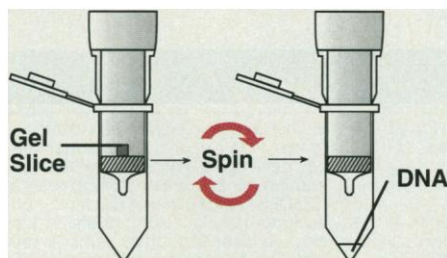
■ Chemical Carcinogen Reference Standard Repository: Reference quantities of over 750 compounds are available. The newest additions are dilute aqueous standards of PAH deoxyguanosine-3'-monophosphates for Randerath ³²P post labelling assays. Other classes of available compounds are: food mutagens, polynuclear aromatic hydrocarbons (PAH), PAH metabolites, radiolabeled PAH metabolites, nitrogen heterocycles, nitrosamines/nitrosamides, aromatic amines, aromatic amine metabolites, azo/azoxy aromatics, inorganics, nitroaromatics, pesticides, pharmaceuticals, natural products, dyes, dioxins and chlorinated aliphatics. A number of radiolabeled PAH adducts, metabolites and nitrosamines are also available. Data Sheets provided with the compounds include chemical and physical properties, analytical data, hazards, storage, and handling information. Catalog available upon request.

Contact: Manager, NCI Chemical
Carcinogen Repository
Midwest Research Institute
425 Volker Boulevard
Kansas City, MO 64110
(816) 753-7600, Ext. 523
(816) 753-3664 FAX

Manager, NCI Radiolabeled
Chemical Repository
CHEMSYN Science Laboratories
13605 W. 96th Terrace
Lexena, KS 66215
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Princeton University
Princeton, NJ
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The proceedings will be
introduced and moderated by:

George deStevens, PhD
Research Professor of Chemistry
Drew University

Hall of Science Auditorium
Room 4
Drew University
Tuesday, 10 October 1995
1:30 pm-5:30 pm

Address inquiries to:

George deStevens, PhD, Frontiers in Biomedical Research
Drew University, Madison, New Jersey 07940

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Ruth L. Kirschstein, Deputy Director,
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To register, contact:
Janis Crowley, Phone: (202) 326-6532,
Fax: (202) 682-0816.
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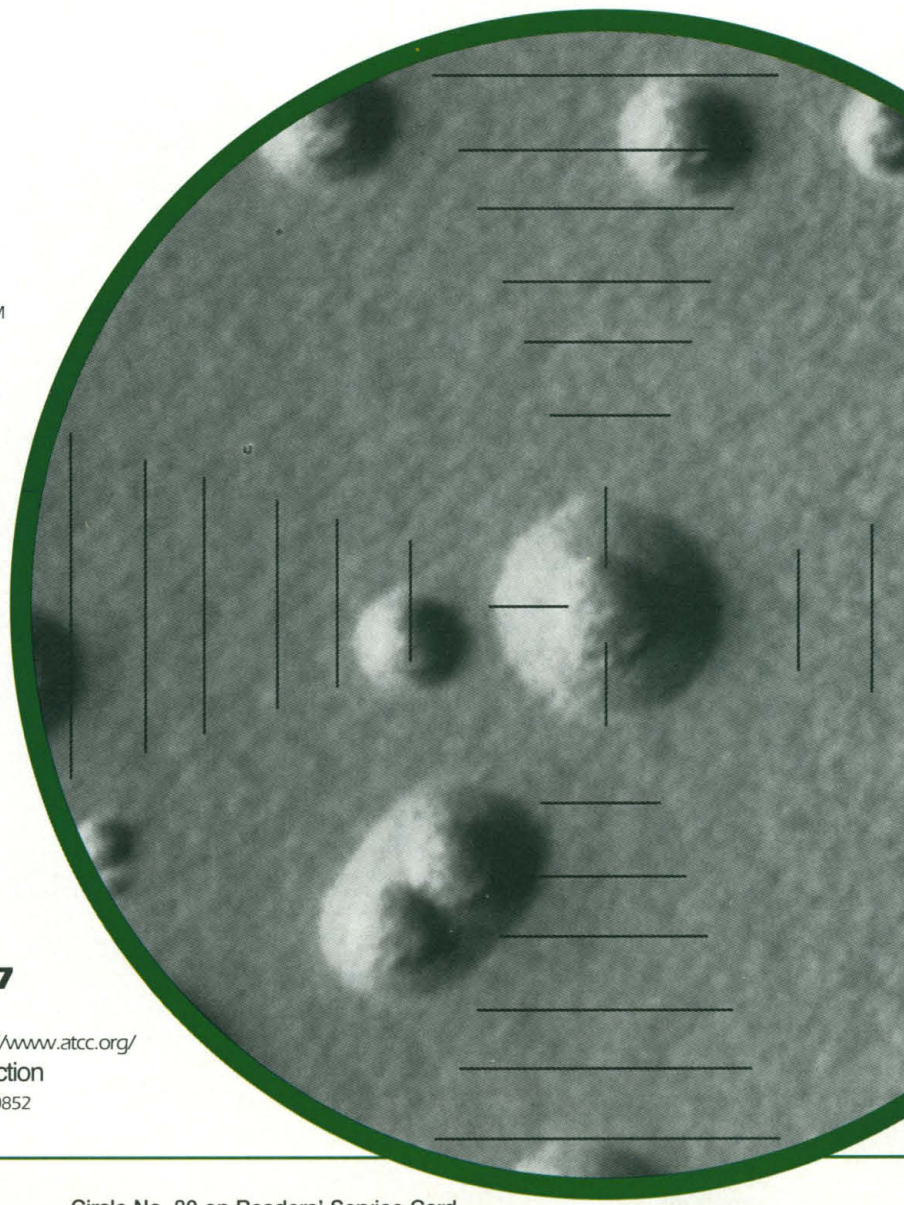
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POSITIONS OPEN



Wayne State University

WAYNE STATE UNIVERSITY DEPARTMENT OF CHEMISTRY

Invites applications for **FACULTY POSITIONS** in the general area of organic chemistry including bioorganic and physical organic and in experimental areas of analytical and physical chemistry. The positions are tenure-track or tenured. Outstanding candidates regardless of level are encouraged to apply. Appointments are expected for fall of 1996. Appointees are expected to establish a strong, visible research program and maintain a commitment to excellence in undergraduate and graduate teaching. Postdoctoral experience is preferred. Applicants should send a complete résumé, a statement of research plans and arrange to have three letters of recommendation sent to: **Chairman, Faculty Search Committee, Department of Chemistry, Wayne State University, Detroit, MI 48202.** An initial deadline for receipt of applications is October 20, 1995. *Wayne State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.*

PLANT MOLECULAR CYTOGENETICIST

ASSISTANT PROFESSOR, tenure-leading, 20% teaching/80% research, to be a member of a strong team effort working with plant genetics and improvement of plant germplasm. Will teach graduate courses in plant cytogenetics and plant genetics and be involved in an undergraduate course in introductory genetics and student advising. Expected to develop a research program focused on the study of plant genomes which includes both modern cytogenetic and molecular genetic technologies. Will work closely with colleagues in Agronomy, the Center for Biotechnology, and related disciplines. Will publish research results in refereed journals and actively seek grant funding to augment research activities. Requires Ph.D. in Agronomy or allied discipline with training in plant genetics or cytogenetics necessary. Send résumé, transcripts, and the names and addresses of three references postmarked by December 1, 1995, to:

Dr. P. Stephen Baenziger, Head
 Department of Agronomy
 University of Nebraska-Lincoln
 P.O. Box 830915
 Lincoln, NE 68583-0915

University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact Dr. Baenziger for assistance.

ASSISTANT PROFESSOR CHEMICAL ENGINEERING

The Department of Chemical Engineering at the University of Delaware invites applications for a **TENURE TRACK FACULTY POSITION** at the junior level. In exceptional cases, appointment at higher rank may be considered. Ph.D. in chemical engineering or a closely related field is required. Successful applicants will be expected to carry out a vigorous research program, to teach and to advise students at both the undergraduate and graduate levels. The Chemical Engineering Department is well equipped and maintains laboratories and computational facilities for both experimental and theoretical research. The department has strong research programs in bioengineering, kinetics and catalysis, colloid and surface science, polymers and composites, molecular thermodynamics, separations, materials science, and environmental fields. Additional information about the department at the University of Delaware is available on the WWW: che.udel.edu. Please send a résumé, a description of research and teaching interests, and the names, addresses and telephone numbers of three references to: **Professor Mark A. Barteau, Search Committee Chairman, Department of Chemical Engineering, University of Delaware, Newark, DE 19716-3110.** Applications must be postmarked by December 1, 1995.

The University of Delaware is an Equal Opportunity Employer which encourages applications from minority group members and women.

POSITIONS OPEN

FACULTY POSITION

Memorial Sloan-Kettering Cancer Center

For a tenure-track position at the **ASSISTANT** or **ASSOCIATE MEMBER** level we are seeking an innovative individual with strong research accomplishments in synthetic or mechanistic organic chemistry who wishes to address problems of relevance to bioorganic chemistry and to cancer research. We have a joint graduate program with Cornell University Medical College and the supervision of some graduate students may be possible.

Memorial Sloan-Kettering Cancer Center (MSKCC) offers a unique and exciting research environment with in-house groups in Immunology, Pharmacology, Molecular Biology, Genetics, Cell Biology, and Cellular Biochemistry. The presence of world renowned clinical programs in cancer research, treatment and prevention offers additional opportunities for creative collaboration. MSKCC is well equipped with modern instrumentation.

Applicants must have a Ph.D. degree in chemistry. A dedication to problems at the interface of biology and chemistry is required. A strong postdoctoral experience is preferred.

Candidates should send by October 15, 1995 their curriculum vitae, research objectives, and the names of three scientists who can evaluate their accomplishments and potential to:

Samuel Danishefsky
 Department of Molecular Pharmacology
 and Therapeutics
 Memorial Sloan-Kettering Cancer Center—Box 428
 1275 York Avenue
 New York, NY 10021

Memorial Sloan-Kettering Cancer Center is an Affirmative Action, Equal Opportunity Employer.

INDUSTRIAL HYGIENE FACULTY POSITION

The Department of Preventive Medicine and Environmental Health of The University of Iowa invites applications for a faculty position at the level of **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR**. Applicants holding a Ph.D. degree in industrial hygiene or an equivalent, closely related field will be considered. Applicants must also be certified industrial hygienists or eligible for certification. It is desirable that the applicant possess focused experience or research interest in a specialized aspect of industrial hygiene compatible with the research and programmatic interests of the Division of Occupational and Environmental Health. The position will include responsibilities for outreach industrial hygiene services and education/training of pre-doctoral and post-doctoral candidates.

Salary will depend upon academic background, evidence of scholastic achievement, and experience. Please respond with a curriculum vitae and the names of three references to: **James A. Merchant, M.D., Dr. of Public Health, Institute for Rural and Environmental Health, 100 Oakdale Campus, Room 220 AMRF, The University of Iowa, Iowa City, IA 52242-5000, Attention: Recruitment Coordinator.** *The University of Iowa is an Equal Opportunity and Affirmative Action employer. Women and minorities are strongly encouraged to apply.*

PLANT BIOLOGIST

The Biology Department of Saint Michael's College invites applications for a tenure-track position in plant biology at the **ASSISTANT PROFESSOR** level, to begin fall 1996. The successful applicant will have the Ph.D. and extensive experience in plant biochemistry and/or molecular biology. Teaching requirements will include one upper-level course in plant biology each semester and participation in a team-taught general biology course for majors, and non-majors courses. Total teaching load is 21 hours per year. Responsibilities also will include direction of undergraduate research, advising, and service to the College community. Previous teaching and postdoctoral experience are preferred. Faculty are expected to be active in research. Send curriculum vitae, undergraduate and graduate transcripts, statements of teaching and research philosophy, and three letters of recommendation to: **Dr. Daniel Bean, Biology Chair, Office of Human Resources, Saint Michael's College, Winooski Park, Colchester, VT 05439.** Review of applications will begin December 15, 1995. Position contingent upon funding availability. *Saint Michael's College is an Affirmative Action/Equal Opportunity Employer.*

Postdoctoral Opportunities In The Biomedical Sciences.

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

Cellular Differentiation

Janice Chou, PhD

Current topics of research deal with molecular genetics of glycogen storage disease (GSD) and methionine adenosyltransferase deficiency. A mouse model of GSD type 1a has been developed and the laboratory is pursuing gene therapy for this genetic disease. Candidates should have experience with biochemical and molecular biology techniques and must have less than five years of postdoctoral experience. Human Genetics Branch (OE-97), NICHD, Building 10, Room 9S-242, 10 CENTER DR MSC 1830, BETHESDA MD 20892-1830.

Eukaryotic Transcription/TFIID

Yoshihiro Nakatani, PhD

The group is focused on the mechanisms of how DNA-binding transcriptional activators communicate with RNA polymerase II transcription machinery to regulate messenger RNA synthesis, with emphasis on the role of TBP-associated factors (TAFs) and other coactivators.* A strong background in molecular biology and/or protein chemistry and/or yeast genetics is required. Laboratory of Molecular Growth Regulation (OE-97), NICHD, Building 6, Room 416, 6 CENTER DR MSC 2753, BETHESDA MD 20892-2753.

*(*Nature*, 367, 484, 1994; *PNAS*, 91, 3520, 1994)

Functional Correlates

Carl Frasch, PhD

An opportunity exists for investigator-initiated research to establish function correlates between antibody levels and bacteria infection. Candidates must have knowledge of microbiology, immunology, or infectious diseases and must have less than three years of postdoctoral experience. Laboratory of Bacterial Polysaccharides (OE-97), FDA/CBER (HFM-428), Building N29, Room 404, 1401 Rockville Pike, Rockville, MD 20852-1448.

Functional Neuroimaging

Allen R. Braun, MD

Positron emission tomography and magnetic resonance imaging methods are being used to study the functional neuroanatomy of speech and language and to model CNS receptor and signal transduction mechanisms. The position is dedicated to the development of novel methods in image processing, statistical analysis and neural systems modeling. Candidates must have a background in neuroscience or mathematical modeling, computer programming, image processing or statistics, and have less than five years of postdoctoral experience. Voice, Speech, and Language Branch (OE-97), NICHD, Building 10, Room 5D38, 10 CENTER DR MSC 1416, BETHESDA MD 20892-1416.

Molecular Biologist and Genetics

Carl R. Merrill, MD

The effects of hypoxia on mitochondrial and nuclear DNA in mammalian systems is being studied. These efforts involve studies with animal and tissue culture systems. Candidates should have experience in biochemical genetics, and molecular biology and must have less than five years of postdoctoral experience. Laboratory of Biochemical Genetics (OE-97), NIMH, Neuroscience Center St.

Elizabeth's Hospital, Building WAW/SEH, Room 131, 2700 Martin Luther King Jr. Avenue, SE, Washington, DC 20032. E-mail: merrillc@dirpc.nimh.nih.gov.

Molecular Genetics

Chuxia Deng, PhD

The function of FGF receptors and tumor suppressor genes are being studied. Projects include analysis of mouse mutants generated by gene targeting, creation of animal models of human genetic diseases and development of technology for conditional knockouts.* Applicants should have a strong background in molecular biology, embryology or oncology and must have less than five years of postdoctoral experience. Laboratory of Biochemistry and Metabolism (OE-97), NIDDK, Building 10, Room 9N119, 10 CENTER DR MSC 1812, BETHESDA MD 20892-1812. *(*Genes & Dev* 8: 3045, *Cell* 82: No. 4)

Regulation of GTP-Binding Proteins

Paul A. Randazzo, MD, PhD

ADP-ribosylation factor (ARF), a GTP-binding protein that has been implicated as a regulator of membrane traffic, is being investigated. The laboratory focuses on the interactions of ARF with ARF-GTPase activating protein (ARF GAP) and with phospholipids. Applicants must have less than five years of postdoctoral experience. Laboratory of Biological Chemistry (OE-97), NCI, Building 37, Room 5D02, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

Additional Opportunities

The NIHEDNET Bulletin Board **POSTDOC** (fellowship positions) and **TENURE** (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7,Even,1) or the Internet using Telnet (wylbur.cu.nih.gov) or the World Wide Web (URL: [telnet://wylbur.cu.nih.gov](http://wylbur.cu.nih.gov)). When connected to NIH, key in ,vt100 for terminal emulation, F5E for initials, and AJL1 for account number. To view tenure track positions, quit the POSTDOC conference and join the TENURE conference.

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

To Apply

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



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POSITIONS OPEN

ASSISTANT/ASSOCIATE/FULL PROFESSOR DEPARTMENT OF BIOCHEMISTRY University of Illinois College of Medicine

Applications and nominations are invited for a tenured track faculty position at the level of **ASSISTANT/ASSOCIATE/FULL PROFESSOR** in the area of molecular medicine with emphasis in developmental gene regulation and cell differentiation. We are especially interested in individuals using vertebrate systems to investigate problems related to gene expression in the context of development and medicine. Applicants should have a Ph.D., postdoctoral experience, a strong record of research accomplishments, and demonstrable potential for the development of an independent research program. The Department is one of six basic science departments in the largest College of Medicine in the United States and consists of 19 full time faculty and 13 joint appointees. In recent years we have recruited several senior and junior faculty and are most interested in fostering independent research in an environment of interactive collegiality. Applications should include a curriculum vitae, a summary of current and future research plans and the names, addresses, telephone/FAX numbers of at least three individuals for references. All inquiries will be held in confidence. Review of applications will begin after October 1, 1995. Send applications or nominations to: **Chair, Faculty Search Committee, Department of Biochemistry (M/C536), University of Illinois College of Medicine, 1819-53 West Polk Street, Chicago, IL 60612.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION IN CELLULAR AND MOLECULAR PHYSIOLOGY

The Department of Cellular and Molecular Physiology of The Pennsylvania State University College of Medicine invites applications for a full-time, tenure-track faculty position at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Applicants should have substantial research experience using transgenic mice and should be interested in developing a research program using techniques for gene expression and gene deletion to examine fundamental questions in cellular physiology. Significant research accomplishment and ability to obtain independent funding are essential. Excellent opportunities exist for research collaboration, teaching in a medical school curriculum, and participation in one or more graduate programs.

Applications will be accepted until December 1, 1995 or until a suitable candidate has been selected. Send a curriculum vitae, a brief description of research interests, and the names of three references to: **Dr. Leonard S. Jefferson, Chairman, Department of Cellular and Molecular Physiology, College of Medicine, The Pennsylvania State University, P.O. Box 850, Hershey, PA 17033.** *We are an Equal Opportunity/Affirmative Action Employer and encourage minority and female applicants to apply.*

FACULTY POSITION IN VIROLOGY University of Arkansas for Medical Sciences

The Department of Microbiology and Immunology of the University of Arkansas for Medical Sciences is seeking applicants for a 12-month tenure-track position as **ASSISTANT** or **ASSOCIATE PROFESSOR**. The successful candidate is expected to develop a high quality, independent research program in the areas of molecular virology or molecular mechanisms of viral pathogenesis. Of particular interest to the Department are candidates whose research area focuses on neurovirology, viral oncogenesis, virus-modulated inflammatory or immune responses, or virus-cell interactions. In addition, the successful candidate is expected to participate in the teaching activities of the Department in the graduate and medical school programs. The laboratories will be located in the newly constructed Biomedical Research Building and competitive start-up funds are available. Applicants should submit a curriculum vitae, a concise statement of research interests and plans, and three letters of reference to: **Dr. Marie Chow, Department of Microbiology and Immunology, Slot 511, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205.** Applications submitted before November 15, 1995 will receive preferential consideration. *Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITIONS Albert Einstein College of Medicine Department of Molecular Pharmacology

The Department of Molecular Pharmacology is expanding and will recruit new faculty members during the period of August 1995–March 1996. Candidates are invited to apply for positions at all academic levels (**ASSISTANT, ASSOCIATE and FULL PROFESSOR**). All positions offer the opportunity for tenure. We are seeking individuals with a record of excellence in research who will apply skills in biochemistry, molecular biology, genetics and cell biology to solve problems relevant to molecular pharmacology. Essential requirements are: an innovative research program that complements programs within the Department and the Medical School; and a commitment to the training of Fellows and graduate students. Research areas of interest to the Department include: mechanisms of hormone, oncogene, growth factor and neurotransmitter actions; regulation of gene expression and differentiation; structure, function and regulation of receptors, channels and transporters; signal transduction, second messengers and protein phosphorylation; post-translational modification and intracellular targeting. Substantial packages will be provided to start up and sustain the laboratories of successful candidates. Submit a curriculum vitae, a statement of research interests, future plans and three letters of reference to: **Dr. Charles S. Rubin or Dr. Susan B. Horwitz, c/o Ms. Anna Cioffi, Administrator, Department of Molecular Pharmacology, Albert Einstein College of Medicine, Jack & Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461.** *Equal Opportunity Employer.*

ASSISTANT PROFESSOR Industrial Hygiene Occupational/Environmental Health Sciences

Applications are sought for a tenure-track academic year **FACULTY POSITION** in the Industrial Hygiene program of the Purdue University School of Health Sciences. The successful applicant is expected to have a strong commitment to teaching in the professional and graduate programs, and to establish a vigorous, extramurally funded, laboratory or field based research program. Applicants with outstanding credentials may be considered for higher faculty rank.

The applicant should be able to complement current interests in the School, which include indoor air quality, bioaerosols, pulmonary aerosol deposition, toxicology, exposure assessment, and radiation. Collaborative opportunities exist in health physics, epidemiology, environmental engineering, agricultural safety and health, ergonomics, and biomarkers of exposure and effect. The candidate must have a doctorate in Industrial Hygiene or a related field.

Review of applications will continue until the position is filled. Please send curriculum vitae, including a list of any previous funding, a statement of research interests, and the names, addresses and telephone numbers of three references to: **Dr. Frank S. Rosenthal, Chair, Search Committee, School of Health Sciences, Purdue University, West Lafayette, IN 47907. Telephone: 317-494-0812; FAX: 317-496-1377.** *Purdue University is an Equal Opportunity/Affirmative Action Employer. Minority and female candidates are encouraged to apply.*

AGROECOLOGY

The Board of Environmental Studies at the University of California, Santa Cruz (UCSC) invites applications for an **ASSOCIATE** or **FULL PROFESSOR** position in sustainable agriculture (salary range: \$45,000 to \$67,800). The successful candidate will also serve half-time as Director of the Center for Agroecology and Sustainable Food Systems. Qualifications: Ph.D. in a social or natural science or agricultural discipline, experience in agricultural systems, excellence in teaching or extension, a record of funded research, interdisciplinary and collaborative experience, and evidence of academic leadership. Applicants should send a curriculum vitae, letters from three referees, up to four representative publications or reports, and a letter describing their research, teaching or extension, and administrative experience to: **Chair, Search Committee, Provision No. 504, Environmental Studies Board, University of California, Santa Cruz, CA 95064** by November 9, 1995. Appointment contingent upon final administrative and budgetary approval. *UCSC is an Affirmative Action/Equal Opportunity/IRCA Employer.* Write or FAX for complete description of the position (**408-459-3518**).

POSITIONS OPEN

DEPARTMENT OF BIOENGINEERING THE UNIVERSITY OF UTAH Tenure-Track Faculty Position

The University of Utah Department of Bioengineering invites applications for a tenure-track faculty position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the area of Neural Plasticity and Control. Candidates must have an earned doctorate, a strong physical science or engineering background, with a clear biological direction to their research (as indicated in their grant support and publications), and postdoctoral or industrial research experience. Specifically, we are seeking candidates with demonstrated expertise in the areas of information processing and plasticity in higher neural centers, biological neural network architectures, and/or adaptive and hierarchical biological control systems.

The successful applicant will be expected to develop a significant research program, to assist in the development of new teaching laboratories, and to teach graduate classes in his or her area of specialization. A complete curriculum vitae, names of three references, and a brief career goals and objectives statement should be sent to: **Dr. R. Normann, Chair, Department of Bioengineering, 2480 MEB, University of Utah, Salt Lake City, UT 84112. Telephone: 801-581-8528; FAX: 801-585-5361.** Applications will be accepted until December 15, 1995, or until a qualified applicant is identified.

The University is an Affirmative Action/Equal Opportunity Employer, encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

ASSISTANT OR ASSOCIATE PROFESSOR Eucaryotic Molecular Genetics/Molecular Ecology

Applications are invited for a **TENURE-TRACK** appointment in an expanding life sciences program. Candidates with training in eucaryotic molecular genetics, molecular ecology or molecular aspects of cell biology, or molecular recognition are encouraged to apply. We are seeking individuals capable of applying molecular genetics or biochemical methods to basic biological issues of invertebrate or vertebrate animals or plants. Preference will be given to investigators which regardless of research expertise are willing to teach general ecology courses as well as to participate in advanced graduate level courses in subjects related to the areas of the candidates' expertise. Successful candidates must have demonstrated research potential through a minimum of several years of postdoctoral experience and recent publications, and are expected to maintain an independent, nationally recognized, research program supported through extramural funding, and to participate in Ph.D. training. Strong oral and written communication skills are essential. Applicants should send curriculum vitae and a statement of research goals, and arrange to have three letters of recommendation sent to: **Shari Howell, Search Committee E, School of Biological Sciences, University of Missouri-Kansas City, Kansas City, MO 64110.**

Screening of applicants will begin December 1, 1995, and continue until the position is filled. *University of Missouri-Kansas City is an Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF MASSACHUSETTS Medical Center Department of Cell Biology

Applications are invited for a tenure-track faculty position at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. Candidates are sought with research interests in areas of molecular cell biology that include but are not restricted to cell cycle and growth control, cell structure and gene expression, transcriptional and post-transcriptional control, developmental regulatory mechanisms, neurosciences, human genetics, or signalling mechanisms. Selection will be based on excellence in research and the potential to maintain an outstanding independent research program. Appointees will participate in medical and graduate education as well as interdisciplinary research and teaching programs. Applicants should send a curriculum vitae, description of research objectives, and names and addresses of three references to: **Dr. Gary S. Stein, Chairman, Department of Cell Biology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655-0106.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer and encourages applications from female and minority candidates.*

Howard Hughes Medical Institute

Predoctoral Fellowships in Biological Sciences

1996 Competition

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

Fellowship Terms

- Full-time study toward the Ph.D. or Sc.D.
- Up to five years of support possible
- \$14,500 annual stipend
- \$14,000 annual cost-of-education allowance

Fields of Study

- Eligible fields:

biochemistry	genetics	pharmacology
biophysics	immunology	physiology
biostatistics	mathematical biology	structural biology
cell biology	microbiology	virology
developmental biology	molecular biology	
epidemiology	neuroscience	

Eligibility

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

Schedule

Application deadline: November 3, 1995
Awards announced: early April 1996
Fellowships start: June 1996–January 1997

1996 Program Announcements, Eligibility Guidelines, and Applications

Hughes Fellowship Program
The Fellowship Office
National Research Council
2101 Constitution Avenue
Washington, DC 20418, United States of America
Telephone: (202) 334-2872
Fax: (202) 334-3419
E-mail: infofell@nas.edu

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

POSITIONS OPEN

INSECT GENETICIST

The Department of Entomology, University of California, Riverside, has a tenure-track position available at the **ASSISTANT or ASSOCIATE PROFESSOR** level (20% teaching, 80% research). Qualifications include a Ph.D. and extensive research experience in insect genetics. Applicants for the Assistant Professorship must have at least one year of postdoctoral experience. Responsibilities: Establish a vigorous research program in insect genetics with the ultimate goal of developing genetic strategies for controlling insect pests and disease vectors. Topics suitable for research include, but are not confined to, basic insect genetics, the basic biology and genetics of endosymbiotic microorganisms, and the use of transposable elements or other genetic transformation systems for altering important insect phenotypes at the population level. Teaching duties include supervision of graduate students and participation in the Department's teaching program and other programs on campus. Opportunities also exist for participation in interdepartmental programs in Genetics, Environmental Toxicology, Neuroscience, and Microbiology. Send curriculum vitae, reprints, names and addresses of five references, and a statement of research experience and interests describing how your training and goals are in accord with the above objectives to: **B. A. Federici, Department of Entomology, University of California, Riverside, California 92521.** Application deadline is November 15, 1995. *University of California is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR EXPERIMENTAL ORGANIC CHEMISTRY AMHERST COLLEGE

A full-time, tenure-track **FACULTY POSITION** is available for a Ph.D. organic chemist beginning in July 1996. The successful candidate will be expected to teach organic chemistry and to participate in the teaching of introductory and upper-level undergraduate chemistry courses. Participation in interdisciplinary courses also will be encouraged. She/he will be expected to establish a vigorous research program in which undergraduates can substantively participate. The research program can be drawn from any area of experimental organic chemistry, including fields that span the boundaries between organic and other chemical disciplines. Amherst College, a private coeducational liberal arts college of some 1,570 students and 165 faculty located in the Connecticut River Valley of western Massachusetts, participates with Hampshire, Mount Holyoke and Smith Colleges, and the University of Massachusetts, in the Five-College Consortium. Applicants should submit a detailed curriculum vitae and a description of their teaching and research plans, and should arrange for the forwarding of three letters of reference, all to: **Professor David E. Hansen, Chairman, Department of Chemistry, Amherst College, Amherst, MA 01002,** by November 1, 1995. *Amherst College is an Affirmative Action/Equal Opportunity Employer and encourages women, minorities and disabled persons to apply.*

POPULATION/COMMUNITY ECOLOGIST

The Department of Zoology invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Although we rule out no study organism or environment, we prefer an experimental field ecologist with novel conceptual or theoretical approaches working in aquatic systems or with terrestrial invertebrates. Applications, including a curriculum vitae, no more than three reprints, statement of research and teaching interests, and the names and addresses of three recommenders, should be sent to: **Dr. R. T. Paine, Department of Zoology, Box 351800, University of Washington, Seattle, WA 98195-1800.** Priority will be given to applications received before 15 November 1995.

The University of Washington is building a culturally diverse faculty and strongly encourages applications from women and minority candidates. Affirmative Action/Equal Opportunity Employer.

The Department of Biochemistry, Duke University Medical Center invites applications for a faculty position at the level of **ASSISTANT PROFESSOR**. We are especially interested in biochemists with experience in structural biology. Send résumé, summary of research interest, and three letters of reference to: **Christian R. H. Raetz, Department of Biochemistry, Duke University Medical Center, Durham, NC 27710.** Consideration of applications will commence in November 1995. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

GROSS ANATOMIST

The Department of Anatomy and Cell Biology, University of Saskatchewan invites applications for a without term faculty appointment at the rank of **ASSISTANT PROFESSOR**. Applicants should have experience in teaching human gross anatomy and ideally histology and/or cell biology. The appointee will instruct medical and other life science students and actively participate in scholarly work/research. Preference will be given to candidates with experience or a strong interest in the design and implementation of computer-aided learning in clinical gross anatomy. Research fields in the department include cell, molecular, and developmental biology; kinesiology; morphometrics; and neurobiology. An application, including curriculum vitae, names of three referees, and a statement of previous teaching experience and scholarly work should be submitted by November 30, 1995 to: **Dr. G. D. Burkholder, Department of Anatomy and Cell Biology, College of Medicine, University of Saskatchewan, 107 Wiggins Road, Saskatoon, SK S7N 5E5, Canada.** *The University of Saskatchewan is committed to the principles of Employment Equity and welcomes applications from all qualified candidates. Women, people of aboriginal descent, members of visible minorities, and people with disabilities are invited to identify themselves as members of these designated groups on their applications. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.*

MICROBIOLOGIST

The Department of Biology at The University of Texas at Arlington (UTA) invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. An individual actively engaged in research in any aspect of the mechanisms of microbial pathogenicity is sought; however, outstanding candidates in related areas may be considered. Applicants must have a Ph.D., and postdoctoral experience is preferred. The appointee will participate in undergraduate teaching serving a growing allied health program, and in graduate teaching. The appointee is expected to develop a vigorous externally funded research program.

The Department of Biology offers B.S. degrees in Biology, Microbiology, and Medical Technology, and M.S. and Ph.D. degrees. The University of Texas at Arlington is a comprehensive university with about 23,000 students located between Dallas and Fort Worth. Applicants should submit curriculum vitae, selected reprints, a statement of research goals, and arrange for at least three letters of recommendation to be sent to: **Dr. W. C. McDonald, Chairperson, Search Committee, Department of Biology, Box 19498, The University of Texas at Arlington, Arlington, TX 76019.** Application review will begin October 16, 1995.

UTA is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

PROKARYOTIC MICROBIOLOGIST ANIMAL PHYSIOLOGIST/NEUROBIOLOGIST

The Biology Department of Santa Clara University invites applications to fill two tenure-track positions at the **ASSISTANT PROFESSOR** level beginning September 1, 1996. Positions are in (1) prokaryotic microbiology and (2) neurobiology, animal physiology, endocrinology, or related fields. Applicants working at the cell and molecular level are encouraged to apply. Applicants must have a Ph.D. with at least two years of postdoctoral experience. Previous teaching experience preferred. The successful candidate will be required to develop a strong research program which includes undergraduate participation.

The Department of Biology is within the undergraduate College of Arts and Sciences at Santa Clara University. The University stresses a strong liberal arts curriculum and seeks to create a learning environment that encourages rigorous enquiry and creative imagination. Excellence in both teaching and research is emphasized.

Applicant should submit curriculum vitae, three letters of recommendation, and a brief description of future research and teaching plans by November 15, 1995 to: **Dr. David Tauck, Chair, Search Committee, Biology Department, Santa Clara University, Santa Clara, CA 95053.** *Santa Clara University, a Jesuit Institution, is an Equal/Affirmative Action Employer, welcomes applications from women and persons of color.*

POSITIONS OPEN

COMPUTATIONAL BIOCHEMIST

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level in computational simulations of the structure and operation of biological macromolecules. A strong background and research publications are required in one or more of the following aspects of molecular modeling: structure and folding of proteins, docking of small molecules with macromolecules, proteins or nucleic acid molecular dynamics, and design of macromolecules. Candidates must have postdoctoral experience and be able to teach in the area of biochemistry. Starting in August 1996, the appointment in the Department of Biochemistry will be for nine months with two months of summer salary covered in the first two years. The faculty position will be funded half by the College of Arts and Sciences and half by the Agricultural Experiment Station. Applicants should send a résumé that includes relevant experience, future research plans, and the names of three references by October 30, 1995 to: **Thomas E. Roche, Head, Department of Biochemistry, Willard Hall, Kansas State University, Manhattan, KS 66506-3702.** *Kansas State University is an Equal Opportunity/Affirmative Action Employer and encourages diversity among its faculty.*

FUNCTIONAL MORPHOLOGY/ BIOMECHANICS

The Department of Biology, Wake Forest University, has a tenure-track position for an **ASSISTANT PROFESSOR** in Functional Morphology/Biomechanics. Responsibilities will include teaching in the lower division core sequence, an upper level course in area of specialization alternating with comparative vertebrate anatomy, and the establishment of a viable research program. Application must include names and addresses of three references, a curriculum vitae, and statements regarding research plans and teaching philosophy. Send to: **Dr. Gerald W. Esch, Chairman, Search Committee, Department of Biology, P.O. Box 7325, Wake Forest University, Winston-Salem, NC 27109.** Deadline is 1 December 1995. *Wake Forest is an Equal Opportunity Employer and is strongly committed to increasing the diversity of its faculty. Applications from women and minorities are encouraged.*

CALIFORNIA INSTITUTE OF TECHNOLOGY Division of Biology Assistant Professor—Developmental Genetics

The Division of Biology of the California Institute of Technology plans to hire an **ASSISTANT PROFESSOR** in the area of developmental genetic. We are looking for the best developmental geneticist, regardless of model system, experimental approach, or specific developmental problem. The term of initial appointment is normally four years, and appointment is contingent upon completion of a Ph.D. degree. Highly qualified applicants committed to a career in research and teaching are invited to send a curriculum vitae, reprints of publications, a list of at least three referees, and a description of research interests to: **Developmental Genetics Search Committee, c/o Ms. Gwen Murdock, Division of Biology 156-29, California Institute of Technology, Pasadena, CA 91125 USA.**

Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

The George Washington University (GWU) seeks to appoint a **Luce PROFESSOR** of Human Origins. Applicants should have 1) Ph.D. in anthropology, biological anthropology, anatomy or equivalent preparation focusing on human origins; 2) tenure or equivalent status; 3) distinguished record of research and publication; 4) a strong commitment to interdisciplinary research and student preparation in fields such as evolutionary biology, evolutionary ecology, paleobiology, and paleontology. The Luce Professor will work actively with the Human Origins Program at the National Museum of Natural History, Smithsonian Institution. Salary and benefits very attractive, consistent with University Professor status. Send vitae and names of references to: **Luce Search Committee, Department of Anthropology, The George Washington University, Washington, DC 20052.** Review of applications will begin on November 15, 1995 and will continue until the position is filled. *GWU is an Equal Opportunity Employer; women and minorities are encouraged to apply.*

NATIONAL INSTITUTES OF HEALTH

DIRECTOR DIVISION OF PHARMACOLOGY, PHYSIOLOGY AND BIOLOGICAL CHEMISTRY

The National Institutes of Health (NIH) invites applications for the position of Director, Division of Pharmacology, Physiology, and Biological Chemistry, National Institute of General Medical Sciences (NIGMS). This is a Civil Service position in the Senior Executive Service (SES) with a salary ranging from ES-1 to ES-4 level per annum (currently \$97,991 to \$113,180 including a locality allowance). Physicians may be eligible for a comparability allowance of up to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-Federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. A one-year probationary period must be served by the individual selected if not currently in the career SES.

The incumbent will be responsible for planning, organizing, and administering a large national program of grants, contracts, and fellowship awards in the biophysical and physiological sciences. This Division employs 13 Full Time Equivalent (FTE) staff members who administer a \$260 million biomedical research and research training support program. The Director evaluates the activities of the program, coordinates the efforts of the program with related scientific endeavors, and advises the Director, NIGMS, on program issues and priorities.

The vacancy announcement with mandatory and desirable qualifications can be obtained by calling (301) 496-1443. Applicants are required to submit a Bibliography, and either a Curriculum Vitae, Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), Resume, or any other written format which addresses the requirements indicated in this announcement, to the following address:

**NATIONAL INSTITUTES OF HEALTH
DIVISION OF SENIOR SYSTEMS
6120 EXECUTIVE BOULEVARD
SUITE 100
ROCKVILLE, MARYLAND 20852
ATTENTION: JANICE BALIN
(301) 496-1443**

Applications must be postmarked no later than November 24, 1995.

- Applicants with access to E-Mail may transmit their materials to the following E-Mail address: fewalker@helix.nih.gov
- Applicants with access to the Internet's World Wide Web may wish to browse the NIH Home Page, and may apply through the Web at the following URL: <http://www.nih.gov/news/>
- Application materials may be FAXed to (301) 402-6139 (Please limit FAXed materials to no more than 10 pages)

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

NIH is an Equal Opportunity Employer

Pharmaceutical Scientists

Join a Newly-established, Multi-disciplinary Team.

The R. W. Johnson Pharmaceutical Research Institute conducts research in therapeutic areas including anti-infectives, CNS, dermatology, hematology/oncology, immunology/inflammation, and women's health for the Johnson & Johnson companies: Cilag, Ortho-McNeil Pharmaceutical, Ortho Biotech and Ortho Dermatological.

We have the following immediate openings at our campus-like facilities in CENTRAL NEW JERSEY on our newly-established Exploratory Technology team directed at the development of new screening systems. The successful candidates will work with Drug Discovery and High Throughput Screening teams to establish novel technologies for the discovery of new therapeutic agents. Good written and verbal communication skills, and the ability to interface effectively (throughout Johnson & Johnson and with external researchers) are essential for Senior-level openings.

Sr. Scientist — Cell Biology

Requires a Ph.D. in Cell Biology, Biochemistry, Pharmacology or related discipline and at least 2 years of postdoctoral training demonstrating skills in cloning and protein expression, cell culture, receptor biology/signal transduction, including biological readouts of signal transduction. Experience with Gene Coupled Protein Receptor (GPCR) and/or protein kinases is a plus. Assay development skills (receptor binding, ELISA, BIAcore, CytoSensor) required.

We will look to you to provide expertise in the identification and development of appropriate targets and biological/biochemical responses within cellular signal transduction pathways. (Dept. 397)

Sr. Scientist — Biochemistry

Requires a Ph.D. in Biochemistry or related discipline and at least 2 years of postdoctoral training demonstrating skills in protein purification, bioanalytical chromatography (HPLC, CE), biophysical techniques (fluorescence polarization, energy transfer, MS) and chemical/enzymatic protein modification. Familiarity with environmentally responsive dyes and probes, and experience in molecular biology and assay development are a plus.

We will look to you to lead a collaborative effort to develop advanced detection methodologies and formats; and then be responsible for the integration of novel, recombinant and/or modified proteins (or other) targets into innovative assays using these formats and technologies. (Dept. 398)

Associate Scientist/Research Associate — Biology

Requires a BS/MS in Biology or related discipline with at least 2 years of laboratory experience demonstrating skills in both molecular biology and tissue culture. Immunoassay, electronics and/or bioanalytical experience is a plus.

Your responsibilities will include gene cloning, growth transfection and selection of a wide variety of eukaryotic cells. You will work with scientists and engineers throughout Johnson & Johnson toward the integration of advanced electronic and/or optical analytical technologies into assay development. (Dept. 399)

We offer competitive salaries and comprehensive benefits including medical/dental insurance, 401(k) plan and our LIVE FOR LIFE Wellness Program with on-site fitness center. Please send a copy of your resume (including salary requirements) to: Dept # indicated above for the position of your interest, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

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



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PHARMACEUTICAL RESEARCH INSTITUTE
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POSITIONS OPEN

BIOCHEMISTRY/MOLECULAR BIOLOGY MEHARRY MEDICAL COLLEGE

Faculty positions are available in 1995/1996 in the Department of Biochemistry, at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Applicants must have a Ph.D. or M.D. degree, or both, and appropriate formal postdoctoral research experience. Joint appointments in clinical science are possible. We are seeking individuals who have potential or demonstrated competence in the use of molecular biological or biophysical approaches to conduct research in molecular medicine, or on fundamental biochemical/cell biological problem(s). Selected individuals must also be capable of, and committed to making significant contributions to teaching and administrative functions of the Department of Biochemistry. Successful applicants will be expected to develop/maintain a funded research program of high quality and to substantially participate in the graduate and professional (medical, dental and applied health) school teaching programs of the Department. Applicants should send curriculum vitae, a statement on teaching interests, names of four individuals who may be contacted for reference, and a summary (not exceeding four pages) of potential research project(s) to: **Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208. An Equal Opportunity/Affirmative Action Employer.**

Microbial Pathogenesis/Microbiology. The Department of Microbiology and Immunology at the Uniformed Services University of the Health Sciences (USUHS) invites applications for a tenure-track **ASSISTANT PROFESSOR** position. Review of applications will begin September 1995 and continue until November 1, 1995. Position is available January 1996. Doctoral degree and postdoctoral research experience in molecular mechanisms of bacterial pathogenesis are required. Responsibilities include development of a productive research program in bacterial pathogenesis plus team teaching in departmental medical and graduate courses. Research facilities, start-up support, and environment for professional development are excellent. Salary is for a full time, 12-month appointment. Submit curriculum vitae and bibliography, a one-to-two page description of proposed research program, and names of three professional references to: **Alison D. O'Brien, Ph.D., Chair, Search Committee, c/o Civilian Human Resources (CHR), Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Telephone: 301-295-3400; FAX: 301-295-3773.** Foreign nationals will only be considered if qualified U.S. citizens are not available. *USUHS is an Equal Opportunity/Affirmative Action Employer.*

ECOLOGY/EVOLUTIONARY BIOLOGY ASSISTANT PROFESSOR

The University of Rochester anticipates an opening for an **ASSISTANT PROFESSOR** of Biology in the area of ecology or evolutionary biology. We are particularly interested in individuals working with microbial systems, although we encourage applications from all areas of ecology and evolution. Applicants should submit, as soon as possible, but before October 31, 1995, a curriculum vitae, statement of research interests, and ask three references to send letters of recommendation to: **Chair, Ecology/Evolution Search Committee, Department of Biology, University of Rochester, Rochester, NY 14627.**

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

FACULTY POSITIONS IN IMMUNOLOGY Duke University Medical Center

The Department of Immunology invites applications for two **TENURE-TRACK FACULTY POSITIONS** at all levels. Candidates working in lymphocyte biology and lymphocyte development are encouraged to apply.

Interested individuals should send a curriculum vitae, a statement of research interests, and the names of three references by December 1, 1995 to:

**Dr. Thomas F. Tedder
Department of Immunology
P.O. Box 3010
Duke University Medical Center
Durham, NC 27710**

Duke University Medical Center is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CLEVELAND STATE UNIVERSITY CENTER FOR ENVIRONMENTAL SCIENCE, TECHNOLOGY AND POLICY

The Center for Environmental Science, Technology, and Policy at Cleveland State University seeks a **DIRECTOR**. He or she must hold a Ph.D. in an area directly related to critical environmental issues and be qualified to hold an academic appointment in one or more university departments. Applicant must demonstrate strong academic background, including ability to see the "big picture" with regard to environmental issues, including broad multidisciplinary interests, ability to raise funds, experience in project management, and experience in building and working with multidisciplinary groups. For additional qualifications, duties, and detailed information about both CSU and the Center, go to <http://bones.asic.csuohio.edu/cstp/cstp.htm>. Applicants must submit a letter of application and complete résumé, including names of three references, to: **Dr. W. B. Clapham, Jr., Interim Director, CESTP, Office of the Provost, Cleveland State University, East 24th and Euclid Avenue, Cleveland, OH 44115.** Consideration of complete applications will begin on October 15, 1995, and will continue until the position is filled. *Cleveland State University is an Affirmative Action/Equal Opportunity Employer committed to nondiscrimination. Minority/Female/Disabled/Veteran encouraged.*

MICROBIOLOGY

Tenure-track **ASSISTANT PROFESSOR** in fall 1996, to teach B.S./M.S. courses in general and nursing microbiology and specialty courses in microbiology that complement our medical technology area, our MBRS program, and our interest in microbial research in an ethnically and culturally diverse campus. Expectations include a strong commitment to student advising and mentoring and developing and sustaining a strong student-oriented, independently-funded research program. Ph.D. required, university teaching and post-doctoral experience preferred. For position #96-97 Microbiology TT, submit curriculum vitae, a cover letter describing teaching and research interests, transcripts, and arrange for three letters of reference to be sent to: **Microbiology Search Committee, Department of Biological Sciences, California State University, Hayward, CA 94542.** Application review begins 22 November 1995. *California State University, Hayward is an Equal Opportunity Employer and does not discriminate on the basis of age, race, color, national origin, gender, sexual orientation or disability.*

FACULTY POSITION DEPARTMENT OF MOLECULAR AND MEDICAL GENETICS Oregon Health Sciences University Portland, Oregon

Applications are invited for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The Department seeks individuals who have demonstrated excellence in research. Preference will be given to candidates with research interests in molecular, cellular or developmental genetics of either simple or complex eukaryotes, including humans. Applicants should include a curriculum vitae, a brief description of research accomplishments, a brief description of future research goals and the names of three references.

Deadline is October 31, 1995.

Please address applications to:

**Faculty Search Committee
Department of Molecular and
Medical Genetics, L103
Oregon Health Sciences University
3181 SW Sam Jackson Park Road
Portland, OR 97201-3098**

The Smell and Taste Center of the University of Pennsylvania is seeking candidates for the position of **ASSISTANT PROFESSOR** of Psychology within the Department of Otorhinolaryngology: Head and Neck Surgery (Research Track). This individual will be expected to initiate an independent research program, as well as manage an on-going effort in animal drug/olfactory behavioral studies. Knowledge of electronics and computer programming essential. Experience in pharmacology and operant conditioning desirable. Send curriculum vitae and names of five references to: **Richard L. Doty, Ph.D., Director, Smell and Taste Center, 5 Ravdin Pavilion, University of Pennsylvania Medical Center, 3400 Spruce Street, Philadelphia, PA 19104-4283. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

HEAD, DEPARTMENT OF CHEMISTRY University of Tennessee, Knoxville

Applications are invited for persons qualified for appointment as **FULL PROFESSOR** to serve as Head of the Department of Chemistry at the University of Tennessee, Knoxville, a Carnegie I Research Institution. Candidates must have a Ph.D. or equivalent degree in chemistry or a related field, excellent interpersonal and communication skills, and a nationally or internationally recognized record of scholarly research. The successful candidate is expected to provide strong leadership in enhancing the stature of the research and instructional programs of this nationally recognized Department, and in representing the Department to outside constituencies. The Head is also expected to maintain a competitive, externally-funded research program. The Department currently consists of 31 full-time faculty, 25 staff, approximately 35 postdoctoral associates, and 115 graduate students. The faculty has a strong commitment to quality graduate and undergraduate education, and maintains close research relationships with Oak Ridge National Laboratory. Applicants should submit a letter of interest describing how their qualifications meet the position requirements, a curriculum vitae, and names of five references, to: **Department Head Search Committee, Department of Chemistry, University of Tennessee, Knoxville, TN 37996-1600.** Consideration of completed applications will begin on November 15, 1995, and will continue until the position is filled. *University of Tennessee, Knoxville is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.*

The Department of Microbiology and Immunology, Uniformed Services University of the Health Sciences (USUHS) with Ph.D. graduate education program wishes to fill two **TENURE-TRACK POSITIONS** in the area of animal virology with preference in viral pathogenesis at the assistant and/or associate professor levels. Hard money salary, excellent research facilities, and start-up support. Doctoral degree and postdoctoral research experience in virology or related field are required. Candidates for Associate Professor must have demonstrated research productivity and current research funding. Responsibilities include: developing an independently funded research program in virology, participating in professional and graduate student teaching, and training pre- and postdoctoral scientists. Submit curriculum vitae, letter describing research and teaching interests and career objectives, and the names and addresses of three professional references to: **Henry C. Wu, M.D., Ph.D., Professor and Chair of Microbiology and Immunology, c/o Civilian Human Resources (CHR), Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Telephone: 301-295-3400; FAX: 301-295-3773.** Foreign nationals will only be considered if qualified U.S. citizens are not available. *USUHS is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT/ASSOCIATE PROFESSOR Division of Rheumatology and Clinical Immunology

The Department of Medicine, University of Pittsburgh School of Medicine, invites applications for three tenure-track positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Candidates must have an M.D., M.D./Ph.D., or Ph.D., postdoctoral research experience, and a well-developed plan for an independent basic or clinical research program. Applications are invited from individuals with training in the areas of molecular immunology, immunogenetics or related basic sciences with a strong interest in the basic mechanisms of autoimmunity and from individuals with training in clinical epidemiology or health services research. Applicants should submit curriculum vitae, a statement of research interests and plans, selected reprints, and a list of three references to: **Timothy M. Wright, M.D., Chief, Division of Rheumatology and Clinical Immunology, University of Pittsburgh School of Medicine, Suite 502, Kaufmann Building, Pittsburgh, PA 15213. Telephone: 412-692-4343. University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.**

CHANGING THE PRACTICE OF MEDICINE THROUGH MOLECULAR BIOLOGY.



INCYTE PHARMACEUTICALS is an innovative, public biotech company applying the tools of computer science to high-throughput cDNA sequencing, bioinformatics, and gene discovery. We offer the following exciting opportunities to join us in the development and commercialization of our comprehensive genomic database.

SCIENTIST, TECHNOLOGY DEVELOPMENT

Ph.D. Genetics or Molecular Biology with 2+ years of post-graduate experience to develop new sequencing chemistries, integrate them into our production operation, and evaluate new technologies. Experience with automated sequencing, robotics, and enzymology of sequencing strongly preferred. Ref: TD

QA MANAGER

BS/BA and 3+ years' experience in DNA sequencing. Experience with automated ABI sequencing equipment essential. Will maintain quality of sequences received from 3 production shifts and troubleshoot and analyze results obtained in production process from template preparation through data analysis. Ref: QA

SCIENTIST, FULL-LENGTH SEQUENCING

This entry-level Scientist will perform cloning and analysis of selected cDNAs discovered in our high-throughput sequencing operation. Ph.D. in Molecular Biology or relevant field required; experience in database analysis highly desirable. Ref: FLS

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Amgen is the world leader in developing and delivering innovative, cost-effective therapeutics based on advances in cellular and molecular biology. Our research environment emphasizes collaboration, intellectual honesty, scientific integrity, and a diverse and supportive culture.

POSTDOCTORAL FELLOW, MOLECULAR BIOLOGY *Boulder, CO*

Using radioactive ligands and expression cloning techniques, this individual will identify genes and encode novel biochemical targets. Qualified candidates will have a Ph.D. in Molecular Biology or related field and experience in inflammation biology with an emphasis on gene isolation, cloning, and expression; PCR; and hybridization.

To apply for the POSTDOCTORAL FELLOW position, please mail your resume/c.v. to: Amgen Boulder, Human Resources Dept., Job Code: OXP-SC-2893, 3200 Walnut Street, Boulder, CO 80301. Principals only, please.

RESEARCH ASSOCIATE *Thousand Oaks, CA*

This individual must have a BA in Biology, with typically 1-2 years' experience in molecular biology applications. MS in Molecular Biology, Biochemistry, or Microbiology, with 2+ years' experience in research, and a background in yeast molecular biology/genetics preferred.

To apply for the RESEARCH ASSOCIATE position, please mail or your resume/c.v. to: Amgen, Staffing, Job Code: OXP-SC-2820, Amgen Center, Thousand Oaks, CA 91320-1789. Fax: (805) 499-9981. Principals only, please.

POSTDOCTORAL FELLOW, YEAST MOLECULAR BIOLOGY *Thousand Oaks, CA*

Qualified candidates will have a Ph.D. in Molecular Biology, Genetics, Biochemistry or related field. Experience in the area of yeast molecular biology with specialization in transcriptional regulation and/or signal transduction is required. Experience in tissue culture techniques is desirable.

To apply for the POSTDOCTORAL FELLOW position please mail or fax your resume/c.v. to: Amgen, Staffing, Job Code: OXP-SC-2823, Amgen Center, Thousand Oaks, CA 91320-1789. Fax: (805) 499-9981. Principals only, please.

Please consult our on-line Job Bulletin Board at <http://www.bio.com> for information on other career opportunities available at Amgen.

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POSITIONS OPEN

ENDOWED CHAIR CELL BIOLOGIST

The Department of Biology at Willamette University is seeking a cell biologist with a strong background in molecular techniques to become the first recipient of the **WATANABE CHAIR OF SCIENCE**. Salary for this tenure-track, senior rank position is competitive.

Qualifications include a doctoral degree, a demonstrated commitment to and record of excellence in undergraduate teaching, a commendable record of scholarship, and a desire to make a distinctive contribution to a selective liberal arts college. Equipped research space and teaching labs in the new Olin Hall of Science and an endowed undergraduate research program enhance opportunities for interaction with quality undergraduate students.

Applicants with a strong record are encouraged to contact: **Dr. G. Thorsett, Biology Department, Willamette University, 900 State Street, Salem, OR 97301** or Email: gthorsett@willamette.edu. To apply, send a letter of interest, a curriculum vitae, and the names and addresses of five references. Review of applications will begin November 1, 1995, and continue until the position is filled.

Willamette University is an Affirmative Action/Equal Opportunity Employer.

COEVOLUTION: GLASER DISTINGUISHED VISITING PROFESSORSHIP IN BIOLOGICAL SCIENCES

Applications are solicited from distinguished scientists interested in visiting the Department of Biological Sciences at Florida International University (FIU), the State University of Florida at Miami. For the 1996 Glaser **VISITING PROFESSORSHIP** we are specifically interested in scientists expert in the area of Coevolution. The Glaser Professor will offer a short course (ten lectures over a two to three week period sometime during the spring 1996 semester), give a departmental seminar, and interact with faculty and students. Remuneration is \$8000. FIU is a growing, dynamic public university with 25,000 students. The Department of Biological Sciences has 30 faculty and 70 graduate students (M.S. and Ph.D.). Apply with letter of intent, brief course outline, résumé, and reprints of three relevant publications before 23 October 1995, to: **Dr. Philip Stoddard, Glaser Committee Chair, Department of Biological Sciences, Florida International University, Miami, FL 33199**. Women and minorities are especially encouraged to apply. FIU is an Affirmative Action/Equal Opportunity Employer.

WHEATON COLLEGE BIOLOGY DEPARTMENT

The Wheaton College Biology Department is seeking applications for **TWO TENURE-TRACK POSITIONS**: 1) Strohschein Endowed Chair and Chair of Biology at the associate or professor level with experience managing academic programs; 2) Assistant or associate professor. Successful applicants for these positions should have teaching and/or research experience in two or more of the following areas of biology: botany or zoology, electron microscopy, science education, introductory biology and cross-disciplinary approaches. Involvement could include teaching at the Wheaton College Science Station Program in the Black Hills of South Dakota. Application forms should be requested from and nominations sent to: **Dr. Rodney Scott, Interim Chair, Department of Biology, Wheaton College, Wheaton, IL 60187**. Closing date is November 17, 1995. Wheaton College is an evangelical Christian liberal arts college whose faculty and staff affirm a Statement of Faith and adhere to lifestyle expectations. *The College complies with federal and state guidelines for nondiscrimination in employment. Women and minority applicants are encouraged to apply.*

CHEMICAL BIOLOGY FACULTY POSITION

Tenure-track **FACULTY POSITION** in a multidisciplinary department comprised of chemists, biologists and chemical engineers. Areas of interest are: Cell Biology, Molecular Biology and Biochemistry. Ph.D. required in an area of bioscience related to the department's interests; postdoctoral and teaching experience are assets. Send résumé, statements of research and teaching interests, and three letters of recommendation to: **Professor Francis T. Jones, Department of Chemistry, Stevens Institute of Technology, Hoboken, NJ 07030**. *Stevens Institute of Technology is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOCHEMISTRY FACULTY POSITION University of Wisconsin-Madison

The Department of Biochemistry at the University of Wisconsin-Madison invites applications for a **TENURE-TRACK POSITION** from individuals whose research interests are in one of the following three areas: 1) molecular structure determination using NMR spectroscopy, crystallography, or other physical methods; 2) eukaryotic biology; and 3) plant molecular biology/biochemistry. The appointment will be at the assistant professor level, but in the case of the structural biochemistry position it can be at the associate level.

The successful candidate is expected to develop a vigorous, independent research program and participate in teaching undergraduate and graduate courses in general and specialized biochemistry. Depending on the candidate's research interests, the position could be joint with the Enzyme Institute, with the tenure home in Biochemistry. Salary will be on a 12-month basis and will be commensurate with the candidate's experience. Applications, including curriculum vitae, list of publications, summary of past work and accomplishments, and a statement of plans for future research, should be sent to: **Professor Hector F. DeLuca, Chairman, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706, USA**. In addition, applicants should arrange for at least three letters of reference to be mailed to the same address. Application materials should be received by October 20, 1995. *The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer. Minority and women candidates and all other qualified persons are encouraged to apply. Under Wisconsin Statutes, names, titles, and addresses of applicants and nominees may be subject to public release upon request.*

Announcement **FACULTY POSITION OPENINGS**. Assistant Professor and Assistant/Associate Professor. Cellular and Molecular Physiology. The Department of Physiology, University of Wisconsin-Madison, invites applications for tenure-track positions at the rank of Assistant Professor or Associate Professor. The Department is developing a focus in membrane transport physiology. We specifically seek applicants who study carrier-mediated transport or vesicular transport across cell membranes, although outstanding applicants in other areas of molecular physiology will be considered. Opportunities for participation in campus-wide interdisciplinary research and training programs are excellent. Successful candidates will teach renal, gastrointestinal or respiratory physiology and will participate fully in the graduate and professional teaching programs of the department.

Applicants should send curriculum vitae, a one or two page summary of research interests and plans, and three letters of reference to: **Dr. Richard L. Moss, Chair, Department of Physiology, University of Wisconsin, 1300 University Avenue, Madison, WI 53706**. Applications will be accepted until October 19, 1995. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.*

UNIVERSITY OF CALIFORNIA, DAVIS DEPARTMENT OF CHEMISTRY

Invites applications for a tenure-track position beginning fall 1996, for an X-ray Crystallographer with research interests in the area of biological macromolecules, broadly defined to include proteins, nucleic acids, membrane assemblies, and other complex natural structures. This position is at the **ASSISTANT PROFESSOR** level and is subject to final budgetary approval. Successful candidate will demonstrate exceptional promise for active, independent research programs and for teaching. Applicants must provide a letter, to be sent to: **Faculty Recruitment Committee (X-ray), Room 108, Chemistry Department, University of California, Davis, CA 95616**, indicating the position they are seeking. They should also include a curriculum vitae (including a list of publications), a summary of research objectives, and the names, addresses, fax and telephone numbers of three referees. The position is open until filled, but to ensure consideration, applications should be received by October 31, 1995. *The University of California, Davis, is an Affirmative Action/Equal Opportunity Employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences based on gender, cultural ethnicity, disability, and sexual orientation. In that spirit, we are particularly interested in receiving applications from individuals who would enhance the diversity of our workforce.*

POSITIONS OPEN

FACULTY POSITION BACTERIAL PATHOGENESIS University of Miami School of Medicine

The Department of Microbiology and Immunology at the University of Miami School of Medicine invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. An individual utilizing a molecular approach to study any aspect of bacterial pathogenesis is sought. All applicants should have several years of postdoctoral experience and a commitment to establishing an externally funded independent research program. Quality research facilities, start-up funds, and salary will be provided to the appointee. Applicants should have a Ph.D., M.D., or equivalent degree. The appointee will be expected to participate in graduate and medical training programs. Interested applicants should send a curriculum vitae, a statement describing research achievements and future research goals, relevant reprints, and the names of three references to: **Bacterial Pathogenesis Search Committee, University of Miami School of Medicine, Department of Microbiology and Immunology (R-138), P.O. Box 016960, Miami, FL 33101**. The review of applications will continue until the position is filled. *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*

GENETICIST

Rank open; **TENURE-TRACK** or with tenure, depending on rank, beginning July 1, 1996. Preference given to candidates studying genetic processes using molecular approaches. The candidate is expected to establish an active research program, supervise senior undergraduate research projects, and teach approximately one and one-half courses per semester, including a co-taught introductory biology course (Molecules, Genes, and Cells) and an upper-level course in genetics. Ph.D. required and postdoctoral experience expected.

Send curriculum vitae, statement of research and teaching interests, and three letters of evaluation by December 1, 1995 to: **Patrick Williamson, Chair, Department of Biology, Amherst College, Amherst, MA 01002-5000**.

Amherst College, a private coeducational liberal arts college of some 1570 students and 165 faculty located in the Connecticut River Valley of Western Massachusetts, participates with Hampshire, Mount Holyoke, and Smith Colleges and the University of Massachusetts in the Five-College Consortium. *Amherst College is an Affirmative Action/Equal Opportunity Employer, and encourages women, minorities, and disabled persons to apply.*

TENURE-TRACK POSITION Molecular Modeling of Human Disease

A **TENURE-TRACK POSITION** is available to direct a research program that will complement ongoing research in the development of models of human disease and gene therapy. Candidates should have experience with molecular genetic manipulations including gene targeting and transgenic animal generation. Candidates will be appointed in the Department of Microbiology and Immunology and in the newly formed Division of Molecular Medicine and Gene Therapy. Candidates holding a doctoral degree(s) and at least three years of postdoctoral experience are eligible. To be considered for the position, please send a cover letter, a curriculum vitae with bibliography, a two page statement of research interests, and three letters of recommendation to: **Howard J. Federoff, M.D., Ph.D., Division of Molecular Medicine and Gene Therapy, Department of Neurology, University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642**. *The University of Rochester is an Equal Opportunity Employer.*

FACULTY POSITION in Cell or Developmental Biology. The Department of Embryology of the Carnegie Institution of Washington seeks a faculty member with a nascent or established research program in any aspect of cell or developmental biology. The Department of Embryology is part of a nonprofit research institution (Carnegie Institution of Washington) and is affiliated with and situated on the campus of The Johns Hopkins University in Baltimore. Applicants should send a curriculum vitae, statement of research interest, and have three letters of recommendation sent to: **Director, Department of Embryology, Carnegie Institution of Washington, 115 West University Parkway, Baltimore, MD 21210**. *An Equal Opportunity/Affirmative Action Employer.*

SCIENTISTS



Genentech is a pace-setting international biotechnology company that discovers, manufactures, and markets human pharmaceuticals for significant unmet medical needs. We currently have the following excellent opportunities available for experienced Scientists.

Scientist/Senior Scientist Hybridoma Group

The Hybridoma Group at Genentech produces, characterizes and applies monoclonal antibodies to support therapeutic proteins in Research, Development and Marketed Products. We are seeking highly motivated individuals with experience in one of the following general areas: immunochemistry, assay development, immunoglobulin gene molecular biology or cell biology. Qualified candidates should have a PhD or equivalent in Immunology, Biochemistry or Molecular Biology. Additionally you should have 1-2 years' relevant scientific experience for the Scientist level position and at least 5 years for the Senior Scientist designation. Senior Scientist candidates must also have a proven track record of managing at least 3 individuals and the desire to lead an aggressive group of 3-5 RAs in the development of novel monoclonal antibodies. Job #CSBF1 - Senior Scientist. Job #CSBF2 - Scientist.

Scientist Cell Banking and Testing

Working in collaboration with other Genentech Cell Biologists in a development environment, you will be responsible for cell banking including optimization of conditions, cryopreservation, cell culture and cell characterization. Experience with GMP and IND and/or PLA filings is highly desirable to help meet our development goals. This position requires a PhD and at least 2 years' postdoc experience; industrial experience is preferred. Broad based experience in cell culture and molecular biology and familiarity with cell genetics also required. Job #VSMD

Scientist/Associate Scientist QC Methods Development

You will be responsible for the evaluation, optimization and validation of analytical test procedures. This includes preparing validation protocols and reports, providing support for technology transfer and method troubleshooting and assessing new technologies for their applicability in a QC environment. Requirements include a PhD in Analytical Chemistry or equivalent and at least 3 years' experience in protein chemistry. Extensive protein purity and activity assessment skills, strong communication skills and the ability to effectively interact with multidisciplinary groups is essential. Experience with cGMP and QC would be a plus. Job #VSKS

Genentech offers an excellent salary and benefits package to full time employees that includes fully paid medical/dental/vision coverage, free health club membership, and Company stock purchase opportunities. For consideration, send your resume indicating appropriate Job # to Genentech, Inc., Human Resources Dept., 460 Pt. San Bruno Blvd., South San Francisco, CA 94080. Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

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Pfizer Inc, a Fortune 100 company, the world leader in Pharmaceutical and Animal Health research can offer you a world of challenge, opportunity and achievement where you can make a significant contribution to the research and development of exciting new products to be introduced in the coming decade...and the new century.

Animal Health Research

RESEARCH ASSISTANTS-M.S.

Growth Hormone Research- The specific area of research will focus primarily on the characterization and testing of peptides which improve the performance of animals. Duties will include the development of biological and immunological assays for the detection of growth promotants.

Qualified candidates for this position should hold a M.S. in Protein Biochemistry or a related discipline or equivalent technical and theoretical depth with a minimum of 2 years experience in biochemical assays, HPLC, radio-immuno assays, and SDS-PAGE electrophoresis. Knowledge in molecular biology and cell culture techniques desired. Ref. # 1036

Immunology Research- This position will involve the *in vitro* and *in vivo* evaluation of immune stimulant and immune suppressive compounds. Duties will include cell based assays of various immune cell function, such as cell proliferation, adhesion molecule expression, phagocytosis and bactericidal activity by PMNs, etc. Techniques will include thymidine incorporation, flow cytometry, and cell culture.

Qualified candidates will have a M.S. in Immunology or a related discipline or equivalent technical and theoretical depth in aseptic tissue culture, cell proliferation assays, flow cytometer experience and molecular biology. Ref. # 1038

Pharmaceutical Research

RESEARCH SCIENTISTS Ph.D.

Allergy & Respiratory Biology- The Allergy and Respiratory Diseases Biology Team is seeking a Doctoral level Biochemist with expertise in the areas of enzyme kinetics and cytokine signal transduction. Candidate must possess a Ph.D. and a minimum of 2 years experience. Ref. # 1039

Immunology- Qualified candidates will have a Ph.D. in Immunology, Biochemistry or related field with two years research experience in biochemical mechanisms of antigen presentation, co-stimulation or energy. Ref. # 1040

RESEARCH ASSISTANTS BS/MS

Molecular Biology- The candidate we seek will possess strong experience in molecular and cellular biology. Research will be in the areas of Immunology and Cancer. We require a minimum of a BS degree and 3 years of experience or MS degree. Ref. # 1041

Immunology- BS/MS in Biochemistry, Immunology or related field with experience in molecular biology, protein chemistry, enzymology, cell biology, to be applied to research in signal transduction or antigen presentation. Ref. # 1042

POSTDOCTORAL

Immune Regulation- Three year postdoctoral position, selected candidate will spend 18 months at Pfizer and 18 months at a co-sponsoring University. You will be involved in an independent project focusing on molecular aspects of immune regulation. An emphasis is placed on publication and individual scientific development. Travel to scientific meetings and presentation of research results will be supported by an annual travel stipend. Selected candidate will have completed a Ph.D. program and have experience with molecular and cellular biology. Experience with transgenic animals is a plus. Ref. # 1043

In addition to a stimulating environment, we offer competitive salaries and a flexible benefits package, including relocation assistance to our southeastern Connecticut shoreline community. Please submit CV or resume suitable for electronic scanning (i.e., eliminate italics, bullets, bolds, underlines and staples), indicating appropriate reference number to: **Manager of Employment, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.**

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POSITIONS OPEN

FACULTY POSITION Department of Biochemistry and Graduate Program in Developmental Biology

A **TENURE-TRACK** faculty position in Developmental Biology is available in the Department of Biochemistry at the Baylor College of Medicine. This position is supported by funds from the Markey Charitable Trust. The Department maintains a wide range of research interests in molecular genetics, developmental biology, cell biology, and protein structure and function. The Graduate Program in Developmental Biology consists of over twenty faculty whose research covers most major areas of modern developmental biology. Interested individuals should send their curriculum vitae, preprints and reprints of significant and recent work, a statement of present and future research activity, and arrange to have three letters of recommendation sent to:

Developmental Biology Search Committee
Department of Biochemistry
Baylor College of Medicine
One Baylor Plaza
Houston, TX 77030

Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

UCLA announces a faculty position for an experimental who works in physics with applications to the geosciences. The appointment is expected to be at the tenured level of **ASSOCIATE** or **FULL PROFESSOR**; however, for an exceptional candidate, a tenure-track, Assistant Professor appointment would be considered. The faculty position is envisioned to be an interdisciplinary appointment associated with the following academic units: the Institute of Geophysics and Planetary Physics, the Department of Earth and Space Sciences, and the Department of Physics and Astronomy. The successful candidate is expected to establish an active research program and to teach at both the undergraduate and graduate levels. Applicants should send a curriculum vitae, with complete list of publications, and the names and addresses of five referees to:

Professor William Kaula
Chair, Search Committee
Institute of Geophysics and Planetary Physics
University of California, Los Angeles
Los Angeles, CA 90095-1517

Applications should arrive by November 1, 1995. The University of California is an Equal Opportunity/Affirmative Action Employer.

The UCLA Jonsson Comprehensive Cancer Center and the College of Letters and Sciences at UCLA solicit applications for a tenure-track position as an **ASSISTANT PROFESSOR**. Applicants with molecular and biochemical interests in the areas of signal transduction, oncogenes/tumor suppressor genes, and/or cell-cycle regulation are especially encouraged to apply. Academic appointment will be in the Department of Microbiology and Molecular Genetics or in the Department of Molecular, Cell, and Developmental Biology, depending on the specific research interests of the appointee, with teaching opportunities at both graduate and undergraduate levels. Applicants should submit a curriculum vitae and a statement of future research plans, and have three letters of reference sent to: **Judith Mayfield, UCLA-Jonsson Comprehensive Cancer Center, 8-684 Factor Building, 10833 Le Conte Avenue, Los Angeles, CA 90095-1781**. Closing date: November 1, 1995. UCLA is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH FELLOWS/RESEARCH SCIENTISTS. Positions available immediately to study molecular mechanisms of drug resistance in cancer cells including MDR, Bcl-2/Bax and related proteins, p53 and protein kinase C. Focus will be on developmental therapeutics for modulation of drug resistance mechanisms by molecular approaches with future intent to bring novel therapies to the clinic. Strong background in molecular biology, pharmacology and biochemistry desired. M.D. or Ph.D. degree required. Please send curriculum vitae and names of three references to: **Robert L. Fine, M.D., Medical Oncology, Columbia University, P&S, 630 West 168 Street, BB 20-05, New York, NY 10032**. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION G PROTEINS Geisinger Clinic, Weis Center for Research

Two **POSTDOCTORAL POSITIONS** are available to study the G protein γ subunits, a multigene family of diverse structure and function, in the laboratory of **Dr. Janet Robishaw**. Projects include: 1) structural and functional analysis; 2) subcellular localization; and 3) genomic organization. Previous experience in molecular biology and/or biochemistry is required. Interested candidates should send a curriculum vitae, names of three references, and a brief summary of research experience to: **Geisinger Human Resources (JDR), 100 North Academy Avenue, Danville, PA 17822-1529**. Equal Opportunity Employer/Minority/Female/Disabled/Veteran.

POSTDOCTORAL RESEARCH ASSOCIATE

A position for a **POSTDOCTORAL RESEARCH ASSOCIATE** is available for a recent Ph.D. graduate with two to three years of postdoctoral experience to study regulation of chemokine mediated recruitment of inflammatory cells.

Applicants should have a strong background in molecular and cellular biology techniques including cloning, immunocytochemistry, PCR techniques, Western, Northern and Southern blots, and should be skilled in mammalian cell culture. Salary commensurate with experience. Send curriculum vitae with three references to: **Vena Antony, M.D., VAMC-111P, Division of Pulmonary and Critical Care, 1481 West 10th Street, Indianapolis, IN 46202**. FAX: 317-267-8762; Telephone: 317-269-6313. Indiana University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the mechanism and nature of interprotein interactions between cytochrome P450 and its redox partners. A molecular biologist/enzymologist is required to efficiently generate and characterize mutant proteins regarding their structure and function and protein-protein interactions. Send résumé and three letters of reference to: **L. Waskell, M.D., Ph.D., University of California, San Francisco, VA Medical Center, Department of Anesthesia, 4150 Clement Street, San Francisco, CA 94121**.

POSTDOCTORAL POSITION Bacterial Multidrug Transporters

Representative previous publications are: *Proc. Natl. Acad. Sci. USA*, **88**, 4781; *J. Biol. Chem.*, **269**, 28506; *J. Bacteriol.* **177**, 3904. NIH funding and modern research facilities. Interested candidates with experience in cloning and protein biochemistry should send résumé and names of three references to: **Dr. Alex Neyfakh, M/C 781, University of Illinois at Chicago, 833 South Wood Street, Chicago, IL 60612**. FAX: 312-996-7107; Email: u55431@uicvm.uic.edu. University of Illinois is an Affirmative Action/Equal Opportunity Employer.

The Division of Gastroenterology at the Ohio State University School of Medicine is inviting applications for two **POSTDOCTORAL POSITIONS** to commence immediately. The candidates should have a Ph.D. in biochemistry, physiology or molecular biology. Expertise in the following areas is desirable: electrolyte transport, protein chemistry, patch clamping, and routine molecular biology techniques such as construction of cDNA and genomic libraries. Please send a curriculum vitae and three references to: **Linda Graff, Administrator, Room N214 Doan Hall, 410 West 10th Avenue, Columbus, OH 43210, USA**.

POSTDOCTORAL POSITION is available to investigate hormone and fuel regulation of insulin and glucagon genes with emphasis on transcription and post-transcriptional processing using clonal cell lines and isolated pancreatic islets. Candidates should have broad, in-depth experiences in techniques of molecular biology. Send curriculum vitae and three reference letters to: **Dr. R. Paul Robertson, Director, Division of Diabetes, Endocrinology, and Metabolism, University of Minnesota, Box 101 UMHC, 420 Delaware Street S.E., Minneapolis, MN 55455**. Email: roberso@lenti.med.umn.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION Molecular Biology of HIV

A position is available in molecular virology to study Human Immunodeficiency Virus Integration with emphasis on genetic and biochemical approaches to dissect the role of host factors, protein-protein interactions and structure-function relationships. Candidate must have a Ph.D. in biochemistry, molecular biology, molecular virology or a related field and a serious interest in AIDS research. Please send curriculum vitae and names and addresses of three references to: **Dr. Ganjam V. Kalpana, Department of Molecular Genetics, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461**. Telephone: 718-430-2354. Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available immediately to study the role of phosphorylation in viral DNA and RNA replication and nuclear transport (see *J. Biol. Chem.*, **268**, 442, 1993; **268**, 17448, 1993; **269**, 2189, 1994; **270**, 19110, 1995). A strong background in biochemistry and molecular biology is required. Please send curriculum vitae and addresses and telephone numbers of three references to: **Dr. R. Padmanabhan, Department of Biochemistry and Molecular Biology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160-7421**. Telephone: 913-588-7018; FAX: 913-588-7440; Email: rpadmana@kumc.wpo.ukans.edu. University of Kansas is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION Washington University School of Medicine

Available to study the molecular and genetic mechanisms of metal and xenobiotic metabolism in human pulmonary and neurodegenerative diseases (*PNAS* **92**:2539 & 4249, 1995). Experience in cell and molecular biology required. Send curriculum vitae and names of references to: **Dr. Jonathan D. Gitlin, Department of Pediatrics, Washington University School of Medicine, St. Louis Children's Hospital, 1 Children's Place, St. Louis, MO 63110**; Email address: GITLIN@KIDSA1.WUSTL.EDU. Washington University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS immediately available in a newly funded Program Project Grant to study pancreatic islet development and function using molecular genetic, transgenic, and conditional gene knock-out technologies. Applicants should have a strong background in molecular genetics and/or developmental biology. Send a curriculum vitae, a statement of research experience and career goals, and the names and telephone numbers of three references to: **Dr. Chris Wright, Department of Cell Biology or Dr. Mark Magnuson, Department of Molecular Physiology and Biophysics, Vanderbilt University, Nashville, TN 37232**. Email: chris.wright@mcm.vanderbilt.edu or mark.magnuson@mcm.vanderbilt.edu.

A **POSTDOCTORAL POSITION** is available immediately for two to four years for an enthusiastic and motivated Ph.D. individual to study the regulation of activation of matrix metalloproteinases and their inhibitors in cancer and metastasis using molecular and biochemical approaches. Training and experience in molecular biology and biochemistry are essential. Send curriculum vitae with three references and a brief summary of research experience to: **Dr. Rafael Fridman, Department of Pathology, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201**. FAX: 313-577-0057; Email: rfridman@med.wayne.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS to apply advanced Optical Mapping approaches to human genome analysis (see *Science*, **262**:110-114, 1993; *Nature Genetics*, **9**:432-438, 1995; *PNAS*, **92**:165-169, 1995; *CSE News*, May 15, 1995; *PNAS*, **92**:5164-5168, 1995). Develop new approaches to sequencing, applications of new genotyping methodologies, whole genome approaches to restriction mapping and gene hunting. Send curriculum vitae, summary of past research, and three letters of reference to: **Dr. David C. Schwartz, New York University, W. M. Keck Laboratory for Biomolecular Imaging, Department of Chemistry, 31 Washington Place, New York, NY 10003**.

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The ideal candidate will possess a Ph.D. in Biology with 2-3 years' relevant postdoctoral experience in either an academic or an industrial setting. Basic understanding of cell and molecular biology and experience with bio-analytical lab instruments are required. Experience with all or most of the following is highly desirable: ISH, FISH, PCR, DNA sequencing, fluorescence chemistry, enzymatic assay development and computer interface development. Excellent interpersonal and communication skills are essential. There will be some overseas travel.

To learn more about us, please see our home page on the WWW at <http://www.perkin-elmer.com/abd/>

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Applied Biosystems Division

TARGETED GENETICS

A Gene Therapy Company

Staff Scientist: Protein Biochemist

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

This achievement oriented scientist will utilize their strong background in protein biochemistry or protein engineering to help develop novel gene delivery systems for gene therapy applications. The successful candidate will work closely with other scientists to design and construct novel recombinant Non Viral Gene Delivery (NVGD) vehicles. Specific responsibilities include the development of purification schemes and assays to obtain biologically active fusion proteins, as well as providing biochemistry input into vehicle design. Experience with membrane targeted fusion and membrane receptor biochemistry is an advantage. Good collaborative and communication skills are essential. The ideal candidate will have a Ph.D. in Biochemistry and 3-5 years of Post Doctoral experience in Protein Biochemistry or Protein Engineering, including direct experience in designing and purifying recombinant fusion proteins.

TGC offers competitive salaries and an excellent benefits package. For consideration, please submit C.V. with the names of three references to:

Targeted Genetics Corporation

REF: Biochemistry
1100 Olive Way, Suite 100
Seattle, WA 98101

Equal Opportunity Employer



College of Medicine

Head of Medical Biochemistry and Genetics

The Texas A&M University Health Science Center, College of Medicine, invites applications and nominations for an outstanding individual to head the Department of Medical Biochemistry and Genetics. The successful candidate will have a well-established and vigorous research program in an area of biochemistry, molecular genetics, or related field, a strong record of research accomplishments, and a demonstrated commitment to teaching. Minority and women candidates are strongly encouraged to apply. Information about the department, college, and university can be obtained on the Internet by accessing the <http://thunder.tamu.edu/home> page.

Review of candidates will begin November 1, 1995 and will continue until an appointment is made. Applicants should submit a complete curriculum vitae that includes a summary of research and teaching experience and the names of three references. Applications and nominations should be sent to Dr. Arthur E. Johnson, Search Committee Chair, College of Medicine, Texas A&M University Health Science Center, 116 Reynolds Medical Building, College Station, TX 77843-1114.

Texas A&M University is an Equal Opportunity Affirmative Action employer.

POSITIONS OPEN

POSTDOCTORAL POSITION Developmental Neurobiology

Opening for neuroscientist experienced with embryonic organotypic brain slice cultures to investigate early olfactory development. Molecular and electrophysiological approaches will be combined to study olfactory neuronal differentiation, axon outgrowth-guidance (**Q. Gong and M. T. Shipley**, *J. Comp. Neurol.*, in press) and target induction (**Q. Gong and M. T. Shipley**, *Neuron*, 1994). Laboratories in new, state-of-the-art research building. Highly competitive salary. Send application, curriculum vitae, statement of research interests, and names of three references to: **Dr. Michael T. Shipley, Professor and Chairman, Department of Anatomy, University of Maryland School of Medicine, Baltimore, MD 21201.** University of Maryland at Baltimore is an Affirmative Action/Equal Employment Opportunity/ADA Employer. Minorities and women encouraged to apply.

POSTDOCTORAL RESEARCH ASSOCIATE. Organic Chemist Position. Synthesis of fluorescent dyes as reagents for specific staining and microanalysis of biological specimens. Experience in computational molecular modeling would be desirable. The successful candidate will have an opportunity to develop new fluorescent probes in collaboration with biologists and biophysicists as part of a state-of-the-art facility for quantitative high resolution microscopy. Salary commensurate with experience. Applicants should forward curriculum vitae with experience and references to: **Dr. Leslie Loew, The Center for Biomedical Imaging Technology, University of Connecticut Health Center, Farmington, CT 06030-1507.** An Affirmative Action/Equal Opportunity Employer. Minority/Female/People with Disabilities/Veteran.

MYASTHENIA GRAVIS FOUNDATION FELLOWSHIP

POSTDOCTORAL RESEARCH FELLOWSHIP available for outstanding candidate with M.D., Ph.D., D.V.M. or equivalent degree, conducting research pertinent to myasthenia gravis (MG), in the laboratory of a qualified senior investigator; investigations concerned with mechanism of neuromuscular transmission; immunology, molecular or cell biology of the neuromuscular synapse; the etiology/pathogenesis, diagnosis or treatment of MG. Submit by November 1, 1995. Stipend competitive.

For specifics on submitting Fellowship, please write or call: **The Myasthenia Gravis Foundation, Inc., 222 South Riverside Plaza, Suite 1450, Chicago, IL 60606; Telephone: 800-541-5454.**

POSTDOCTORAL POSITION available to study bone morphogenetic and related proteins playing key roles in development. Studies utilize *in situ* hybridizations of mouse embryos and adult tissues, functional assays of recombinant proteins expressed in baculovirus, generation and characterization of knockout mice, and standard immunological and molecular biology techniques. Applicant should be a recent Ph.D. with relevant experience. Send curriculum vitae and names of three references to: **Dr. Daniel S. Greenspan, Department of Pathology, University of Wisconsin Medical School, 1300 University Avenue, Madison, WI 53706.**

POSTDOCTORAL RESEARCH ASSOCIATE position available for three years to study action of anesthetic agents on properties of ion channels from isolated cells and cloned channels in *Xenopus* oocytes. Competitive salary with benefits. Seeking Ph.D. or M.D. with experience in electrophysiology, biophysics or molecular biology. Send curriculum vitae with three references by November 1, 1995 to: **Carl Lynch III, M.D., Ph.D., Department of Anesthesiology, HSC-Box 238, Charlottesville, VA 22908.** Email: c17y@virginia.edu. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

THE HEISER PROGRAM FOR RESEARCH IN LEPROSY AND TUBERCULOSIS

Beginning **POSTDOCTORAL RESEARCH FELLOWSHIPS** available in amounts up to \$28,000 per year, plus other allowances. Applicants should have M.D., Ph.D., or equivalent degree. Application deadline February 1, 1996, for awards to be activated July through December 1996. For information write: **The Heiser Program, 450 East 63rd Street, New York, NY 10021, or FAX: 212-688-6794.**

POSITIONS OPEN

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

John J. and Anna H. Gallagher Fellowship

The Academy of Natural Sciences of Philadelphia, internationally recognized as a center for research on the systematics and evolution of animals and plants, is pleased to offer a unique opportunity for original postdoctoral research on the systematics of any microscopic invertebrate organism. The project must be based at the Academy, although field work and visits to other museum collections are encouraged, and the scope should be narrow enough to permit completion during the one year period of the non-renewable fellowship. The research focus must be on systematics but may include ecological, behavioral, physiological, biochemical, genetic, or developmental components. Applications will be accepted until a suitable candidate is identified. An early starting date is preferred. Send curriculum vitae, statement of research interests, description of the project, and the names, addresses and telephone numbers of three references to: **Chairman, Gallagher Fellowship Committee, Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103-1195.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS: Role of Reactive Oxygen Species (ROS) in Aging. A multi-investigator program focused on cellular, biochemical, and molecular biological studies of ROS effects on protein structure and function. Several positions available with the following preferred areas of expertise: **Dr. Diana Bigelow:** Membrane protein biochemistry and fluorescence (fluorescence of protein conformation); mammalian cell culture techniques (oxidation in cell culture). **Dr. Erik Floor:** Neurochemistry or protein biochemistry (oxidative stress in nigrostriatal dopamine systems). **Dr. Mary Michaelis:** Protein biochemistry or cell culture experience (oxidative modification of neuronal Ca-ATPase and Na/Ca exchangers). **Dr. Elias Michaelis:** Cell culture or molecular biology experience (oxidation effects on native or cloned glutamate receptors). **Dr. Tom Squier:** Protein biochemistry or biophysics (oxidative modification and dynamics of erythrocyte membranes). Send curriculum vitae and addresses and phone numbers of three references to: **Anette Lundsgaarde, University of Kansas, Higuichi Biosciences Center, 2099 Constant Avenue, Lawrence, KS 66047. Telephone: 913-864-5183. Email: anette@smisman.hbc.ukans.edu.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

Bacterial Pathogenesis. A **POSTDOCTORAL POSITION** is available to investigate the molecular biology and immunology of syphilis and Lyme disease. The research will utilize a variety of contemporary molecular technologies and cellular immunologic approaches to investigate components of *Treponema pallidum* and *Dorrelia burgdorferi* that contribute to immunopathogenesis and/or protective immunity. The position offers the opportunity to carry out research in an attractive and dynamic research environment. Candidates should send curriculum vitae and the names and addresses of three references to: **Dr. Michael V. Norgard, Vice Chairman, Department of Microbiology, U. T. Southwestern Medical Center, 6000 Harry Hines Boulevard, Dallas, TX 75235-9048, USA.** University of Texas Southwestern Medical Center is an Equal Opportunity Employer.

VASCULAR CELL BIOLOGY UNIVERSITY OF VIRGINIA

POSTDOCTORAL POSITION available to study the expression of adhesion molecules in postcapillary venules and leukocytes using molecular, cellular, and *in vitro* approaches. U.S. citizenship or permanent residency is required. Send résumé and names of four references to: **Dr. C. Desjardins, Medical Center Box 391, University of Virginia, Charlottesville, VA 22908.**

POSTDOCTORAL POSITION Chemoprevention of Colon Cancer

Immediate opening to study chemopreventive properties of naturally occurring and synthetic compounds. Candidates must have a Ph.D. and proven record in biochemistry especially in enzymology. Please send curriculum vitae and three letters of reference to: **Human Resources Department (NC), American Health Foundation, Valhalla, NY 10595.** An Equal Opportunity Employer.

POSITIONS OPEN

The University of Nebraska Medical Center invites applications for a **PROFESSORSHIP** in Pathology and Microbiology in retroviral molecular biology and pathogenesis. Applications are invited from individuals with international stature with proven track record in acquiring extramural funding. The Department has ongoing federally funded research programs in immunology, cancer biology, neurovirology, and HIV-1 immunopathogenesis which interfaces with a federally funded ACTG in HIV clinical care. A generous starting package, a large fully equipped "state of the art" laboratory are provided. Send curriculum vitae and a detailed description of research plans no later than November 15, 1995 to: **Dr. Howard Gendelman, Chairman, Molecular Retrovirology Search Committee, Path/Micro, UNMC, 600 South 42nd Street, Omaha, NE 68198-5215.** An Affirmative Action/Equal Opportunity Employer.

Two **POSTDOCTORAL POSITIONS** available immediately. Position 1) To study opioid receptors and cellular signal transduction mechanisms. Experience in cellular electrophysiology (intracellular recording and/or patch clamp techniques) required. Position 2) To study opioid receptor functions in animal models. Experience in animal behavioral testing and/or psychopharmacology desired. Both positions offer opportunities to incorporate multi-disciplinary approaches to study the actions of opioids. Send curriculum vitae, summary of research interests, and names, addresses and telephone numbers of three references to: **Dr. L. Yu, Department of Medical and Molecular Genetics, Indiana University School of Medicine, Indianapolis, IN 46202.** Email: igcm100@indycms.iupui.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION available for the molecular genetic analysis of a G protein-coupled receptor in the yeast *Saccharomyces cerevisiae*. Areas for study include receptor trans-membrane signalling and receptor regulation through mechanisms involving phosphorylation, ubiquitination and endocytosis. Molecular biology experience is a plus. Send curriculum vitae as well as the names and addresses of three references to: **Nicholas G. Davis, Ph.D., Elliman Room 1205, Wayne State University School of Medicine, 421 East Canfield, Detroit, MI 48201.** Wayne State University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to study transcriptional regulation and chromatin structure in erythroid cells. The β -globin locus control region (lcr) is used as a model system. Biochemical and molecular biological approaches are used to study the protein components of the lcr and to understand how they interact during erythropoiesis. Send curriculum vitae and three references to: **Dr. Emery Bresnick, University of Wisconsin Medical School, Department of Pharmacology, 1300 University Avenue, Madison, WI 53706.** Email: ehbresni@facstaff.wisc.edu.

POSTDOCTORAL POSITIONS are available at Seattle Biomedical Research Institute in the following areas: 1) organelle expression in the malarial parasite *Plasmodium falciparum*, 2) assembly of fragmented mitochondrial rRNAs into ribosomes in *P. falciparum*, and 3) growth control in *Mycobacterium tuberculosis*. Experience in molecular biology desired. Send curriculum vitae and names of three references to: **Dr. Jean Feagin** (positions 1, 2) or **Dr. Gerard Cangelosi** (position 3) at: **Seattle Biomedical Research Institute, 4 Nickerson Street, Seattle, WA 98109-1651.** Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study TCRs using cellular, molecular and biophysical techniques. Prior experience in immunology preferred. Please send curriculum vitae and names of three references to: **Dr. E. Sally Ward, Cancer Immunobiology Center and Department of Microbiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-8576.** University of Texas Southwestern is an Equal Opportunity Institution.

The Ottawa Civic Hospital and the University of Ottawa



The Loeb Medical Research Institute at the Ottawa Civic Hospital, an academic health sciences centre affiliated with the University of Ottawa, has designated 4 Programs of Excellence for priority development. Funding of the Programs is guaranteed for the recruitment of outstanding MD and PhD investigators with special emphasis on individuals whose research interests are complementary to areas of existing strength and offer the opportunity for collaborative research. Recruitment of individuals who have interests in clinical investigation related to the Program areas is particularly encouraged. Applicants are expected to have completed at least 2 years of post-doctoral research training and will have given evidence of originality, superior productivity and potential as an independent investigator. Successful applicants will be appointed at the appropriate academic rank in the Faculty of Medicine and will be expected to develop their independent research activities.

Hormones, Growth & Development

The HGD Group comprises 14 independent investigators with expertise in the molecular mechanisms of hormone action, focusing on endocrine control of development and growth. The Group is seeking investigators in the following areas: developmental neurobiology, embryonic development, reproduction, signal transduction, growth and cellular differentiation, chromatin structure and intracellular trafficking.

Neurosciences

The Neurosciences Group involves 10 independent investigators. We seek individuals with expertise in clinical trials to complement clinical foci in stroke/cerebral ischemia and degenerative/movement disorders. We also seek individuals with research expertise in cell and molecular biology and electrophysiology to study cell-cell communication and neurotransmission, cell homeostasis, membrane trafficking and mechanisms of neuron/glia response to ischemia; preference will be given to molecular approaches directed to post-receptor signal transduction.

Cancer

The Cancer Program has a major clinical research interest in the mechanisms of drug resistance and design, and development of new therapeutic strategies to overcome drug resistance. A second interest is the development of a collaborative and clinical Hereditary Predisposition to Cancer program with a focus on the genes that control the predisposition to colorectal cancer.

Clinical Epidemiology

The Clinical Epidemiology Unit comprises 11 independent investigators with interests in: randomized clinical trials, studies in emergency medicine and critical care, thrombosis and transfusion medicine, reporting and dissemination of research evidence and the development and evaluation of decision aids to help patients and clinicians optimize clinical decision making. The Group is particularly interested in recruiting individuals whose research interests lie in the area of randomized clinical trial methodologies, decision aids technology, emergency medicine and pharmacoeconomics.

In accordance with Canadian immigration requirements, this advertisement is directed primarily, but not solely, to Canadian citizens and permanent residents. Applications should include a *curriculum vitae*, a statement of research goals/interests, and the names of three references. Applications should be sent to **Dr. David Grimes, Director, Loeb Institute for Medical Research, 1053 Carling Avenue, Ottawa, Ontario CANADA K1Y 4E9**. Deadline for receipt of applications is October 30, 1995.

The Ottawa Civic Hospital, an equal opportunities employer, encourages applications from all qualified applicants including women, aboriginal peoples, members of visible minorities and people with disabilities.



PURDUE UNIVERSITY
West Lafayette, Indiana

Dean, School of Veterinary Medicine

Purdue University invites applications and nominations for the position of Dean of the School of Veterinary Medicine.

Established in 1869, Purdue University is Indiana's land-grant university. The West Lafayette campus, located one hour northwest of Indianapolis and two hours southeast of Chicago, encompasses thirteen Schools with an enrollment of 35,000 students.

As one of the leading veterinary programs in the nation, the School of Veterinary Medicine is internationally recognized for professional and graduate education, and for veterinary and comparative medical research. Enrollment in the D.V.M. and veterinary technology programs is approximately 300 with 86 graduate students, clinical interns and residents. A new and progressive curriculum has recently been adopted. The School has 79 faculty with an annual total budget of \$15.2 million and is currently celebrating the completion of a major facility expansion.

The Dean's primary role is to provide leadership and direction in the School, fostering excellence in teaching, research and service. The Dean joins with the School's associate deans, department heads and faculty to assure that learning activities of the highest quality flourish at all levels, from undergraduate education through professional and graduate degrees. The Dean is responsible for encouraging the continual development of a strong basic and clinical research program. As chief academic and administrative officer of the School, the Dean actively represents the School to a variety of constituents within the University and state, as well as nationally and internationally. The individual reports directly to the Executive Vice President for Academic Affairs and works closely with other deans, vice presidents and the President.

Qualified candidates will possess a Doctor of Veterinary Medicine or equivalent degree and be eligible for the rank of tenured full professor. The candidate must also have an excellent record of scholarship, a working knowledge of the national research and funding environment, and the ability to foster interdisciplinary activities within and outside the University. Research experience, specialty certification, and administrative experience in an academic veterinary program are desirable. The successful candidate will work with all constituencies served by the University, have a demonstrated commitment to cultural diversity and equal opportunity, and be able to articulate and advocate the goals of the School.

Nominations and letters of application accompanied by a vita and other supporting material should be submitted to:

Dr. George E. Van Scoyoc
Chairman of the Search Advisory Committee
1073 Hovde Hall
Purdue University
West Lafayette, IN 47907-1073

Screening of applications will commence November 6, 1995 and continue until the position is filled. Questions regarding the position can be addressed to Dr. Van Scoyoc at 317-494-0608.

Purdue University is an equal opportunity - affirmative action employer. Minority and women candidates are especially encouraged to apply.

POSITIONS OPEN



POSTDOCTORAL POSITIONS CHANNELS AND PORES

Worcester Foundation for Biomedical Research

POSTDOCTORAL POSITIONS are available for interdisciplinary mechanistic studies of ion channel and pore proteins. Projects include: the remodeling of prokaryotic pores for applications in biosensors, drug delivery systems and new materials (*Prot. Eng.* 7, 91 and 655 (1994), *PNAS* 91, 12828 (1994), *Chem. & Biol.* 2, 99 and 391 (1995)) and the molecular mechanism of channel modulation by protein kinases in the central nervous system (*Neuron* 8, 387 (1992), *PNAS* 89, 1641 (1992), *J. Biol. Chem.* 269, 2911 and 23722 (1994)). Applications from any relevant discipline are welcome. Call: **Hagan Bayley** at Telephone: 508-842-9146 for details or find out more at: <http://sci.wfbr.edu/~bayley/>.

Send your curriculum vitae and the names of references to: **Hagan Bayley**, c/o Human Resources, Worcester Foundation, 222 Maple Avenue, Shrewsbury, MA 01545. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIP Cornell Medical College

POSTDOCTORAL POSITION available immediately to study virally-mediated apoptosis in endothelial cells. Experience in PCR, molecular cloning, immunoblotting, HIV culture desirable. Send curriculum vitae to: **Jeffrey Laurence, M.D.**, Cornell University Medical College, 411 East 69th Street, New York, NY 10021. *Equal Opportunity Employer.*

CELLULAR NEUROPHYSIOLOGY

A three-year NIH-funded **POSTDOCTORAL POSITION** is available to study voltage-dependent potentiation of calcium channel activity in hippocampal neurons. Experience with electrophysiological techniques is essential; familiarity with molecular biological methods is desirable. Send a curriculum vitae, brief statement of research experience and interests, and names and addresses of three references to: **Dr. Mark R. Plummer**, Nelson Biological Laboratories, Rutgers University, Busch Campus, Piscataway, NJ 08855-1059.

CELL BIOLOGY/IMMUNOLOGY

POSTDOCTORAL POSITION. A position is available for studies involving *Toxoplasma gondii* host cell interactions. Multidisciplinary group with interests in attachment, invasion, motility, and immune response of the host to this intracellular parasite. Reply with curriculum vitae and summary of research interests to: **Dr. L. H. Kasper**, Dartmouth Medical School, Department of Microbiology, Hanover, NH 03755-3842. *Dartmouth is an Equal Opportunity/Affirmative Action Employer. Women are encouraged to apply.*

POSTDOCTORAL POSITION available immediately to study ion channels in human and rat megakaryocytes. Previous experience with patch clamp electrophysiological techniques is highly desirable. Send curriculum vitae, a statement of research experience and the names, addresses and telephone numbers of three references to: **Dr. Alan Fein**, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030-3505. FAX: 203-679-1269; Email: afein@neuron.uhc.edu. *An Affirmative Action/Equal Opportunity Employer. Minority/Female/Persons with Disabilities/Veteran.*

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately to study structure, function and regulation of voltage-gated ion channels, using electrophysiological and recombinant DNA methods. Patch-clamp experience is essential. Send curriculum vitae and names and addresses of three references to: **Dr. Glenn E. Kirsch**, Rammelkamp Center for Research R327, MetroHealth Medical Center, 2500 MetroHealth Drive, Cleveland, OH 44109-1998. FAX: 216-778-8282; Email: gkirsch@mhnet.mhmc.org.

POSITIONS OPEN

UNIVERSITY OF WASHINGTON Postdoctoral Fellowships in Genome Analysis

Available immediately to conduct research on the technological, computational and biological problems posed by large-scale genome analysis. Research opportunities are available in large-scale physical mapping, genetic mapping, DNA sequencing, cytogenetics, protein analysis, CDNA analysis, polymorphism analysis, instrumentation development, computational biology, biomedical ethics and informatics. Emphasis of NIH-funded training program is on interdisciplinary research, encompassing engineering, chemistry, computer science, mathematics, physics, molecular biology, and genetics. Individuals with a Ph.D. in these or other disciplines are encouraged to apply. *U.S. citizens or permanent U.S. residents only.* For information, a listing of training faculty and their research interests, and application packet, contact: **Dr. Barbara Trask**, Department of Molecular Biotechnology, University of Washington, Box 357730, Seattle, WA 98195. Telephone: 206-685-7347; FAX: 206-685-7354; Email: trask@biotech.washington.edu. *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW

SRI, a major nonprofit research facility in Menlo Park, California, has an immediate opening for a **POSTDOCTORAL FELLOW** with a Ph.D. or M.D./Ph.D. degree. The candidate will be based in our Molecular Cardiology laboratory, and collaborate with members of the Stanford Cardiology division in studies of human cardiac gene expression. Applicants should have experience in molecular expression cloning techniques, DNA and RNA analytical methods, PCR, mammalian cell culture, and protein biochemistry. Interested individuals should send their résumé to:

**Professional Staffing
SRI International
333 Ravenswood Avenue
Menlo Park, CA 94025**

Indicate that you are interested in position STG 30147 on the outside of the envelope and on your cover letter. Qualified candidates are encouraged to apply.

PULMONARY PATHOLOGY RESEARCH Armed Forces Institute of Pathology National Cancer Institute

Applications are invited for a pulmonary pathology **RESEARCH POSITION** in the Department of Pulmonary and Mediastinal Pathology, Armed Forces Institutes of Pathology in collaboration with the Laboratory of Pathology at the National Cancer Institute. Experience in molecular pathology is desired.

Send a curriculum vitae and two references to: **William D. Travis, M.D.**, Department of Pulmonary and Mediastinal Pathology, Armed Forces Institute of Pathology, Washington, DC 20306-6000. Telephone: 202-782-1780; FAX: 202-782-5017. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available in Molecular/Structural Biology of Intracellular Signal Transduction. To study role of domain function and structure in kinases, adaptors, and GTPases. Strong background in cloning and protein expression required. Background or interest in structural biology is essential. Send curriculum vitae and names of three references to: **Dr. D. Cowburn**, Laboratory of Physical Biochemistry, The Rockefeller University, 1230 York Avenue, New York, NY 10021-6399; cowburn@rockvax.rockefeller.edu.

RESEARCH SPECIALIST. University of Pennsylvania, School of Veterinary Medicine, New Bolton Center has an immediate opening for a Research Specialist. Duties are as follows: assist with design of biological experiments; interpret experimental results; assist with preparation of publications, grants, and reports; assist with courses, workshops and seminars in biomathematics and biostatistics. B.S. degree in Biomathematics/Biostatistics required. M.S./Ph.D. preferred. Minimum of three years of experience required, additional experience preferred. Knowledge of computer modeling methods desirable. Familiarity with animal medicine helpful. Send résumé with references to: **Elaine Johnson**, Personnel Administrator, New Bolton Center, 382 West Street Road, Kennett Square, PA 19348-1692. No Phone Calls Please. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS MUCOSAL IMMUNOLOGY

Two **POSTDOCTORAL POSITIONS** beginning September 1995 for new NIH projects on mucosal B cell biology. One position concerns the newly defined role of HIV gp120 as a B cell (VH3 gene family) superantigen (*Science*, 261:1588, 1993; *Ann. J. Pathol.*, 144:623, 1994; *J. AIDS*, 7:641, 1994), and the mechanism by which these antibodies confer resistance to HIV mucosal transmission and long-term survival. A second position concerns use of phage-display cloning strategies to isolate marker antibodies and candidate antigens in inflammatory bowel disease pathogenesis (*J. Clin. Invest.*, 92:1080, 1993; *J. Immunol.*, 153:3756, 1994). Successful applicants should have recently completed Ph.D. in cellular immunology, analytic biochemistry, and/or molecular biology. Send curriculum vitae, research interests, and names of three references to: **Jonathan Braun**, Pathology CHS 13-186, UCLA, Los Angeles, CA 90095-1732. FAX: 310-206-5178. *An Equal Opportunity Employer.*

RESEARCH ASSOCIATE

The Manitoba Institute of Cell Biology, Faculty of Medicine, University of Manitoba, invites applications for a full-time **RESEARCH ASSOCIATE** with experience in the development of transgenic and homozygous null mutant mice. The successful candidate is expected to maintain and operate a transgenic facility which services the Institute. Normally all positions require a Ph.D. and relevant experience. Salary will be commensurate with experience and qualifications. Applicants should send a curriculum vitae and the names of three references to: **Dr. Arnold Greenberg**, Director, The Manitoba Institute of Cell Biology, 100 Olivia Street, Winnipeg, Manitoba, Canada R3E 0V9. Deadline for receipt of applications is October 31, 1995. *The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, Aboriginal people, and persons with disabilities. The University offers a smoke-free environment, save for specially designated areas. This advertisement is directed to Canadian citizens and permanent residents.*

Pediatric Physician SCIENTISTS: The University of Kentucky College of Medicine is interested in recruiting pediatricians (M.D. or M.D., Ph.D.) who are committed to laboratory investigation in areas of oncology, neuroscience, endocrinology, infectious disease or pulmonary diseases as applied to pediatrics. Clinical area of interest should be related to one of the above or in neonatology or critical care. Modern laboratory space, protected time, joint clinical/basic science appointments, collaboration or mentorship by senior investigators, and substantial intramural funding is available. Junior investigators with potential for extramural funding or senior investigators with active funding are encouraged to apply. Interactions with other faculty in the clinical basic science departments as well as the Sanders-Brown Center on Aging, Markey Cancer Center, School of Biological Sciences and College of Agriculture provide a particularly stimulating clinical and research environment.

Interested individuals should send curriculum vitae and statement of past experience and future plans to: **V. Manakad, Chairman**, Department of Pediatrics, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536-0284.

ACADEMIC COORDINATOR II—Introductory Biology. Applications are invited for a position in the Section of Evolution and Ecology, Division of Biological Sciences, University of California, Davis, effective 1 July 1996. Ph.D. in biological sciences and extensive experience in teaching laboratory sections required. Position involves assisting instructors and coordinating teaching assistants and laboratories for course Biological Sciences 1B (Introductory Biology), directing a TA training course, and involvement in course improvement in Biological Sciences 1B and the Biological Sciences 1B Learning Center.

Position open until filled. Applications should be received by 15 October 1995 to receive full consideration. Applicants should send a letter of application and curriculum vitae, and have two letters of recommendation sent to: **Judy Stamps**, Vice Chair, Section of Evolution and Ecology, University of California, Davis, CA 95616-8755. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

Major Opportunities in Biomedical Research at the Mount Sinai School of Medicine

The Mount Sinai School of Medicine, with the completion of its new East Building next year, will effectively double its space dedicated to biomedical research and education. New research initiatives will complement and expand the existing research programs in cancer research, cardiovascular sciences, developmental biology, human genetics and gene therapy, immunobiology, molecular genetics, neurobiology of aging, signal transduction, structural biology and systems physiology.

To support these initiatives, Mount Sinai is recruiting 75 new tenure-track faculty members for the Departments and Centers of the Medical School. Research groups organized around the areas of interest will include faculty at the ranks of Professor, Associate Professor and Assistant Professor. New faculty members will be expected to develop highly meritorious, independent research programs and to participate in the training of Ph.D., M.D. and M.D./Ph.D. students, and post-doctoral fellows.

Nominations and applications of the highest quality may be sent to: Dr. Nathan G. Kase, Dean, Mount Sinai School of Medicine, One Gustave L. Levy Place, Box 1096, New York, NY 10029. Please send your curriculum vitae, bibliography, statement of research interests and three references. For additional information, please call (212) 241-7335. Mount Sinai is an equal opportunity/affirmative action employer.

Mount
Sinai

SENIOR ANALYTICAL CHEMIST

Mallinckrodt Baker, Inc., an operating company of Mallinckrodt Chemical, is a Total Quality company and a leader in the laboratory and specialty chemical business. We are located in Phillipsburg, NJ, directly across the Delaware River from the Lehigh Valley of Pennsylvania (Allentown/Bethlehem/Easton). Business operations are worldwide.

We are seeking a highly motivated candidate for the position of Senior Analytical Chemist in our Research & Development Department. The area of focus is trace metal analysis in the ppt to ppb range.

Key responsibilities include methods development, providing technical support to all QC laboratories, assisting Marketing and Operations with technical input and publishing significant advances in trace metal analysis.

The candidate should have a Ph.D. in Chemistry with special emphasis (thesis) on trace element detection. A sound understanding of the basic principles involved in ICPMS, ICP and GFAA is essential.

In addition to outstanding career growth potential, Mallinckrodt Baker, Inc. offers a highly competitive salary, a generous flexible benefit program and an employee savings plan with employer matching contributions. Qualified applicants should send their resume, including salary history to:

Manager, Human Resources, MALLINCKRODT BAKER, INC., 222 Red School Lane, Phillipsburg, NJ 08865. Equal Opportunity Employer M/F.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

HEAD DEPARTMENT OF BIOCHEMISTRY

Memorial University of Newfoundland invites applications and/or nominations for the position of Head, Department of Biochemistry. The appointment, to be effective no later than July 1, 1996, is initially for a term of three years and is renewable. The successful applicant should be eligible for a senior appointment, with tenure, in the Department.

Memorial University is a modern institution located in one of the most scenic and historic parts of Canada. It is the largest university in the Atlantic provinces, with 14,000 full-time undergraduates, a well equipped Science Faculty and professional schools of engineering, medicine and pharmacy. Biochemistry is a well-funded research-active department with 21 faculty members, 29 graduate students and 200 undergraduate majors.

An application including a resume and the names of three referees, should be submitted by November 1, 1995, to:

Dr. Peter Tremaine, Chair
Search Committee/Head of Biochemistry
c/o Dean of Science Office
Memorial University of Newfoundland
St. John's, Nfld.
A1B 3X7
Fax: (709) 737-3316, e-mail: ptremaine@kean.ucs.mun.ca

An external appointment is conditional on budgetary approval. In accordance with Canadian Immigration requirements, this advertisement is directed towards Canadian citizens and permanent residents of Canada. Memorial University is committed to employment equity.

Department Head Position

Professor and Head Department of Entomology: The College of Agriculture at the University of Arizona invites applications and nominations for the position of Head of the Department of Entomology. The successful candidate is expected to provide strong innovative interdisciplinary leadership in the areas of research, teaching and extension. The candidate should have excellent research credentials in an area that would be considered part of a modern department of entomology, e.g., ecology, behavior, pest management, insect/plant interactions, molecular and cellular biology, and physiology. The department consists of 23 faculty members (6 of whom are joint appoints from other departments) who reside either on campus or at two off-campus experiment stations located in southern Arizona. The Department of Entomology has a commitment to both basic and applied research. It maintains strong ties with the Center for Insect Science and similar academic units as well as with the agricultural industry of the state of Arizona. This appointment will be available on or after July 1, 1996. A Ph.D. in entomology or a related discipline is required. Evidence of administrative ability is essential. The successful candidate will be expected to maintain an active research program. The position also requires experience in or knowledge of undergraduate/graduate teaching and university-based extension programs. The salary will depend upon qualifications and experience. Applicants should submit a current curriculum vitae, the names, addresses and telephone numbers of six references, and a statement of qualifications and goals to **Dr. Robert T. Leonard, Chair, Entomology Search Committee, Department of Plant Sciences, The University of Arizona, Tucson, AZ 85721.** Application Deadline: The committee will begin considering applications on October 20, 1995, but will accept applications until a suitable candidate has been identified. **THE UNIVERSITY OF ARIZONA IS AN EEO/AA/ADA EMPLOYER. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.**

Ricerca is a broad-based technology company which provides contract R&D and technical services to assist clients in developing new chemical products/processes and in supporting product registration for world-wide regulatory compliance.

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STUDY DIRECTOR ANIMAL METABOLISM

The ideal candidate will have a Ph.D. in a biological or chemical science and 10 years' experience directing small (mouse, rat) and large (goat, dog, chicken) animal pharmacokinetic, biliary, dermal, and ADME studies under GLP. Relevant experience in the pharmaceutical or agrochemical industries is preferred. Strong verbal and written communication skills and proficiency in the use of PC-based spreadsheets and word processing software are required. Responsibilities will also include developing client relationships.

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FACULTY POSITION IN MOLECULAR BIOLOGY

The Center for Advanced Biotechnology and Medicine (CABM) and the Department of Molecular Biology and Biochemistry at Rutgers University are seeking applicants for a tenure-track faculty position. Applicants should have a strong record of publication in transcription, RNA processing, cell cycle control, macromolecular structure/recognition, receptor function, or signal transduction. The successful candidate will occupy new laboratory space in the CABM building and join a growing, interactive, and highly productive life-sciences community on the Busch campus, where there are many opportunities for research collaboration and participation in several graduate programs. The position is highly competitive with regard to start-up funds, laboratory space, salary and benefits. Please send a CV, publications, and summary of research activities and plans, along with names and addresses of 3 references to: Drs. Aaron J. Shatkin and Robert M. Krug, CABM/MBB Search Committee, 679 Hoes Lane, Piscataway, NJ 08854-5638.

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- Chemical Fingerprinting of Soils and Waters
- Site Characterization and Analysis Penetrometer System
- CERCLA Risk Assessment Programs
- Innovative Technology Treatment Additives
- Risk Assessment Use of Soil Ingestion Data
- TPH Approach for Risk Assessment
- Innovative Cleanup Technologies

For More Information Contact The Conference Directors:
Edward J. Calabrese, Ph.D. or Paul T. Kosteki, Ph.D.
Tel: (413) 545-2934 Fax: (413) 545-4692



AGRACETUS, INC.

Agracetus, Inc., is a world leader in genetically engineered cotton. We are establishing a multidisciplinary group to focus technology on the development of high-performance fibers. These fibers will improve textile processing economies as well as enable entirely new fiber product opportunities.

Postdoctoral Fellow/Research Associate

A postdoctoral or research associate position is available in our Cotton Fiber Program to conduct genetic engineering of cotton to enable production of polyesters within the fiber. The program is partially funded by the Department of Commerce, Advanced Technology Program for product development (*Science* Vol. 266, p. 1811, 12/16/94).

Candidates (Ph.D. or BS/MS) should have extensive experience in molecular biology. In addition, experience in any of the following fields will be advantageous: protein isolations, enzyme chemistry, HPLC/GC-mass-spectrum, textile chemistry, processing/fiber application development or biopolymer chemistry.

Agracetus has a state-of-the-art facility located near the University of Wisconsin. We offer an outstanding salary and benefits package. Please send your resume to: *Human Resources Department, Agracetus, Inc., 8520 University Green, Middleton, WI 53562. FAX: 608-836-9710.*

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Deadline January 15, 1996

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A research and development organization has an excellent career opportunity for an experienced manager.

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This position requires a Ph.D. in Analytical Chemistry or Pharmaceutical Science plus a minimum of 10 years pharmaceutical industry experience in drug characterization, analytical methods development, stability studies, and involvement in IND/NDA submissions. Experience in project, staff management and aptitude for business development.

We offer excellent salary and benefits as well as a growth oriented environment. Please send resume to:

**Science, Box 60
1333 H Street N.W., Rm. 814
Washington, D.C. 20005**

EOE



**JSPS FELLOWSHIPS FOR BIOMEDICAL
AND BEHAVIORAL RESEARCH IN JAPAN**



Through arrangements made with the Fogarty International Center of the National Institutes of Health (NIH), the Japan Society for the Promotion of Science (JSPS) is offering 30 fellowships for American researchers in the biomedical and behavioral sciences to pursue collaborative research in Japanese universities and other eligible institutions and laboratories. Funding is available for stays ranging from two weeks to twelve months. These fellowships are intended to enhance American-Japanese collaboration in biomedical and behavioral research by providing flexible opportunities for capable American scientists to work with colleagues in leading Japanese laboratories on substantive projects of mutual interest. Although intended primarily for postdoctoral level researchers, doctoral candidates and senior researchers may also apply. Fellows are expected to be recipients of NIH awards or to be substantially involved in NIH-supported research.

These fellowships are being offered as a pilot program at this time only. Because recipients must arrive in their host laboratories in Japan by March 31, 1996, interested persons should contact the Fogarty International Center immediately.

E-mail requests for a detailed program announcement and application instructions are welcome at: JSPS@NIH.GOV.

Persons who do not have e-mail or who would like more information on this program should contact:

Director, Division of International Relations
Attn: JSPS Fellowships
Fogarty International Center
National Institutes of Health
Building 31, Room B2C11
31 Center Drive, MSC 2220
Bethesda, Maryland 20892-2220
telephone: 301-496-4784
fax: 301-480-3414

BIOLOGY DEPARTMENT HEAD

Muhlenberg College seeks candidates for the tenure-eligible position of DEPARTMENT HEAD. Rank and salary commensurate with qualifications and experience. Requires a Ph.D. in biology, a demonstrated commitment to teaching consistent with the traditions of a liberal arts college, a research program involving undergraduates, and the ability to lead a broad undergraduate program in Biology. Preferred area of expertise is in the general area of cell biology. Leadership in curricular development in the biological sciences, the ability to nurture faculty development and research programs, and administrative abilities desired.

Muhlenberg College is a selective, four-year liberal arts college located one hour north of Philadelphia. Applicants should submit a curriculum vitae, including a statement of academic and administrative philosophy, and arrange to have three reference letters sent to: **Dr. David H. Much, Biology Department, Muhlenberg College, 2400 Chew St., Allentown, PA 18104-5586.** Review of applications will begin on October 15th. As an equal opportunity employer, we encourage applications from minority and women candidates.

MUHLENBERG
COLLEGE

AMERICAN SOCIETY FOR MICROBIOLOGY AND NATIONAL CENTER FOR INFECTIOUS DISEASES

1996 POSTDOCTORAL RESEARCH ASSOCIATES PROGRAM

Up to ten associate positions will be awarded by the American Society for Microbiology (ASM) for full-time research on infectious diseases which cause significant public health problems. Associates will perform research in residence at the National Center for Infectious Diseases (NCID) which is headquartered at the Centers for Disease Control and Prevention (CDC) in Atlanta, GA. Eligible fields of study include Bacterial and Mycotic Diseases, Viral and Rickettsial Infections, Nosocomial Infections, HIV/AIDS, Vector-borne Infectious Diseases, Sexually Transmitted Diseases, and Parasitic Diseases. Associate positions are limited to individuals who either earned their doctorate degree (Ph.D., Sc.D., M.D., D.V.M., or D.D.S.) or have completed a primary residency after May 1993.

The application deadline is December 1, 1995. For information contact: ASM/NCID Postdoctoral Research Program, 1325 Massachusetts Avenue, N.W., Washington, D.C. 20005
Tel. (202) 942-9299 Fax (202) 942-9329
E-mail: fellowships-careers@asmusa.org



Tenure-Track Faculty Positions Department of Genetics

The Genetics Department of the University of Pennsylvania School of Medicine is continuing its recent expansion and plans to make appointments in the molecular genetics of both lower and higher eukaryotes, including developmental genetics and human genetics. Attractive new laboratory space and resources are available.

The deadline for applications is January 1, 1996. Candidates should send curriculum vitae, statement of research interests and three letters of recommendation to:



**Chair, Search Committee
Department of Genetics
School of Medicine
University of
Pennsylvania
415 Curie Boulevard
Philadelphia, PA 19104**

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

POSTDOCTORAL RESEARCH POSITIONS MOLECULAR MEDICINE NORTHWEST HOSPITAL SEATTLE, WA

Several positions are available to investigate growth factor signaling and carcinogenesis at the molecular and cellular level. Projects include: 1) construction of chimeric c-fms/EGF receptors with application to tumor promotion and cell signaling; 2) regulation of cell cycle progression; 3) tumor suppressor functions of connexin genes; and 4) calcium homeostasis. Expertise in molecular/cell biology with interest/experience in carcinogenesis, cell cycle/signaling is desirable. Respond with C.V., brief description of research experience and interest, names and phone numbers of three references to: Dr. Alton L. Boynton, Director, Molecular Medicine, Northwest Hospital, 120 Northgate Plaza, Suite 230, Seattle, WA 98125.

POSTDOCTORAL RESEARCH POSITION DEKE SLAYTON CENTER FOR BRAIN CANCER STUDIES, NORTHWEST HOSPITAL SEATTLE, WA

The focus of this position is on the molecular basis of human brain tumors using molecular and cellular techniques. Ready access to surgical tissue and newly renovated laboratory space. An interest and experience in oncogenes, tumor suppressor genes and/or cell cycle genes desired. Send curriculum vitae and names, addresses and phone numbers of three references to: Dr. Alton L. Boynton, Ph.D., Chair, Search Committee, Northwest Hospital, 120 Northgate Plaza, Suite 230, Seattle, WA 98125 EOE.



Massachusetts General Hospital Cancer Center Harvard Medical School

Two tenure track appointments are sought at the level of Assistant Professor. Applicants should hold the degree of Ph.D., M.D./Ph.D., or M.D. and should have sufficient research experience to demonstrate a strong promise of continued success.

1. Assistant Professor of Pathology. A candidate is sought with a strong background in molecular biology, with interests including, but not limited to cell cycle regulation, developmental biology, signal transduction or transcriptional regulation. The position will be a joint appointment between the Department of Pathology at Harvard Medical School and Massachusetts General Hospital and the MGH Cancer Center. *Applications should be directed to Dr. Ed Harlow, MGH Cancer Center.*

2. Assistant Professor of Medicine. An applicant is sought with a well developed interest in the application of molecular approaches to cancer, including but not limited to the cloning of cancer genes, molecular diagnostics or molecular epidemiology. The position will be a joint appointment between the Department of Medicine at Harvard Medical School, Massachusetts General Hospital and the MGH Cancer Center. *Applications should be directed to Dr. Daniel Haber, MGH Cancer Center.*

Applicants for either position should submit a curriculum vitae, bibliography and a brief summary of past research experience and future goals. Four letters of recommendation should be sent separately. Deadline is November 15, 1995. All inquiries should be addressed to:

**Linda Coventry, Search Coordinator
MGH Cancer Center, 149-7330
Bldg 149, 13th Street
Charlestown, MA 02129**

Harvard University/Massachusetts General Hospital are Equal Opportunity/Affirmative Action Employers. Qualified women and minorities are encouraged to apply.

BUILD ON OUR
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USER SUPPORT SPECIALIST

A professional position is available in Bioinformatics at The Jackson Laboratory as a member of the User Support Staff associated with the Mouse Genome Informatics Group. The individual in this position will be responsible for responding to user queries that are biological in nature via email, phone, and correspondence, instructing users in software installation, demonstrating software to groups and individuals, and helping with writing manuals and maintaining user tracking systems.

Applicants must be versed in UNIX and have experience with accessing and using biological databases. It is expected that this individual will develop excellent familiarity with the biological databases maintained at The Jackson Laboratory and will be facile with other databases, such as GDB and GenBank, to aid biologists in searching for and analyzing information. In addition, applicants should have demonstrated people skills and good organizational abilities. MS in molecular biology/genetics with excellent computer skills or MS/BS in computer science or information science with biological experience. SQL skills and knowledge of mammalian genetics a plus.

The Jackson Laboratory, located on the coast of Maine adjacent to Acadia National Park, is a world-renowned center and resource for mammalian biology and genetics.



The
Jackson
Laboratory

Qualified candidates should send resume to:

The Jackson Laboratory
Human Resources Office
600 Main Street
Bar Harbor, ME 04609
email: hrw@jax.org
FAX (207) 288-6106

The Jackson Laboratory
is an Equal Opportunity/
Affirmative Action Employer

MOLECULAR IMMUNOLOGISTS/ CELL BIOLOGISTS

THE UNIVERSITY OF CHICAGO

The Gwen Knapp Center for Lupus and Immunology Research of the University of Chicago is seeking applicants at the Assistant, Associate and Full Professor levels to join the newly formed Center. The Center is committed to developing a strong program in molecular immunology. We are seeking outstanding individuals who are using the approaches of molecular biology and cell physiology to examine basic immune mechanisms and/or disorders such as signal transduction, gene regulation, and antigen processing. Existing immunology programs at the University of Chicago include: lymphocyte development, B and T cell activation, antigen presentation, tumor immunology, transplantation, and autoimmunity.

Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Faculty appointments will be tenure-track in the most appropriate academic department where the candidate will be expected to exercise full membership. New state-of-the-art laboratory space will be located within the Institute for Molecular Medicine which is now being formed. This Institute will also house programs in molecular oncology, vascular biology, human genetics, and neurobiology.

Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of 3 references should be sent to: Dr. Craig B. Thompson, Director, Gwen Knapp Center for Lupus and Immunology Research, 924 E. 57th Street, Room R410, Chicago, IL 60637-5420. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.



THE UNIVERSITY
OF CHICAGO

FACULTY POSITION - MOLECULAR GENETICS THE OHIO STATE UNIVERSITY



The Department of Molecular Genetics at The Ohio State University is initiating a search for two tenure track faculty members at the Assistant Professor level. We are primarily interested in applicants who are using molecular genetic approaches to study important topics in molecular, cell and developmental biology in yeast, *C. elegans*, zebra fish, mice, and humans. Exceptional applicants using other eukaryotic experimental systems will also be considered. A highly competitive recruiting package is available, which includes an attractive (hard money) salary, new or newly renovated laboratory space and substantial funds for equipment purchase and initial operating expenses. The Ohio State University is undergoing a major expansion in the Molecular Life Sciences which will involve the hiring of at least 30 new faculty over the next four years. The Department of Molecular Genetics will play a central role in this expansion.

The Ohio State University is the flagship institution of the state's higher education system. It is located in the state capital, Columbus, which is a growing, yet highly affordable metropolitan area of about 1.3 million people. Columbus has been ranked by Newsweek as one of the country's best places to live and work.

Applications should include a detailed curriculum vitae, a description of research experience, and a statement of the nature of the planned independent research program. Applicants should also arrange to have at least three recommendation letters sent to the department. Applications will be accepted until suitable candidates are hired. Review of applications will begin during January, 1996. Information about our Department can be obtained by calling the departmental office (614-292-8084) or by contacting Alan Lambowitz or Lee Johnson. Application materials should be sent to: Faculty Search Committee, Department of Molecular Genetics, The Ohio State University, 484 West 12th Avenue, Columbus, Ohio 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era Veterans, disabled veterans and the disabled are encouraged to apply.



Assistant Professor Department of Biochemistry and Molecular Biology Wright State University

The Department of Biochemistry and Molecular Biology at Wright State University invites applications for a 12-month, tenure-track, faculty position at the assistant professor level with an appointment in both the School of Medicine and the College of Science and Mathematics. Candidates with research expertise in any area of contemporary biochemistry/molecular biology will be considered.

Currently, the department consists of 12 full-time faculty, with research interests in three major areas: macromolecular mechanisms, including protein and membrane structure-function relationships; molecular genetics including the regulation of transcription and replication in eukaryotes; and the application of nuclear magnetic resonance to biomedical research.

A Ph.D. in Biochemistry or a related field and two or more years of postdoctoral experience are required for appointment. The successful applicant will be expected to develop an extramurally-funded independent research program as well as to participate in one or more of the department's graduate (M.S. and Ph.D.), professional (M.D.), undergraduate and nutrition teaching programs. The salary and benefits will be commensurate with the appointee's professional training and experience.

Interested applicants should submit a curriculum vitae, a focused research plan, and the names of three references to: Dr. Lawrence J. Prochaska, Chairperson, Faculty Search Committee, Department of Biochemistry and Molecular Biology, Wright State University, 3640 Col. Glenn Highway, Dayton, Ohio 45435.

Candidates from under-represented groups in academic science are encouraged to apply.

Applications will be accepted until the position is filled, however, those received prior to December 1, 1995 will be assured of full consideration.



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Join the nation's leading research-driven pharmaceutical products and services company: **Merck & Co., Inc.** We are known for excellence in discovering, developing, manufacturing and marketing a broad range of innovative products. An exceptional process research opportunity currently exists at our West Point, PA facilities.

Responsibilities will involve providing scientific and technical support to the Biological Manufacturing areas. In this capacity, the incumbent will identify and implement strategies to improve the reliability and performance of the biological product while planning, organizing and executing experimental programs which will support implementation of process changes. Other duties include acting as the technical lead for the transfer of new monitoring tools and processes from research into the production environment.

The successful candidate must possess up to 5 years of relevant experience and demonstrate the ability to be creative in the approach to new and diverse problems. Strong leadership and communication skills (oral and written) are essential. To qualify, you must possess a Ph.D. in Biology or Biochemistry and be familiar with Cell Culture Techniques, Virology, and Biological Assays.

We offer a competitive salary, a full range of benefits and the unlimited opportunities of a Merck career. Please rush a resume including salary history/requirements, to: **Merck & Co., Inc. WP53B-424, P.O. Box 4, West Point, PA 19486. No Phone Calls, Please.** An Equal Opportunity Employer M/F/D/V



DEPUTY DIRECTOR, SCIENTIFIC RELATIONS

Ono Pharmaceutical Co., headquartered in Osaka, Japan, is seeking a candidate for our Boston office. The successful applicant should have postdoctoral or medical experience in one of the following fields: inflammation/immunology, gastrointestinal, respiratory, cardiovascular, or metabolic disorders. Some knowledge in the area of drug development is preferred.

The duties shall include: the collection of information on new pharmaceutical research in North America, focusing on opportunities for collaborative drug development; visits to pharmaceutical companies, academic institutions, and attendance at scientific conferences for the above purpose; the collection of information related to health care systems, governmental health care policies, regulatory affairs and the pharmaceutical industry and markets in the United States.

An ability to travel up to one half of each month is essential. Japanese language skills are not required but would be helpful. Screening of applicants will continue until December 31, 1995 for an April 1, 1996 start date. Candidates should submit their curriculum vitae to:

Dr. David Batter
Ono Pharmaceutical Co., Ltd.
99 Summer Street, Suite 440,
Boston, MA 02110.



**Temple
University
School of Medicine**

POSTDOCTORAL POSITIONS IN NEUROSCIENCE

Two positions available to study the neuronal cytoskeleton and neuronal morphogenesis. The cytoskeleton comprises an architectural framework that defines the external shape of the axon and also organizes the intracellular motility necessary to grow and maintain the axon. One goal of our work is to define the mechanisms that establish the cytoskeleton during axon growth. Toward this end, we combine microinjection of tagged cytoskeletal proteins and digital image analysis to examine the transport and assembly of cytoskeletal elements in growing neurons. A second project examines the functional specializations of cytoskeletal proteins in axonal and dendritic growth using antibody injection approaches. Applicants should send curriculum vitae, statement of research experience, and the names of three references to: **Dr. Mark M. Black, Department of Anatomy and Cell Biology, Temple University School of Medicine, Philadelphia, PA 19140. FAX: 215-707-2966.** Temple University is an Equal Opportunity/Affirmative Action Employer, M/F/D/V.

COLORADO SCHOOL OF MINES DEPARTMENT OF CHEMISTRY/GEOCHEMISTRY



ASSISTANT PROFESSOR - TENURE TRACK MOLECULAR BIOLOGIST/BIOCHEMIST OR GEOMICROBIOLOGIST

The Department of Chemistry and Geochemistry at the Colorado School of Mines invites applications for a tenure-track position. A Ph.D. in molecular biology, biochemistry, geomicrobiology or related field is required. The successful applicant will have a commitment to developing a graduate research program in applications of biological science to environmental and geochemical systems and to excellence in teaching at both graduate and undergraduate levels. Teaching duties will be in microbiology, biochemistry, and/or introductory organic chemistry.

Applicants should send a curriculum vitae, a statement of teaching philosophy and research goals, and names, addresses, telephone and FAX numbers of at least three professional references to:

**Colorado School of Mines
Office of Human Resources
Chemistry/Geochemistry
Search #95-031260
1500 Illinois Street
Golden, CO 80401
Fax: (303) 273-3278**

Review of applications will begin December 1, 1995 and continue until the position is filled. CSM is an AA/EEO employer. Women and minorities are encouraged to apply.

ASSISTANT DIRECTOR FOR SCIENTIFIC AFFAIRS

The Center for Biotechnology seeks an Assistant Director for Scientific Affairs. Responsibilities include forging university/industry collaborations, developing technical training programs for industry, assisting in the development of a public education program, and securing funding for scientific projects.

The successful candidate will have an M.S. or Ph.D. in the Life Sciences, Chemistry, or related field, plus two years post degree experience. Exceptional communication and organizational skills required. Broad-based knowledge of scientific and commercial aspects of biotechnology, and experience in technology transfer/development preferred. Business degree a plus. Salary commensurate with experience.

Applicants should forward their resume and references no later than October 9, 1995 to: **Center for Biotechnology, 130 Life Sciences Building, State University of New York at Stony Brook, Stony Brook, NY 11794-5208, Attn: Diane Fabel, Assoc. Director.** The State University of New York at Stony Brook is an equal opportunity/affirmative action employer M/F/D/V.



MOLECULAR ONCOLOGIST BIOCHEMIST/CELL BIOLOGIST THE UNIVERSITY OF CHICAGO

The Center for Molecular Oncology of the University of Chicago is seeking applicants at the Assistant and/or Associate Professor level to join the newly formed Center. The Center is committed to developing a strong program in molecular oncology, broadly defined, and is closely interfaced with an NCI-designated Cancer Center that includes programs on cytogenetics and molecular genetics, cell growth and differentiation, immunology and developmental therapeutics. We are seeking outstanding individuals who are using the approaches of molecular biology, molecular genetics, biophysics, and cell physiology to examine basic mechanisms and/or disorders such as signal transduction, gene and cell cycle regulation, and DNA replication and repair.

Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Faculty appointments will be tenure-track in the most appropriate academic department where the candidate will be expected to exercise full membership. New state-of-the-art laboratory space is available in the Institute for Molecular Medicine. This Institute also houses programs in molecular immunology, vascular biology, human genetics, and neurobiology.

Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of 3 references, should be sent to: Dr. Michael Weiss, Director, Center for Molecular Oncology, 924 E. 57th Street, Chicago, IL 60637-5419. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.



**THE UNIVERSITY
OF CHICAGO**

SENIOR RESEARCH ASSOCIATE

Nucleic Acid Analysis (#1062)

Pioneer Hi-Bred International, a global leader in the exciting field of agricultural genetics, has an immediate opening for an innovative research associate in our Johnston, Iowa facility. In this challenging role, you'll assist with the development of novel nucleic acid diagnostic tests for high-volume genetic screening of crop species.

This position requires an MS degree with 2+ years' experience or a BS degree in Chemistry/Biochemistry/Molecular Biology and 4+ years' lab experience. In addition to creative ability, you must also have a working knowledge of basic molecular biology techniques including cloning, PCR, and probe hybridization methods. We prefer experience with optical or electronic instrumentation, conjugation or surface chemistry, and fluorescence detection.

For prompt consideration, please send CV, three references, and letter explaining interest, by October 16, 1995, to: **Dawn Myer - Job #1062, Pioneer Hi-Bred International, 7300 NW 62nd Avenue - Box 1004, Johnston, IA 50131-1004.** No phone calls, please. Pioneer Hi-Bred International is an Equal Employment Opportunity company.



PIONEER HI-BRED INTERNATIONAL, INC.

The Lindsley F. Kimball Research Institute, a division of the New York Blood Center, currently has an opening in the Laboratory of Plasma Proteins for a junior faculty member to join a basic research team conducting multifaceted structure/function analysis of a novel form of the blood clotting factor, fibrinogen.

The successful candidate will be a versatile biochemist with a strong background in both protein chemistry and molecular biology, proficiency in modern techniques, and several years productive post-doctoral experience. Expertise in receptor biology, immunohistochemistry and use of transgenic animals helpful.

In close proximity to other major research institutes on Manhattan's Upper East Side, the Institute is comprised of 17 laboratories carrying out autonomous research programs in diverse fields, and offer a competitive salary and comprehensive benefits package. For immediate consideration, please fax (212)288-5087, or send CV to: Department of Human Resources, Attn: JS/GG-PP, New York Blood Center, 150 Amsterdam Avenue, 3rd Fl, New York, NY 10023. An Equal Opportunity Employer M/F/D/V.

Lindsley F. Kimball
Research Institute
A Division of the New York Blood Center
Where concern for the community comes first.

Senior Research Investigator Biochemical Pharmacology

Bristol-Myers Squibb Pharmaceutical Research Institute, located in Buffalo, New York has an opening for a **Senior Research Investigator** in its Dermatology Discovery Group.

The successful candidate will be responsible for the development of new animal models which are relevant to human pathophysiology. These models will rely heavily on *in vivo* biochemical endpoints in addition to gross clinical and histological evaluations. The research will focus on the identification and characterization of novel drugs which affect gene expression. You will contribute substantially to the overall strategy and objectives of research program areas.

The position requires a Ph. D. in biochemistry, pharmacology, molecular biology or related field with 4+ years of postdoctoral experience. Qualified candidates will have a demonstrated record of research productivity. Technical expertise should include some of the following: northern and western blotting, immunoassays, enzyme assays, radioreceptor assays, tissue culture, protein purification and characterization. Well developed communication, supervisor and problem-solving skills are also required for this leadership position.

Bristol-Myers Squibb has a very attractive compensation and benefits package. We offer a highly productive and team-oriented research environment. For confidential consideration, send your CV and salary requirements to: **Manager, Human Resources, Bristol-Myers Squibb Company, 100 Forest Avenue, Buffalo, New York, 14213.** No phone calls please.

**Bristol-Myers Squibb
Pharmaceutical Research Institute**



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An Equal Opportunity Employer M/F/D/V

The Missouri Botanical Garden is accepting applications for the following positions:

Editorial Assistant - Flora of China

The selected individual will edit manuscripts; verify bibliographical citations; correspond with coauthors; prepare the scientific index; prepare the project's newsletter & maintain an up-to-date mailing list; develop a database regarding the novelties, nomenclatural changes, & distribution extensions of Chinese taxa; complete & update the Chinese taxonomic literature; produce taxonomic treatments; attend editorial committee meetings; create accounts & illustrations, in collaboration with other Research staff & make them available on the Gopher & World-Wide Web. The ideal candidate will possess a Ph.D. in taxonomy; knowledge in word processing, databases, & spreadsheets. Editorial experience preferred.

Taxonomist - Flora of China

The selected individual will correspond with the Project's Co-Director in Beijing regarding deadlines, delivery of first drafts, reviews by authors & editorial committee, formatted volumes, author contracts, Chinese & Pinyin plant names, & visits to & from China; translate from Chinese all correspondence; enter Chinese names in formatted manuscripts; prepare the Pinyin & Chinese indexes, & read proofs; prepare applications for supporting travel grants & organize the visits of the Chinese authors; complete & update the Chinese taxonomic literature in conjunction with the Coordinator & Editorial Assistant; produce taxonomic treatments of certain groups when required; work with other Research staff to make accounts & illustrations available on the Gopher & World Wide Web; & develop a database in Chinese & English for addresses of all correspondents in China. The ideal candidate will have a Ph.D. in taxonomy, verbal & written command of the Chinese language, knowledge in word processing, databases, & spreadsheets, knowledge of Chinese Star & related Chinese language programs preferred.

Managing Editor - Flora of North America

The selected individual will oversee the entire scope of transforming the work of contributors & editors into the products of the FNA, participate in the application of informatics, supervise the daily work of the FNA Central Office (FNAC) at the Garden, & integrate the flow of information among the off-campus participants and the FNAC. Also will also participate in the preparation & management of the budget, in fundraising, & in reporting to the FNA Organization in general & to specific subgroups. Reports to the project's Convening Editor & will work closely with a newly-established Management Committee. This position will be a regular member of the Garden staff. Requires an established track record in the field of systematic botany, including a Ph.D. in systematic botany or equivalent training, & a record of published accomplishment in floristic and/or monographic research writing and/or editing scientific literature, knowledge of botanical terminology, nomenclature, & familiarity with the protocols of keys, descriptions, maps, & ecological data. Experience in organizing complex projects & administering them, & a capacity for flexibility are required, as are competence in writing & public speaking, & basic computer literacy.

To apply, submit curriculum vitae & three letters of reference to: **Missouri Botanical Garden, Human Resource Management, P.O. Box 299, St. Louis, MO 63166-0299.**

(EOE)

Postdoctoral Positions Division of Renal Diseases and Hypertension University of Colorado Health Sciences Center

Tomas Berl, MD

- cellular and molecular mechanisms of vasopressin action and resistance
- transfection of collecting duct cells

Lynn Heasley, PhD

- signaling pathways involved in the growth and differentiation of PC 12 cells
- aberrations in G-protein coupled pathways involved in small cell lung cancer

Jim Kim, PhD

- regulation of arginine vasopressin (AVP) gene expression
- mechanisms of AVP gene processing and gene therapy in central diabetes insipidus

Stuart Linas, MD

- differences in function and mechanisms between apical/basolateral G-protein coupled receptors in polarized tissues
- Renal ischemia/reperfusion injury; modulation of epithelial cell receptor function by endothelial cell activation/injury

Raphael A. Nemenoff, PhD

- signal transduction pathways regulating growth and differentiation of vascular smooth muscle cells
- molecular regulation and physiologic role of phospholipase A₂

Robert W. Schrier, MD

- Clinical Research: Hypertension/Type II Diabetes/ Polycystic Kidney Disease
- Mechanisms of body fluid volume regulation: cardiac failure, cirrhosis, nephrotic, syndrome and pregnancy
- Basic Research: Renal injury: calcium, nitric oxide, proteases, oxygen radicals, cellular mechanisms of action of vasopressin

Joseph Shapiro, MD

- biochemical and physiological effects of acid-base and electrolyte disturbances
- pathogenesis of chronic renal failure and hypertension
- biomedical applications of NMR spectroscopy

David M. Spiegel, MD

- issues of clinical nephrology in the ESRD; evaluation of dialysis graft survival rates, fluid volume measurements and dry weight in hemodialysis patients

Isaac Teitelbaum, MD

- molecular and cellular mechanisms underlying impairment of the hydroosmotic response to arginine vasopressin in the inner medullary collecting duct
- alterations in V₁ receptor-mediated pathways in chronic pathophysiological states

Thomas J. Thekkumkara, PhD

- biochemical mechanisms of receptor-mediated angiotensin II actions
- structure/function relationship of angiotensin receptor subtype

Applicants must have a PhD in biological sciences, and should send a CV, summary of research interests, and names of three references to the individual faculty member listed above c/o: **Division of Renal Diseases and Hypertension, University of Colorado Health Sciences Center, Box C-281, 4200 East Ninth Avenue, Denver CO 80262**

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MAYO CLINIC MAYO CANCER CENTER

Associate Director for Cancer Prevention and Control

The NCI-designated Mayo Cancer Center in Rochester, Minnesota, invites applications for Associate Director of Cancer Prevention and Control. Investigators with established research programs in cancer prevention and control and with demonstrated leadership skills are encouraged to apply. The Mayo Clinic provides an outstanding environment for conducting cancer prevention and control research, with particular strengths in epidemiology biostatistics and health services research. Interested candidates should submit a letter of application including a statement of research interests, curriculum vitae, bibliography, and list of references to:

James Ingle, M.D.
Associate Director for Clinical Research
Mayo Cancer Center
Mayo Clinic
200 First Street SW
Rochester, MN 55905

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Readership in Experimental Pathology

The electors intend to proceed to an election to the Readership in Experimental Pathology, with effect from 1 October 1996 or such later date as may be arranged. The stipend of the reader will be on the scale which is at present £27,747 to £31,357 per annum. The successful candidate should have an interest in some aspect of experimental cell/molecular biology with relevance to the cellular basis of disease. The Sir William Dunn School of Pathology undertakes no routine pathology examinations and the candidate does not need to be medically qualified. Enquiries may be made to Professor H. Waldmann at Oxford (01865) 275503.

The readership is associated with a fellowship at Exeter College.

Applications (ten copies, or one from overseas candidates), naming three referees, should be received not later than 6 November 1995 by the Registrar, University Offices, Wellington Square, Oxford OX1 2JD, from whom further particulars may be obtained.

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UNIVERSITY OF LOUVAIN, BELGIUM
 Department of Biology
 Department of Applied Biology and Agricultural Productions
**FACULTY POSITIONS IN MICROBIOLOGY, PLANT BIOLOGY, ANIMAL BIOLOGY,
 ANIMAL GENETICS, PLANT BREEDING, MOLECULAR PLANT PATHOLOGY.**

The Departments of Biology at the Faculty of Science and of Applied Biology and Agricultural Productions at the Faculty of Agronomy, of the Catholic University of Louvain in Louvain-la-Neuve, Belgium, invite applications for full-time academic positions beginning in the fall of 1996 or 1997. Applicants will have a Ph.D. or equivalent, postdoctoral experience, and a record of research achievement in one of the fields described below.

The applicants will be expected to establish a vigorous, externally funded, collaborative research program integrated in the activities of both departments. At the beginning, only a good knowledge of French or English is requested but the candidates will be expected to teach later in French. Teaching experience will be appreciated. Rank and salary will depend upon qualification and experience.

Department of Biology

MICROBIOLOGIST

Research on fundamental aspects in microbiology, preferably bacteria. Competence in general biology of microorganisms, intermediate metabolism and approach of genetic engineering.
 Teaching of microbiology and contribution to courses in general biology and molecular biology.

PLANT CELL BIOLOGIST

Research on plant reproduction and development, symbiosis, or environmental stress resistance. An expertise in the techniques of molecular biology will be appreciated.
 Teaching of plant biology.

ANIMAL CELL BIOLOGIST

Research on the cell biology of animal development and cell differentiation.
 Contribution to teaching of animal biology, cell biology and embryology.

Candidates should send a curriculum vitae, a research program (short and long term), five significant publications, and three letters of recommendation to:

Professor Ph. van den Bosch de Aguilar

(Faculty of Sciences, Department of Biology, Place Croix du Sud, 5)
 Fax ..(32.) 10.47.35.15, E-mail: vdbosch@bani.ucl.ac.be.
 or to

Professor H. Maraite

(Faculty of Agronomy, Department of Applied Biology and Agricultural Productions, Place Croix du Sud, 2/3)
 Fax ..(32.) 10.47.86.97, E-mail: maraite@tymy.ucl.ac.be
B-1348 Louvain-la-Neuve, Belgium.

Inquiries can be directed to the above addresses. Closing date for applications December 24, 1995.

Department of Applied Biology and Agricultural Productions

ANIMAL GENETICIST

Research on fundamental and applied aspects of genetics of domestic animals.
 Teaching of genetics including population genetics.

PLANT BREEDER

Research on enhancement of genetic resources of crop plants.
 Experience in breeding for polygenic characters in tropical plants would be of advantage.
 Teaching of plant reproduction and improvement

MOLECULAR PLANT PATHOLOGIST

Research in virology and molecular aspects of host-parasite interactions.
 Experience in the study of pathogenicity determinants or virology of horticultural crops would be advantageous.
 Teaching of plant virology and contribution to various courses in plant protection.

University of Oulu, Finland Faculty of Science

*Professor
 in*

*structure elucidation of macromolecules
 by NMR spectroscopy*

is available at the NMR Laboratory, University of Oulu, Finland. The position will be fulfilled by invitation for a five year period in the first instance. Persons who wish to be considered should indicate their interest by sending curriculum vitae and a list of publications by **October 10, 1995**, to the Faculty of Science, University of Oulu, P.O. Box 333, FIN-90571 Oulu, Finland.

The invited person is expected to start research and teaching in structure elucidation of macromolecules, especially proteins, applying NMR spectroscopy and computational methods in order to satisfy the needs among scientists in Biochemistry, Chemistry and Medical Biochemistry. At the University of Oulu, there is a long tradition in high-resolution NMR of small- and medium-sized molecules in the research groups at the departments of Physics, Chemistry and Medical Biochemistry. At the moment, the NMR Laboratory is equipped with modern 500, 400 300 and 200 MHz instruments.

The teaching duties will include courses on the graduate and postgraduate level. The lectures will be delivered mainly in Finnish. However, the lectures in English are allowed as well. The annual salary will be within the range of 215 000 - 275 000 FIM according to qualifications and experience.

Further information is available from: Professor Erkki Rahkamaa, Dean of the Faculty of Science, University of Oulu, P.O. Box 333, FIN-90571, Oulu, Finland (tel. +358-81-553-1620 or -553-1050) and Ms. Kaisa Ala, Faculty Secretary (e-mail: kaisa.ala@oulu.fi).



University of Alabama at Birmingham (UAB)
Assistant Professor - Molecular Mucosal Immunity for Vaccine

A tenure-track faculty positions in Molecular and Mucosal Immunology for Vaccine is available in the School of Dentistry and the Immunobiology Vaccine Center (IVC) at UAB. This position also has a strong tie with the Department of Microbiology. We are seeking candidates with strong research records, a commitment to developing an independent, innovative and funded research program for Molecular Mucosal Immunity for Vaccine and a genuine interest in graduate and dental education. UAB is ranked in the top 20 institutions in NIH-funded research and offers an unusually interactive environment. Several multidisciplinary Centers including a Comprehensive Cancer Center, a Center For AIDS Research, a Caries Research Center and a Research Center for Oral Biology have strong ties with the Immunobiology Vaccine Center and the School of Dentistry. Furthermore, an interdepartmental graduate program in Cell and Molecular Biology (CMB) facilitates collaborations among disciplines and between Basic Science and Clinical faculty. The successful applicant could provide expertise in a new area or extend one of the existing Vaccine and Immunology programs. Applications and inquiries should be sent to Chairman of the Search Committee and should include a curriculum vitae, a brief description of past accomplishments and future research plans, and the names and addresses of four references. Applications and inquiries should be made and submitted no later than October 31, 1995.

Chairman of the Search Committee
Immunobiology Vaccine Center and School of Dentistry
University of Alabama at Birmingham
UAB Station - BBRB 761
Birmingham, AL 35294-2170
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FACULTY POSITION IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

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Kan Agarwal
Chair, Faculty Search Committee
Department of Biochemistry and
Molecular Biology
The University of Chicago
920 East 58th Street
Chicago, IL 60637

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MAYO CLINIC MAYO CANCER CENTER

Staff Scientist in Cancer Research

The NCI-designated Mayo Cancer Center in Rochester, Minnesota, invites applications for several staff scientist positions in cancer research. Investigators with established research programs in areas of cancer biology with clinical/translational applicability are especially encouraged to apply. Areas of particular emphasis in the Mayo Cancer Center include breast and gynecologic malignancies, neuro-oncology (adult and pediatric primary brain tumors), prostate and genito-urinary malignancies, gastrointestinal malignancies, soft tissue sarcomas (including pediatric solid tumors), and hematologic malignancies. The Mayo Clinic provides an outstanding environment for investigators interested in applying modern advances in the cellular and molecular basis of cancer to improved methods in the prevention, diagnosis and treatment of cancer. Interested applicants should submit a statement of research interests, curriculum vitae, bibliography and list of references to:

Nita J. Maihle, Ph.D.
Associate Director for Basic Research
Mayo Cancer Center
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ANNOUNCEMENTS



EXPANDING RESEARCH OPPORTUNITIES IN DYSTONIA

Knowledge about dystonia, a neurological disorder characterized by abnormal, involuntary movements, is rapidly increasing, but the work continues. The Dystonia Medical Research Foundation supports research grants, usually limited to \$25,000 per year for one, two, or three years.

Dystonia-related research should be hypothesis-driven. Typically, studies focus on genetics, human brain tissue, anatomy, and physiology of the basal ganglia and relevant brain circuitry.

The deadline is December 15, 1995. Applications can be secured from the **Dystonia Medical Research Foundation at One East Wacker Drive, Suite 2430, Chicago, IL 60601-1905. Telephone: 312-755-0198; FAX: 312-803-0138; Email: dystfndt@aol.com.**

LEUKEMIA RESEARCH FOUNDATION GRANTS

The Leukemia Research Foundation, Inc. announces funds are available to support research in the field of leukemia. The goal of the grant program is to support new investigators; preference will be given to applicants proposing new lines of investigation. Currently two types of grants are being funded; research grants, and postdoctoral fellowships. Grants and fellowships are for a one-year period, and may be renewable for a second year. Deadline for receipt of completed grant applications is February 15, 1996.

Research Grant Policies: 1) Eligibility is restricted to investigators who are staff members of a university, hospital, or a non-profit research institute. The applicant must be less than five years beyond the end of training at the time of the proposed starting date of the grant award. 2) Maximum budget request is \$35,000. The funds may not be used for salary support of the principal investigator.

Postdoctoral Fellowship Policies: 1) Maximum budget request is \$20,000. The funds usually are used to support the fellow's salary. 2) Eligibility is restricted to postdoctoral trainees with an M.D. or Ph.D. degree. The fellow must have no greater than three years of postdoctoral training (excluding medical residency) at the time of the proposed starting date of the grant award. For further information and applications, contact: **Hollis R. Brownstein, Chairman, Medical Advisory Committee, Leukemia Research Foundation, Inc., 4761 West Touhy Avenue, Suite 211, Lincolnwood, Illinois 60464. Telephone: 708-982-1480; FAX: 708-581-0779.**

SYMPOSIUM

SYMPOSIUM: Translation & Stability of mRNA. October 8 to 10, 1995, Cathedral Hill Hotel, San Francisco, California. Speakers: E. Baker, H. Blau, R. Braun, A. Geballe, P. Green, J. Harford, J. Hershey, A. Hinnebusch, M. Katze, R. Lehmann, M. Mathews, D. Morris, R. Parker, S. Peltz, G. Read, T. Rouault, A. Sachs, P. Sarnow, R. Schneider, A. Shyu, R. Silverman, N. Sonenberg, O. Uhlenbeck, S. Warren, M. Wickens. Organizers: J. Harford, RiboGene; M. Katze, University of Washington; J. W. Larrick, PAIMM. Abstracts due August 31, 1995. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 415-694-4996; FAX: 415-694-7717; Email: PAIMM@AOL.COM.

MEETING

SIXTH INTERNATIONAL CONFERENCE ON THE MOLECULAR BIOLOGY AND PATHOLOGY OF MATRIX PHILADELPHIA, PENNSYLVANIA

Sunday, June 16–Wednesday, June 19, 1996

Current research in the field of collagen and other extracellular matrix molecules will be presented by invited international experts. Poster sessions will also be held. For information, please write:

Darwin J. Prockop, M.D., Ph.D.
Jefferson Institute of Molecular Medicine
Jefferson Medical College
Thomas Jefferson University
Philadelphia, PA 19107

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MEETING



3rd International Conference on Anti-Aging Medicine & Biomedical Technology. December 9 through 11, 1995, Las Vegas, NV. Anti-Aging Therapies, Health & Wellness Essentials, Aging Diagnostic Testing, The Future of Biotechnology. Featured Speakers: **Dr. William Regelson, Dr. Bob Goldman, Dr. Ben Weider, and Dr. Ronald Klatz,** and 100 other internationally known experts in human aging and maximum health span. For more information contact **BioConferences International, 4405 East-West Highway, No. 501, Bethesda, MD 20814. Telephone: 301-652-3072; FAX: 301-652-4951.**

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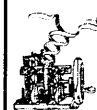
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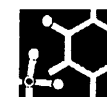
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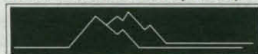
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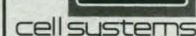
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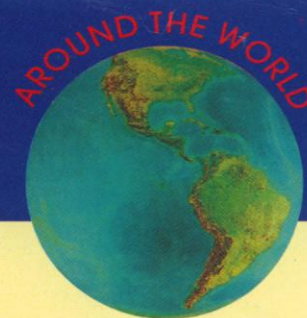
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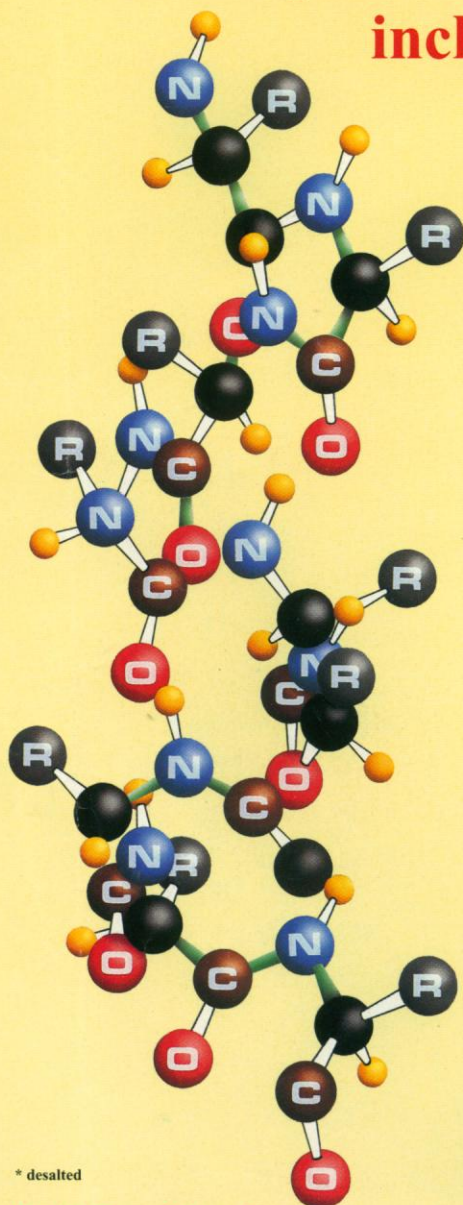
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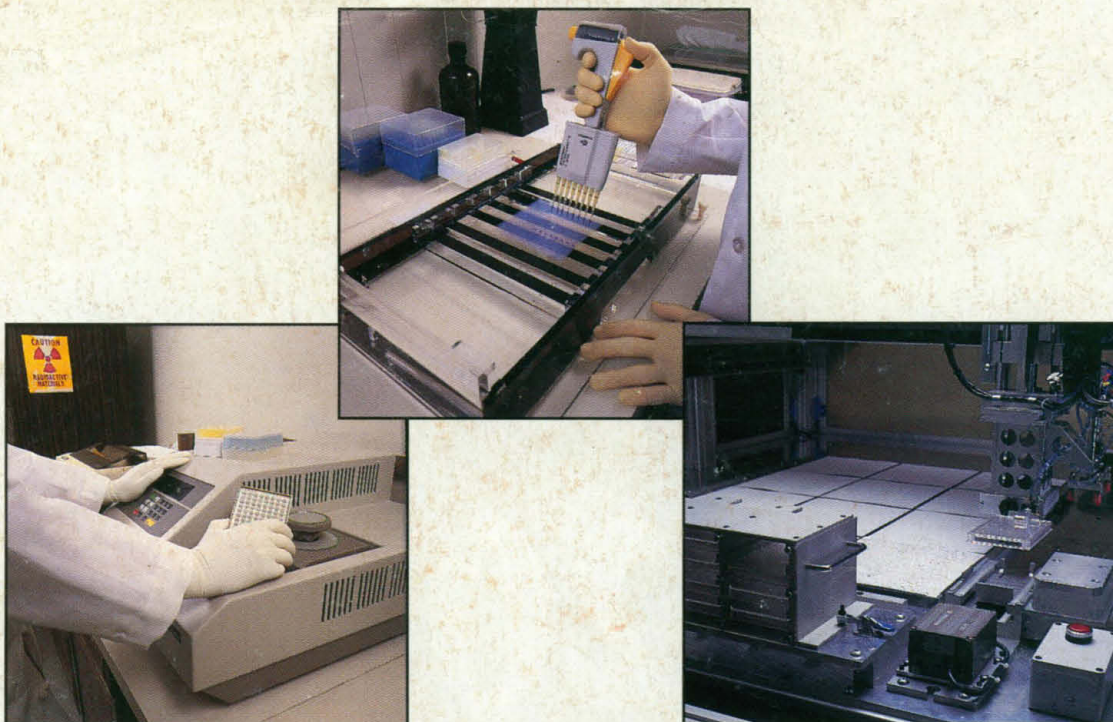
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Research Genetics is now equipped to perform both YAC (avg insert = 1 Mb) and BAC (avg insert = 125 Kb) library custom screenings. The results of this service are guaranteed and the clones identified will be delivered within 2-3 weeks. Primers for the screening may be provided by the researcher, chosen from our stock of MAPPAIRS™ microsatellite markers at no additional charge, or custom synthesized. One clone is guaranteed and included in the screening price of \$790 per microsatellite markers. If additional clones are identified, they may be purchased for \$24 each. All clones are verified by PCR[†] with the chosen primers before being sent to the researcher. Current libraries include mouse and human YAC libraries and both mouse and human BAC libraries.

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