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. Piramoon 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 computer. The temperature loggers are available in two ranges, -5° to +37°C or -39° to +75°C. They come with a 10-year replaceable 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.


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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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 Pre-immune 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
  (609) 966-8000
  (609) 342-8078 FAX
  Citing Contract #N01-CP-15665
  
  **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.**
  
  **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:** Peptides -$25.00/mg.
  Ascites Fluid -$45.00/ml.
  Cell Culture -$100.00/culture
  (Plus Shipping and Handling)

### Environmental Cancer

- **NCI's Chemical Carcinogenesis Research Information System (CCRIS) is available online 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/NIH'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 polynitrominated biphenyls.**

  The Michigan Long Term PB2 Study is a well-maintained longitudinal database on 4,000 participants from rural farms in Michigan. This group was exposed to polynitrominated 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) 336-6550

  **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:**


  **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 collaborative studies and some independent research. The most extensive collections are serum samples from patients with Burkitt's lymphoma.

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

  **Cost:** Free to Collaborating Investigators; Others: Depend upon Processing Time.

- 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 1964–1989. 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 Visual Basic Command Procedures and exportable to most mainframes.

  **Contact:** Mustafa Dosemeci, Ph.D.
  **Occupational Studies Section**
  **DCE, NCI, NIH**
  **Building EPN, Room 418**
  **Bethesda, MD 20892-7364**
  (301) 496-9093
  (301) 402-1819 FAX
  E-mail: dosemme@epnodce.nic.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 works 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 [BOCC]; and 1980 BOCC), and four industrial classification systems (1972 Standard Industrial Classification System [SIC]; 1967 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**
  **DCE, NCI, NIH**
  **Building EPN, Room 418**
  **Bethesda, MD 20892-7364**
  (301) 496-9093
  (301) 402-1819 FAX
  E-mail: dosemme@epnodce.nic.nih.gov

  **Cost:** Free

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 for 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. Seifrid, Ph.D.
  **Chemical and Physical Carcinogenesis Branch**
  **DCE, NCI, NIH**
  **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 FP post labelling assays. Other classes of available compounds are: food mutagens, polyunbrnlar aromatic hydrocarbons (PAH), PAH metabolites, radiolabeled PAH metabolites, nitrogen heterocycles, nitrosamines/nitrosoamides, aromatic amines, aromatic amine metabolites, azoxyaromatics, inorganic and organometallics, pesticides, pharmaceuticals, natural products, dyes, and chlorinated aliphatics. A number of radiolabeled PAH adducts, metabolites and nitrosamines are also available. Data sheets. The data associated with the compounds include chemical and physical properties, analytical data, hazards, storage, and reference information. Catalog available upon request.

  **Contact:** Manager, NCI Chemical Carcinogen Repository
  **Midwest Research Institute**
  **425 Volker Boulevard**
  **Kansas City, MO 64110**
  (816) 753-7000 Ext. 523
  (816) 753-3664 FAX

  **Cost:** Subject to chemical class code and quantity (see catalog). Includes handling and shipping charges.
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### Nineteenth Annual Symposium

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**Presentations of the Ciba Drew Award in Biomedical Research will be made to:**

- **Joseph Schlessinger**, PhD
  - New York University Medical Center
  - New York, NY
  - "Cellular Signaling by Tyrosine Phosphorylation"

**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
- 9:30 am-3:30 pm

Address inquiries to:
- George deStevens, PhD, Frontiers in Biomedical Research
- Drew University, Madison, New Jersey 07940
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- **John H. Gibbons**, Assistant to the President for Science and Technology, Office of Science and Technology Policy
- **Anne C. Petersen**, Deputy Director, National Science Foundation
- **Ruth L. Kirschstein**, Deputy Director, National Institutes of Health

26-27 October 1995 Crystal City Marriott
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To register, contact:
- Janis Crowley, Phone: (202) 326-6532, Fax: (202) 682-6816.
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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 indicate a preference of research and teaching interests, and the names, addresses and telephone numbers of three references to: Professor Mark A. Bassett, Search Committee Chair, 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.

INDUSTRIAL HYGIENE FACULTY POSITION

The Department of Preventive Medicine and Environmental Health of The University of Iowa invites applications for a faculty position as an 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 international 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 Environmental Health, 100 Oakdale Campus, Room 220 AMRF, The University of Iowa, Iowa City, IA 52242-5000, Attn: 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. Application should be directed to: Daniel Bean, Biology Chair, Office of Human Resources, Saint Michael's College, Winooksi Park, Colchester, VT 05443-0800. The position will begin December 15, 1995. Position contingent upon funding availability. Saint Michael's College is an Affirmative Action/Equal Opportunity Employer.
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 95-242, 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.


**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, PhD

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), NIDCD, Building 10, Room 5D38, 10 CENTER DR MSC 1416, BETHESDA MD 20892-1416.

**Molecular Biologist and Genetics**

Carl R. Merril, 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: merric@dirpc.nimh.nih.gov.

**Molecular Genetics**

Chuxia Deng, PhD

The function of FGFR 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:ll wylbur.cu.nih.gov). When connected to NIH, key in ,POSTDOC for terminal emulation, F5 for initial, and AJIL 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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National Institutes Of Health

**Office Of Education**

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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. The successful candidate should have a strong commitment to teaching in the professional and graduate programs, and to establishing a vigorous, extramurally funded, laboratory or field based research program. Applicants with research interests in the area of cell biology, with a focus on endocrine or intracellular signaling processes, are encouraged to apply. Successful candidates will be expected to integrate their research interests with curriculum development and participate in departmental, university, and community activities. The University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN VIROLOGY/IMMUNOLOGY

The Department of Virology/Immunology of the University of Arkansas for Medical Sciences is seeking applicants for a 12-month tenured-track position as ASSISTANT or ASSOCIATE PROFESSOR. The successful candidate is expected to develop high-quality, independent research program in the areas of molecular virology or molecular mechanisms of viral pathogenesis. Of particular interest are applications from 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 virology building Research Building and experimental equipment will be available. Applicants should submit a curriculum vitae, a concise statement of research interests, and the names and addresses of three letters of reference to: Dr. Marie Chow, Department of Microbiology and Immunology, Slot 511, University of Arkansas for Medical Sciences, Little Rock, AR 72205. Applications submitted before November 15, 1995 will receive preferential consideration.

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, experience as a collaborator and a record of publication and successful authorship. Applicants should submit a curriculum vitae, three letters of reference and a statement of research interests. Applications are available from: Dr. Gary A. Brown, Agroecological Studies Board, University of California, Santa Cruz, CA 95064. Interviews will be held on or before December 15, 1995. All materials will be considered until the position is filled. UCSC is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply.

ASSISTANT OR ASSOCIATE PROFESSOR

Eucaryotic Molecular Genetics/Molecular Ecology

Applications are invited for a TENURE-TRACK appointment in an expanding life sciences program. Candidates must have training in eucaryotic molecular genetics, molecular ecology or molecular aspects of cell biology, or molecular recognition are encouraged to apply. The teaching load is two courses per year: a laboratory course and an upper division seminar. The successful candidate should also participate in the campus-wide honors program and contribute to the academic environment in a general way. The University is an Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF MASSACHUSETTS

Medical Center Department of Cell Biology

Applications are invited for a tenure-track faculty position in molecular genetics and molecular biology at the ASSISTANT OR FULL PROFESSOR level. Candidates are sought with research interests in molecular biology that include but are not restricted to cell cycle and growth control, cell stress and gene expression, and post-transcriptional control, developmental regulatory mechanisms, neurosciences, human genetics, or signaling mechanisms. Selection will be based on excellence in research and the potential to maintain an outstanding independent research program. Appointees will participate in undergraduate and graduate curriculum development and be expected to apply for, and conduct independent research and teaching programs. Applications should include a curriculum vitae, description of research objectives, and the names and addresses of three letters of recommendation. Applications should be submitted to: S. Stein, Chairman, Department of Cell Biology, University of Massachusetts Medical Center, 55 Lake Ave. N.W., Worcester, MA 01655-0106. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer and encourages applications from female and minority candidates.

ASSISTANT/ASSOCIATE/FULL PROFESSOR DEPARTMENT OF BIOENGINEERING UNIVERSITY OF UTAH Tenure-Track Faculty Position

The University of Utah Department of Bioengineering invites applications for a full-time, nine-month, tenure-track faculty position at the ASSISTANT OR ASSOCIATE PROFESSOR level in the area of Neural Plasticity and Cognition. Candidates must have earned doctoral degrees in a 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 in the field. Candidates must be dedicated to teaching and able to demonstrate excellence in education. The successful applicant will have demonstrated expertise in the areas of information processing and plasticity in higher neural centers, biological neurophysiology, computational neurophysiology, and/or adaptive and hierarchical biological control systems. The successful applicant will be expected to develop a signal processing and some applications, take part in developing 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, encourage applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

The Department of Molecular Pharmacology is expanding its faculty and invites applications for two post-doctoral positions. The period of August 1995–March 1996. Candidates are invited to apply for positions at all academic levels (ASSISTANT to 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 biochemical, molecular biological genetics and cell biology to solve problems relevant to molecular pharmacology. Essential requirements are: an innovative research program that complements programs within the University of Illinois at Chicago College of Medicine and a commitment toward the training of Fellows and graduate students. Research areas of interest to the Department include: mechanisms of hormone action, gene 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 support 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. Horsley, Department of Molecular Pharmacology, Albert Einstein College of Medicine, 1819-53 West Polk Street, Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION

DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS AT CHICAGO

Applications are invited for an academic year full-time, tenure-track faculty position at the ASSISTANT OR ASSOCIATE PROFESSOR level in the area of Molecular Biology and Cell Science. Qualifications: Ph.D. in biochemistry or a related discipline, post-doctoral fellowship experience, and a strong publication record. Demonstrated ability to obtain extramural funding is a strong plus. Send curriculum vitae and names of three references to: Dr. Richard Quilliam, Chair, Search Committee, Department of Biology, University of Illinois at Chicago, 800 S. Wolcott Avenue, Chicago, IL 60680-7710. Applications received before December 1, 1995 will be given preference consideration. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.
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
  - biophysics
  - biostatistics
  - cell biology
  - developmental biology
  - epidemiology
  - genetics
  - immunology
  - mathematical biology
  - microbiology
  - molecular biology
  - neuroscience
  - pharmacology
  - physiology
  - structural biology
  - virology

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.
INSECT GENETICIST

The Department of Entomology, University of California, Riverside, has a tenure-track position available at the ASSISTANT or ASSOCIATE PROFESSOR level in genetic and molecular physiology of insects. 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 include: Establish a vigorous research program in insect genetics with the ultimate goal of developing genetic strategies for controlling insect pests and diseases. 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 in transformation systems for altering important insect phenotypic traits 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. Address applications 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 AT 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, intermediate, and advanced organic laboratory courses. Participation in interdisciplinary courses also will be encouraged. She/he will be expected to establish a vigorous research program which undergirds and substantiates both teaching. The research program can be drawn from any area of experimental organic chemistry, including but not limited to bioorganic, synthesis, organic synthesis and chemistry of natural products. Amherst College is a private college with a strong commitment to teaching and research and is an Equal Opportunity/Affirmative Action Employer. AMHERST COLLEGE, 188 College Street, Amherst, MA 01002, by November 15, 1995. Amherst College is an Affirmative Action/Equal Opportunity Employer and encourages women, minorities and disabled persons to apply.

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. Qualifications include a Ph.D. and experience teaching human gross anatomy and ideally histology and/or cell biology. The appointee will instruct medical and veterinary students. Preference will be given to can-

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COMPUTATIONAL BIOCHEMIST

Applications are invited for a tenure-track position at the ASSISTANT PROFESSOR level in computational simulation of the structure and operation of biological macromolecules. A wide range of research pub-

PROMYKROBIOLOGIC MYCOLOGIST

The Biology Department of the University of Texas at Austin (UTA) invites applications for a tenured-track position at the ASSISTANT PROFESSOR level. The Department of Biology offers B.S. degrees in Biology, Microbiology, and Medical Technology, and M.S. and Ph.D. programs. The University of Texas at Austin 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 plans, and letters of recommendation. A Ph.D. degree is required. Deadline is 15 SEPTEMBER 1996. UTA is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

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 division 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. Echols, Search Committee, Department of Biology, 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 of Developmental Genetics

The Division of Biology of the California Institute of Technology plans to hire an ASSISTANT PROFESSOR in the area of developmental genetics. We are looking for the best developmental geneticist, regardless of method, to join our experimental developmental genetics and/or cell biology program. We are particularly interested in people interested in extending the model organism approach to other species. We are particularly interested in the developmental process of the boundary between organ 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 College, 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, by November 15, 1995. The University of California, Division of Research, Box 131060, University of California, Los Angeles, CA 90095-1565. Applications from women and minorities are encouraged.

PROKARYOTIC MICROBIOLOGIST ANIMAL PHYSIOLOGIST/NEUROBIOLOGIST

The Biology Department of Santa Clara University invites applications to fill two tenured-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 must have a Ph.D. and be encouraged to apply. Applications are invited from qualified candidates. Applications should be received by 15 NOVEMBER 1995. The University of California, Berkeley, is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and disabled persons to apply.

The Department of Biochemistry, Duke University Medical Center invites applications for a faculty position at the level of ASSISTANT PROFESSOR. We are es-

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The Department of Biochemistry, Duke University Medical Center invites applications for a faculty position at the level of ASSISTANT PROFESSOR. We are es-

The George Washington University (GWU) seeks to appoint a Luce PROFESSOR of Human Origins. Applicants should have 1) Ph.D. in anthropology, biological anthropology, archaeology, 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 paleoanthropology. The Luce Professor will work actively with the Human Origins Program, and will assume a leadership role in the newly formed Natural History, Smithsonian Institution. Salary and benefits vary attractive, consistent with University Professor status. Send vita and names of referees to: Search Committee, Department of Anthropology, The George Washington University, Washington, DC 20052. Review of applications will begin 15, 1995 and will continue until the position is filled. GWU is an Equal Opportunity/Affirmative Action 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-5, or equivalent (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 relocation 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 fellowships in the biophysical and physiological sciences. This Division employs 13 Full Time Equivalent (FTE) staff members who administer a $250 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: femailer@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) 402-6339 (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, BIACors, 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. Immunassay, 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.
ANT or ANT statement 20814-4799.

references

Chairman, Department of Biochemistry, Mcharry 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 experience in molecular mechanisms of bacterial pathogenicities are required. Responsibilities include development of a productive research program in bacterial pathogenesis and training in department and related courses. Research, 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: Allison 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 invites applications for an ASSISTANT PROFESSOR of Biology in the area of ecology and evolution. 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 three 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. Preference is given to individuals working in lymphocyte biology and lymphocyte development. Interested individuals should send a curriculum vitae, a statement of research interests, and the names of three sponsors by December 15, 1995 to:

Dr. Thomas F. Tedder
Department of Immunology
Duke University Medical Center
Durham, NC 27710

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


We recognize that diverse perspectives are a key factor in the process of discovery.

EEO/AA Employer M/F/D/V
The Department of Biology at Willamette University is seeking an endowed chair in cellular biology 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 contribute 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 between faculty and undergraduate students.

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

Willamette University is an Affirmative Action/Equal Opportunity Employer.

The Department of Biochemistry at the University of Wisconsin-Madison invites applications for a tenure-track position in biochemistry. The Department of Biochemistry, with over 70 full-time faculty members, is in a highly active research environment. Applicants with a strong background in molecular biology, or biochemistry, or a combination of both are encouraged to apply.

Applications should include a letter stating research interests and the names of three references to: The Recruitment Committee, Department of Biochemistry, University of Wisconsin-Madison, 525 N. Frances Hall, Madison, WI 53706, USA. In addition, applicants should arrange for at least three letters of reference to be mailed directly. Application materials should be received by October 20, 1995. The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity employer and encourages applications from women and minority candidates.

The Department of Biology at Amherst College is seeking an endowed faculty position in molecular biology or biochemistry. The successful candidate will be expected to be active in research, to participate in the education of undergraduate students, and to have a record of excellence in teaching.

Applications are solicited from distinguished scientists interested in teaching in the Department of Biological Sciences at Amherst College. The member of the faculty will have an annual position for a three-year period (tenure to be renewed for a second and a third year). The successful candidate will be expected to have a strong research program and a commitment to excellence in teaching. The field of research can be chosen by the candidate with the advice of the department.

Applications should be sent to: Chair, Department of Biological Sciences, Amherst College, 50 College St., Amherst, MA 01002-5000.

The Department of Chemistry at the University of California, Davis is seeking a full professor in departmental chemistry. The position is available immediately and will continue until the position is filled.

Applications should be sent to: Chair, Department of Chemistry, 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 of three references. The position is open until filled, but to ensure consideration, applications should be received by October 15, 1995. The University of California is an Affirmative Action/Equal Opportunity Employer with strong institutional commitment to the development of a diverse faculty.

The Department of Chemistry at the University of Maryland, Baltimore, is seeking a full professor in departmental chemistry. The position is available immediately and will continue until the position is filled.

Applications should be sent to: Chair, Department of Chemistry, University of Maryland, Baltimore, MD 21201, an Equal Opportunity/Affirmative Action Employer.
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. Qualifications 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 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 bacterial activity by PMNs, etc. Techniques will include thymidine incorporation, flow cytometry, and cell culture. Qualifications 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 ornergy. Ref. # 1040

**Research Assistants BS/MS**

**Molecular Biology** - The candidate seeks 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 murine 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.

We are an equal opportunity employer M/F/D/V.

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**Scientists/Associate Scientists**

**QC Methods Development**

You will be responsible for the evaluation, optimization and validation of analytical test procedures. This includes preparing standardization and reports, providing support for technology transfer and method troubleshooting and assessing new technologies for their applicability in a QC environment. Requirements include a Ph.D 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 #V5kS

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.
POSTDOCTORAL POSITION

Department of Biochemistry

Chemical Biology

The Laboratory of Dr. Jonathan D. Gitlin, Department of Pediatrics, Children's Hospital of Columbus, Columbus, OH 43210. Send curriculum vitae and names of three references to: Dr. Jonathan D. Gitlin, Department of Pediatrics, Children's Hospital, 1 Children's Place, St. Louis, MO 63110. Email address: gittlin@kidsal.wustl.edu. Washington University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

Department of Biochemistry

The Laboratory of Dr. Robert J. Weinberg, Department of Biology, Cell Biology, and Pathology, University of California, San Francisco, CA 94114. Send curriculum vitae and names of three references to: Dr. Robert J. Weinberg, Department of Biology, Cell Biology, and Pathology, University of California, San Francisco, CA 94114. Email: roberto@lsen.med.uu.edu. UCSC is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Department of Biochemistry

The Laboratory of Dr. Robert J. Weinberg, Department of Biology, Cell Biology, and Pathology, University of California, San Francisco, CA 94114. Send curriculum vitae and names of three references to: Dr. Robert J. Weinberg, Department of Biology, Cell Biology, and Pathology, University of California, San Francisco, CA 94114. Email: roberto@lsen.med.uu.edu. UCSC is an Equal Opportunity/Affirmative Action Employer.

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Department of Biochemistry

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The Applied Biosystems Division of Perkin-Elmer is the leading producer of instruments and reagents for biotechnology research. We are committed to developing innovative products for scientists exploring a broad range of bioresearch applications, such as the Human Genome Project.

Our multidisciplinary teams of scientists, engineers and strategic marketing personnel are focused on providing improved systems for automation of such processes as DNA Synthesis, DNA Analysis, PCR (Nobel prize winning technology of 1993) and Protein Analysis. We serve leading-edge academic research and applied science efforts in molecular biology and human genetics research, pharmaceutical R&D, environmental studies, agriculture/food testing and forensic analysis throughout the world.

If you are an experienced professional eager to make a difference in the ever-changing face of life-science, consider this opportunity available at our Foster City location, in the beautiful San Francisco Bay Area:

SENIOR SCIENTIST
In our Science and Technology Group

As a member of an international team spread over multiple sites, you will focus on developing innovative systems for slide-based assays involving localization of DNA. Your key responsibilities will include applications development and systems optimization, including definition of system specifications for specific applications; optimization of chemistry and protocols; definition of data acquisition, analysis and presentation requirements; definition of user interface requirements. You will interact with academic collaborators, develop applications data for marketing and system support, as well as participate in training marketing, sales and support personnel.

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-elm.com/abd/

We offer a competitive salary and generous benefits package. Send your resume, indicating reference #SC10446, to: Applied Biosystems, P.O. Box 54998, Santa Clara, CA 95056-4998 or e-mail to: ostojimi@ccmail.aplidbio.com. We are an equal opportunity employer.

PERKIN ELMER
Applied Biosystems Division

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

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.
POSTDOCTORAL POSITION
Developmental Neurobiology

Opening for neuroscientist experienced with embryonic organ culture techniques 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. Shiple, in press), and olfactory-blot induction (Q. Gong and M. T. Shiple, Nature 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. Shiple, 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 physicists as part of a state-of-the-art facility for quantitative high resolution microscopy. Send resume with experience and references to: Dr. Leslie Loew, The Center for Electron Microscopy, University of Connecticut Health Center, Farmington, CT 06020, 1507, an Affirmative Action/Equal Employment 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 investigative scientist. Investigations concerned with mechanism of neuromuscular transmission, immunology, molecular or cellular 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 vertebrate and invertebrate development. Investigations concerned with mechanisms of mouse embryos and adult tissues, functional assays of recombinant proteins expressed in baculovirus, generation and characterization of knockout mice, and standard immunocytochemistry and biochemical techniques. Applicant should be a recent Ph.D. with relevant experience. Send curriculum vitae and names of three references to: Dr. Daniel S. Greenman, 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 letter of interest and three references by November 1, 1995 to: Carl Lynch III, M.D., Ph.D., Department of Anesthesiology, HSC-Box 238, Charlotteville, VA 22908. Email: cly7@virginia.edu. University of Virginia is an Equal Opportunity/Affirmative Action Employer.

THE HEISER PROGRAM FOR RESEARCH IN LEPROSY AND TUBERCULOSIS

Beginning POSTDOCTORAL RESEARCH FELLOWSHIPS available up to $28,000 per year, plus other allowances. Applicants should have M.D., Ph.D., or equivalent degree. Application deadline February 15, 1996. Submit curriculum vitae with three references by December 1996. For information: The Heiser Program, 450 East 63rd Street, New York, NY 10021, or FAX: 212-688-6794.

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA
John J. and Margot A. Pritzker 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 marine invertebrates. The project must be based at the Academy, although field work and visits to other museum collections are encouraged. The topic should be named early 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 and/or evolutionary, 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 and names of three references, description of the project, and the names, addresses and telephone numbers of three references to: Chairman, SAFTS, American Chemical Society, 1901 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 to elucidate the role of ROS in aging and cell death in several model systems. Experience with 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 chemistry and fluorescence (fluorescence of protein conformation); mammalian cell culture techniques (oxidation in cell culture). Dr. Erik Floor: Neurochemistry (oxidative modification of proteins). Several positions available in state-of-the-art facilities. Dr. Mary Michaelis: Protein biochemistry or cell culture experience (oxidative modifications of proteins and use of NacNac reagents). 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: Dr. C. Hedges, Department of Biology, Kans, Fuguisc, Biocenosis 2009 Constant Avenue, Lawrence, KS 66047. Phone: 913-864-5183. Email: anette@smissman.hbc.ukans.edu. Affirmative Action/Equal Employment Opportunity Employer.

POSTDOCTORAL POSITION

Bacterial Pathogenesis. A POSTDOCTORAL POSITION is available to investigate the molecular biology of bacterial pathogens that cause disease in epithelial cells. The research will utilize a variety of contemporary molecular technologies and cellular immunologic approaches to investigate the mechanism of virulence of Salmonella and Dazella lungasseyferi that contribute to immunopathogenesis and/or protective immunity. The position offers the opportunity to carry out research in an attractive and dynamic research environment. Send curriculum vitae, a brief description of research interests, and the names and addresses of three references to: Dr. Michael V. Norgard, Vice Chairman, Department of Pathology, University of Virginia, 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 cell adhesion molecules in postcapillary venules and leukocytes using molecular, cellular, and in vitro approaches. U.S. citizenship or permanent residency is required. Send resume and names of four references to: Dr. C. Desjardins, Medical Center Box 291, 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, cell biology, immunology, and/or pharmacology. Send curriculum vitae and three letters of reference to: Human Resources Department (NC), American Health Foundation, Valhalla, NY 10592. An Equal Opportunity Employer.

POSTDOCTORAL POSITION

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 a Ph.D. or M.D. degree and a proven record in research with proven track record in acquiring extramural funding. The Department has ongoing federally funded research programs in virology, cancer biology, immunology, and HIV-1 immunopathogenesis which interfaces with a federally funded ACTG in HIV clinical care. A generous starting package, a fully equipped “state of the art” laboratory are provided. Send curriculum vitae and a detailed description of research plans no later than October 1, 1995 to: Dr. Howard Gendelman, Chairman, Molecular Retrovirology Search Committee, Path/Micro, UNMC, 400 South 42nd Street, Omaha, NE 68105. An Affirmative Action/Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS available immediately. Position 1) To study opioid receptors and cell-signal transduction. Experience in cellular electrophysiology (intracellular recording and/or patch clamp techniques) required. Position 2) To study opioid receptor interactions in animal models. Experience in animal behavioral testing and/or psychopharmacology desired. Both positions offer opportunities to incorporate multiple disciplinary approaches to study the actions of opioids. Send curriculum vitae, a brief description of research interests, and names, addresses and telephone numbers of three references to: Dr. L. Yu, Department of Medical and Molecular Genetics, The Ohio State University, 1900 Biological Sciences, Indianapolis, IN 46202. Email: igem100@indycms.iupui.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION available for the molecular genetic analysis of a G protein-coupled receptor in Askat Sacharow worms. Experience in cellular electrophysiology and other techniques included. Send curriculum vitae and references to: Dr. J. Peck, Assistant Professor, Neurobiology, University of Washington, Seattle, WA 98195. Equal Opportunity Employer.

POSTDOCTORAL POSITION to study transcription regulation and chromatin remodeling 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-Madison School of Medicine, Department of Pathology, 1300 University Avenue, Madison, WI 53706. Email: ehebrsen@facstaff.wisc.edu.

POSTDOCTORAL POSITIONS are available at Seattle Biomedical Research Institute in the following areas: 1) organole expression in the malarial parasite Plasmodium falciparum, 2) assembly of fragmented mitochondrial rRNAs into ribosomes in P. falciparum, and 3) growth regulation and chromatin remodeling in molecular biology desired. Send curriculum vitae and names of three references to: Dr. Jean Feagin (positions 1, 2) or Dr. Gerard Gougiolisi (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. For 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 and Immunology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-8576. University of Texas Southwestern is an Equal Opportunity Institution.
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 areas of randomized clinical trial methodologies, decision aids technology, emergency medicine and pharmacoconomics.

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 interests/needs, 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.

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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.*
POSTDOCTORAL POSITIONS
CHANNELS AND PORES
Worcester Foundation for Biomedical Research


POSTDOCTORAL FELLOWSHIP
Cornell Medical College

POSTDOCTORAL FELLOWSHIP position is 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, 525 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. Plemper, Nelson Biological Laboratories, Rutgers University, Busch Campus, Piscataway, NJ 08855-1069. Equal Opportunity Employer.

CELL BIOLOGY/IMMUNOLOGY

POSTDOCTORAL POSITION. A position is available immediately for studies of 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 three letters of reference to: Dr. 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 Pein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030-3505. FAX: 203-679-1269; Email: afem@email.neuron.uconn.edu. 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 other cell biology methods. Patch-clamp experience is essential. Send curriculum vitae and names and addresses of three references to: Dr. Glenn E. Kirsch, Rambamkamp Center for Research R327, MetroHealth Medical Center, 2500 MetroHealth Drive, Cleveland, OH 44109-1998. FAX: 216-776-8282; Email: gkirsch@mhocr.mhocr.org.

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 Libraries, Metaphase Analysis, Linkage, Coordinate, and DNA Database Analysis), or large-scale mutational 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 the above fields 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 International

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 contribute to the efforts of the Giant Cell and Cardiovascular division in studies of human cardiac gene expression. Applicants should have experience in molecular experiments, cloning techniques, cell analysis and cell biology methods, PCR, mammalian cell culture, and protein biochemistry. Interested individuals should send their resume 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

POSTDOCTORAL POSITION available immediately for pulmonologists interested in basic science research in the Laboratory of Pulmonary Pathology, Armed Forces Institute of Pathology in collaboration with the Laboratory of Pathology at the National Cancer Institute. Experience in molecular pathology, pathology research is required. Send a curriculum vitae and names of three references to: Dr. D. Cowburn, Laboratory of Physical Biochemistry, The Rockefeller University, 1230 York Avenue, New York, NY 10021-6599; cowburn@rockvax.rockefeller.edu.

POLYMOHYLARY PATHOLOGY RESEARCH

Applications are invited for a pulmonology RESEARCH POSITION in the Department of Pulmonary and Medistsitary Pathology, Armed Forces Institute of Pathology in collaboration with the Laboratory of Pathology at the National Cancer Institute. Experience in molecular pathology is required. Send a curriculum vitae and names of three references to: Dr. D. Travis, M.D., Department of Pulmonary and Medistsitary Pathology, Armed Forces Institute of Pathology, Washington, DC 20306-6000. Telephone: 202-782-1780; FAX: 202-782-5017. Equal Opportunity Employer.

RESEARCH SPECIALIST

University of Kentucky, College 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 and presentations; and assist in manuscript and bio-statistics. B.S. degree in Biomechanics/Bioinformatics required. M.S./Ph.D preferred. Minimum of three years of experience in any related field preferred. Knowledge of computer modeling methods desirable. Familiarity with animal medicine helpful. Send resume with references to: Dr. Greg Powell, Director of Pathobiological Sciences, New Bolton Center, 382 West Street Road, Ken- nett Square, PA 19348-1692. No Phone Calls Please. Equal Opportunity/Affirmative Action Employer.

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 the above or in neurorehabilitation or critical care. Modern laboratory space, protected time, joint and/or basic science collaborations or mentorship by senior investigators, and substantial intramural funding is available. Junior investigators with potential for extramural research funding will be considered. Applicants with active funding are encouraged to apply. Interactions with other faculty in the basic science departments as well as the Sanders-Brown Center on Aging, Markey Cancer Center, School of Law 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. Man- kadb, Chair, Department of Pediatrics, University of Kentucky Medical Center, 800 Rose Street, Lex- ington, 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 Biology 1B and the Biological Sciences 1B Learning Center. Position open until filled. Applicants 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: Dr. T. Vines, 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.

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.

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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 a newly created 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.

Rutgers University is an Equal Opportunity/Affirmative Action Employer m/f/h/v.

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**AGRACTUS, INC.**

Agractus, 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 economics 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 isolation, enzyme chemistry, HPLC/GC- mass-spectrum, textile chemistry, processing of fiber application development or biopolymer chemistry.

Agractus 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, Agractus, Inc., 8520 University Green, Middleton, WI 53562. FAX: 608-836-9710.

Equal Opportunity Employer Drug-Free Workplace
**Alexander Hollaender**  
**Distinguished**  
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Research Opportunities in Energy-Related Life, Biomedical, and Environmental Sciences including Human Genome and Global Change

- Research in OHER-sponsored programs
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- Doctoral degree received after April 30, 1994
- U.S. citizens or PRA eligible

Information and applications:
Hollaender Postdoctoral Fellowships  
Science/Engineering Education Division  
Oak Ridge Institute for Science and Education  
P.O. Box 117  
Oak Ridge, TN 37831-0117  
(615) 576-9975

*Deadline January 15, 1996*

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**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.

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**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, Nonocurrent 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

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**PENN UNIVERSITY OF PENNSYLVANIA**

**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

**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, Nonocurrent 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

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**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.
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.

MOLECULAR IMMUNOLOGISTS/COUNTY 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
Project Scientist/Vaccine Engineering & Technology

Process Research With The World's Leader In Pharmaceutical Innovation.

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. WPS3B-424, P.O. Box 4, West Point, PA 19486. No Phone Calls, Please.

An Equal Opportunity Employer M/F/D/V

MERCK

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, government 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 with digital image analysis to examine the transport and assembly of cytoskeletal elements in growing neurons. A second project examines the functional specialization 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: 215-707-2986. Temple University is an Equal Opportunity/Affirmative Action Employer. M/F/D/V.

TEMPLE UNIVERSITY SCHOOL OF MEDICINE

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, or geobiology 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. CSU 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 and delivering 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.
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, biochemistry, 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

The Lindsey 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 numerous 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: J/GG-PP, New York Blood Center, 150 Amsterdam Avenue, 3rd Fl, New York, NY 10023. An Equal Opportunity Employer M/F/D/V.

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

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.


Bristol-Myers Squibb Pharmaceutical Research Institute

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, immunoprecipitation, enzyme assays, radioreceptor assays, tissue culture, protein purification and characterization. Well developed communication, supervision, 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

A Bristol-Myers Squibb Company
An Equal Opportunity Employer M/F/DV
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; and 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 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 &/or monographic research writing &/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.

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**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
- alterations 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 hydrostatic response to arginine vasopressin in the inner medullary collecting duct
- alterations in V1 receptor-mediated pathways in chronic pathophysiologic states

**Thomas J. Thekkumkar, PhD**
- biochemical mechanisms of receptor-mediated angiotension II actions
- structure/function relationship of angiotensin receptor subtypes

Applicants must have a Ph.D 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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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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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) 275505.

The readership is associated with a fellowship at Exeter College.

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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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Nita J. Maihle, Ph.D.
Associate Director for Basic Research
Mayo Cancer Center
Mayo Clinic
200 First Street SW
Rochester, MN 55905

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ICOS Corporation
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Bothell, WA 98021
LEUKEMIA RESEARCH FOUNDATION

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 nonprofit 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 60646. Telephone: 708-982-1480; FAX: 708-581-0779.

MEETING

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Darwin J. Prockop, M.D., Ph.D.
Jefferson Institute of Molecular Medicine
Jefferson Medical College
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Center for Fluorescence Spectroscopy University of Maryland School of Medicine
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