PRODUCTS & MATERIALS

clonal and polyclonal antibodies on protein immunoblots, and lectin and receptor binding studies. Antibody binding can be detected by all conventional methods including chemiluminescence and enzyme conjugates. Immunetics. Circle 140.

Infrared Thermometer

The laser-guided, noncontact Infrared Thermometer Model IR-3LD provides instantaneous surface temperature measurement of an object or area from a distance of up to 1 meter. It features a laser guide to pinpoint the exact location of measurement, °C/°F switch, low-battery indicator, and display memory hold. The cellular phone–sized unit has a temperature range of -20° C to 400°C and is accurate to within 1% of the reading. Delta-TRAK. Circle 136.

-

Ion Chromatograph

The DX-120 Ion Chromatograph is an affordable, fully integrated system that performs all types of isocratic ion chromatography separations that make use of conductivity detection. The system is designed for routine, high-throughput applications where

economy, reliability, and simplicity are primary concerns. The DX-120 is shipped preconfigured for single- or dual-column operation with all necessary components, including injector, pump, and high-sensitivity conductivity detector. The system can be operated as a stand-alone instrument or fully automated by connecting to a workstation. **Dionex. Circle 137.**

Contaminating DNA Removal

Plasmid-Safe DNase is an easy, fast, and powerful method to selectively remove contaminating bacterial chromosomal DNA from preparations of plasmid or cosmid DNA. Plasmid-Safe DNA digests linear double-stranded DNA and both closed-circular and linear single-stranded DNA, but has no activity on nicked or closed-circular double-stranded DNA. Following digestion, the enzyme is inactivated by incubation at 70°C for 30 min. **Epicentre Technologies. Circle 138.**

Blue Substrate for Alkaline Phosphatase

The BCIP Microwell Substrate for alkaline phosphatase produces a deep-blue color in enzyme-linked immunosorbent assays (ELISA). This two-component substrate offers high signal-to-noise ratio, sensitivity, and consistent performance. The substrate remains blue after addition of stopping reagent and is read at 620 to 650 nm. The rapid reaction rate permits accurate, quantitative measurement in kinetic ELISA. The strong blue color also enables quantitative determinations. Kirkegaard & Perry Laboratories. Circle 139.

Blot Processor

The Immunetics Miniblotter PH/8 is a multichannel device for processing multiple antibodies simultaneously on an intact blot produced with the Pharmacia Phast System. The patented Miniblotter eliminates the difficulties associated with cutting individual strips of membrane for each test. Instead, all tests are performed in parallel lines on a single, uncut blot. Wash steps are carried out with a detachable manifold, enabling the user to rapidly wash all lanes on the blot simultaneously. The Miniblotter requires only microliter volumes of sample, making it useful for hybridoma screening and other applications where sample volumes are limited. The lanes are matched to a standard Pharmacia eight-tooth comb. A preparativestyle sample application comb is also available that can be used to apply a single antigen across the width of a gel. Applications for the device include rapid screening of mono-

Kit for Manual or Automated DNA Purification

The 96-Plasmid Purification Kit for template DNA purification in microplate format can be used with manual procedures or with the Biomek 2000 Laboratory Automation Workstation. All separation steps are performed with filtration once the bacteria have been pelleted by centrifugation. The kit contains reagents, filter plates, and collection plates for purification of 96 templates. **Beckman Instruments. Circle 141.**

■ Antibodies

Monoclonal antibody POH-1 stains p34cdc2 cyclin-dependent kinase in formalin-fixed, paraffin-embedded tissue sections. The antibody reacts with proliferating cells and tumor cells and cross-reacts with skeletal muscle. **BioGenex. Circle 142.**

A polyclonal antibody specific for ribosomal S6 protein kinases is available. These enzymes are part of a signaling cascade regulated by serine/threonine phosphorylation. The antibodies can be used in protein immunoblots, immunoprecipitation, and immune-complex kinase assay. **Berkeley Antibody, BAbCO. Circle 143.**

Precast Sequencing Gels

CastAway precast sequencing gels eliminate the need to pour sequencing gels manually, significantly reducing the time involved in gel preparation. Traditional methods take up to 2 hours of preparation to clean the plates, mix the solutions, de-gas the acrylamide, pour the plates, and wait for polymerization. CastAway precast gels are ready to run in less than 5 min without the mess. The procedure is simple: Open the bag, place the gel in the CastAway sequencing device, run the gel, and dry in the CastAway gel dryer. The precast gels are thinner than standard gels, resulting in shorter run times and reduced band compressions. There is no need for filter paper and less risk of gel tear-

SCIENCE • VOL. 273 • 2 AUGUST 1996

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

PRODUCTS & MATERIALS

ing because the precast gels are covalently bound to one of the glass plates. **Stratagene. Circle 144.**

Automated DNA Isolation System

The AutoGen P850 is an automated system for isolation and purification of DNA for the laboratory that only needs to run 50 samples a day. It can be used with a variety of DNA sources including plasmids and cosmids. The microprocessor-controlled system features reagent delivery, robotic tube transfer, and a centrifuge module for consistent sample processing. Up to 48 samples can be processed in 5 hours. The system is designed for laboratories performing restriction nuclease digestions, automated fluorescent sequencing, polymerase chain reaction, and Southern (DNA) blotting. Integrated Separation Systems. Circle 145.

Backpack Viewing Cabinet

The Backpack Viewing Cabinet for gel and blot analysis reduces the number of cumbersome cables and cords, freeing up valuable bench space. Two auxiliary power outlets are

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located along the side of the unit for plugging into a transilluminator, monitor, or other equipment. To ensure operator safety, the backpack houses lamp ballasts and other electrical components, and it supplies power to the high-resolution charge-coupled device camera and motorized zoom lens. Installation takes only a few minutes. Ultra-Lum. Circle 146.

Syringe In-Line Filters

Syringe In-Line Filters can be used with benchtop fermenters, for in-line gas filtration for sterile air or carbon dioxide, and as



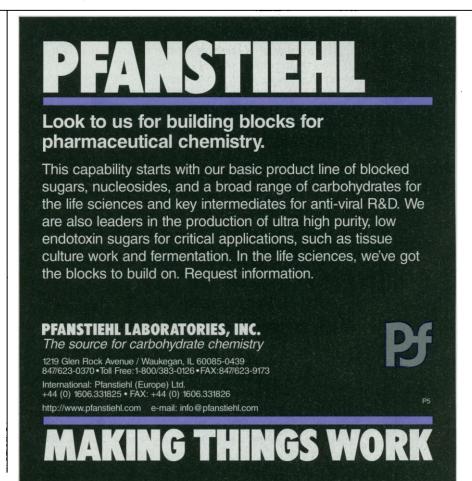
protection for vacuum pumps from damage by aqueous solutions. Manufactured of autoclavable polypropylene with a Teflon polytetrafluoroethylene membrane, the filters feature a 50-mm membrane diameter with a 0.2- or 0.45- μ m pore size. Nalge Nunc International. Circle 147.

-Literature

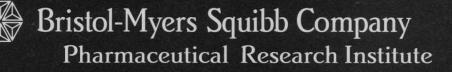
Electroporation Made Easy describes an instrument for rapid and efficient transformation of bacteria and yeast. The user simply sets the voltage, inserts the cuvette, and presses the pulse button. Eppendorf. Circle 148.

Optimization of Reversed-Phase Peptide Separations Using Automated Pairing Agent Mapping on the BioCAD Workstation is an application note on a new method for automated mapping of peptides. **PerSeptive Biosystems. Circle 149.**

Whatman LabSales 1996 Catalog includes 300 pages of laboratory instrumentation, equipment, and supplies. It includes sections on research equipment, lab instrumentation, safety products, general lab supplies, and biotechnical applications, including filtration and chromatography products. Whatman. Circle 150.



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Please forward/fax your resume to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Dept. #AB-451, P.O. Box 11279, Trenton, NJ 08620-0279. FAX: 609-581-8841.

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SEATTLE, WASHINGTON

Postdoctoral

IMMUNOTHERAPEUTICS MOLECULAR IMMUNOLOGY

The selected scientist will be a Ph.D. in Molecular Biology, Biochemistry, Immunology, Genetics or a related discipline. Specific focus will be on the development of immunologic-based therapeutic agents for the treatment of cancer and disease. Candidates must demonstrate expertise in all aspects of molecular biology and protein engineering techniques. Skill in testing of agents using in vivo models would be beneficial.

Please forward/fax your resume to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Dept. #DF-392, 3005 First Avenue, Seattle, WA 98121. FAX: 206-727-3606.

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Fully funded Postdoctoral Fellow positions are available to participate in exploratory brain research. Opportunities exist for Postdoctoral Fellows to work with scientific mentors engaged in research related to neurodegenerative diseases, feeding disorders, the regulation of receptors in the CNS. Candidates with interest in cell biology, molecular biology, and neuropharmacology are encouraged to apply.

Please forward/fax your resume to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Dept. #BS-364PD, P.O. Box 5101, 5 Research Parkway, Wallingford, CT 06492-7661. FAX: 203-284-7762.

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Completed applications must be received by October 15, 1996. Appointment commences on September 1, 1997.

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Applications for the faculty position in the general area of **ORGANIC CHEMISTRY** should include a current curriculum vitae and list of publications and a brief statement of research interests (three pages or less). Arrange to have three letters of reference sent on your behalf to:

> Chairman, 1996 Organic Chemistry Search Committee Department of Chemistry Stanford University Stanford, CA 94305-5080

Applications for the faculty position in the general area of **PHYSICAL CHEMISTRY** should include a current curriculum vitae and list of publications and a brief statement of research interests (three pages or less). Arrange to have three letters of reference sent on your behalf to:

> Chairman, 1996 Physical Chemistry Search Committee Department of Chemistry Stanford University

Stanford, CA 94305-5080 Stanford University is committed to Equal Employment Opportunity through Affirmative Action and is eager to identify minority persons and women with appropriate qualifications.

BIOMEDICAL ENGINEERING FACULTY Columbia University

The Center for Biomedical Engineering of the School of Engineering and Applied Science (SEAS) at Columbia University is seeking applications for three TENURE-TRACK faculty positions in the areas of cardiovascular research, cellular engineering, and biomedical imaging. The applicants should have a background in one of the traditional engineering disciplines, including bioengineering. Each applicant should be prepared to establish a vigorous and independent program of high quality research in one of the three areas. Close collaborations with the faculty and staff of Columbia's College of Physicians and Surgeons is strongly encouraged, and qualified individuals may receive joint appointments. Other responsibilities include graduate and undergraduate teaching, and curriculum development. Applicants at the Assistant, Associate, and Full Professor levels will be considered. An incentive recruitment package is to be individualized to the needs of each successful applicant. These positions will be filled during the 1996 and 1997 calendar years. Funding for the Center is derived in part from a Whitaker Special Opportunity Award to SEAS. Applicants should send curriculum vitae along with a brief statement of current research projects, three samples of publications, record of funding, career goals, and names of five references to: Professor Van C. Mow, SW Mudd Building, Room 248, Columbia University, New York, NY 10027. Telephone: 212-305-1515; Email: mow@cuorma.orl. columbia.edu

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EXECUTIVE DIRECTOR Center for Tropical and Subtropical Aquaculture

Center for Tropical and Subtropical Aquaculture (CTSA) is one of five regional aquaculture centers admin-istered by USDA. Candidates should have outstanding technical knowledge, experience in aquaculture research, understanding of commercial aquaculture, and demonstrated administrative and leadership abilities. A Ph.D. is required. Significant cross-cultural professional experience is an important requisite of this position. Candidate should be able to communicate efficiently with industry, academic, and government representatives in aquaculture and demonstrate strong leadership in team-building approaches to project development and management. Salary is commensurate with experience. By September 1, 1996. send a letter of application and detailed résumé, and arrange to have three letters of reference sent to: Executive Committee, Center for Tropical and Subtropical Aquaculture, The Oceanic Institute, Makapuu Point, 41-202 Kalanianaole Highway, Waimanalo, HI 96795. Equal Opportunity Employer.

POSITIONS OPEN TENURE-TRACK FACULTY POSITION

Center for Advanced Research in Biotechnology Macromolecular NMR Spectroscopy

The Center for Advanced Research in Biotechnology (CARB) is seeking to fill a tenure-track **FACULTY** position in macromolecular NMR spectroscopy. Applicants using and developing multidimensional solution NMR methods to study structure and dynamics of biological macromolecules are invited to apply. The successful candidate will be expected to develop a strong, independent, externally funded research program, and also to interact with other CARB scientists involved in high field NMR spectroscopy, physical biochemistry, structural immunology, protein folding, stability, modeling and engineering, macromolecular crystallography, and computational chemistry.

CARB is a research center of the National Institute of Standards and Technology (NIST) and the University of Maryland Biotechnology Institute devoted to fundamental problems of macromolecular structure, function, and engineering. Interested candidates should send a curriculum vitae and a summary of research interests and plans, and should arrange for three letters of reference to be sent to:

Faculty Search Committee Center for Advanced Research in Biotechnology University of Maryland Shady Grove 9600 Gudelsky Drive Rockville, MD 20850

Review of applications will begin on 1 October 1996. CARB is an Equal Opportunity/Affinuative Action Employer. Women and minority candidates are encouraged to apply. Preference will be given to U.S. citizens.

THREE FACULTY POSITIONS NEUROSCIENCE

The Departments of Biology and Biochemistry at the University of Houston (UH) invite applications for three TENURED or TENURE-TRACK faculty positions in neurosciences. We especially wish to recruit neuroscientists with interests in learning and memory, ion channels and signal transduction, developmental neurobiology, biological rhythms, or neurological diseases. The positions require a Ph.D. or equivalent and postdoctoral experience. The level of academic rank is open and will depend upon qualifications. The faculty members are expected to develop and maintain a nationally competitive research program and participate in graduate and undergraduate teaching. The Departments have spacious labs and strong research programs in many areas of cellular and molecular biology and biochemistry, and encourage active research collaborations among their faculty and with other research institutions in the Houston area. Consult http:// www.bchs.uh.edu for further information about the Departments. Review of applications will begin by October 15, 1996. Applicants should submit curriculum vitae and statement of research plans, and have three letters of reference sent to: Dr. Arnold Eskin, Faculty Search Committee, Departments of Biology and Biochemistry, University of Houston, Houston, TX 77204-5934. UH is an Équal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

FACULTY POSITION ATMOSPHERIC CHEMISTRY University of California, Irvine

The Department of Chemistry invites applications for a tenure-track position as ASSISTANT PROFESSOR in the area of atmospheric chemistry. We are seeking an outstanding Ph.D. who will establish a vigorous research program in areas that will complement existing strong programs in atmospheric chemistry both within the Department of Chemistry as well as in Earth System Science. Typical (but not exclusive) areas include the development of new analytical methods, studies of the fundamental chemistry and photochemistry of organic or inorganic atmospheric systems, or aerosol chemistry. The ability to effectively teach chemistry at the undergraduate and graduate levels is required. Applicants should send their cur-riculum vitae, a list of publications, and a research proposal to: Professor B. J. Finlayson Pitts, Atmospheric Chemistry Search Committee, Department of Chemistry, 516 Physical Sciences 1, University of Califor-nia, Irvine, CA 92697-2025. Applicants should also arrange to have three letters of recommendation submitted on their behalf. To ensure full consideration, applications and all supporting materials should be received by November 15, 1996. The University of California is an Equal Opportunity Employer committed to excellence through diversity.

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- Dr. John M. Hallenbeck Dr. A. Jacqueline Hunter Dr. Constantine ladecola Professor Peter Jenner Dr. Matthew Linnik Dr. Paul Morgan
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- 3. Oligodendrocytes and MS
- 4. Inflammatory Mediators in CNS
- 5. Ischemic Insult and Inflammation
- 6. Neurodegenerative Inflammatory Disorders and Potential Therapies
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POSTDOCTORAL FELLOWSHIPS



Fellowships for the NIDA-funded "Training in Pharmacology of Drugs of Abuse" program are available for candidates with Ph.D., Sc.D., M.D., or equivalent. This interdisciplinary pro-gram draws from the Departments of Pharmacology and Physiology & Biophysics, and the Center for Neurobiology, Mount Sinai School of Medicine, and the Department of Psy-chalogy Queons Colloga CLINY chology, Queens College, CUNY.

Opportunities are now available in research training with the following preceptors:

Carter Bancroft, Ph.D. - Nicotine modulation of pituitary gene expression Richard Bodnar, Ph.D. - Opioid mediation of analgesic and ingestive responses Dennis P. Healy, Ph.D. - Regulation of CNS dopamine receptor gene transcription Ravi lyengar, Ph.D. - G proteins and opioid drug dependence-gene transfer experiments Roman Osman, Ph.D. - Structure and function of peptide receptors

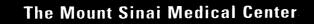
James Roberts, Ph.D. - Endorphin gene expression/Peptide PCP-like NMDA receptor antagonists

Stuart Sealfon, M.D., Ph.D. - Interactions of hallucinogens with G-protein coupled receptors/effects of receptor overexpression in transgenic mice

Harel Weinstein, Sc.D. - Computational studies of signal transduction in G-protein coupled receptors involved in the actions of hallucinogens and opioid drugs Sherwin Wilk, Ph.D. - Mechanisms of regulation of thyrotropin releasing hormone

and cholecystokinin metabolizing enzymes

In accordance with NIDA funding stipulation, applicants must be U.S. citizens or permanent residents. To apply, send your curriculum vitae, names of three references, letter describing your research interests, and indication of which preceptors/pro-jects interest you, to: Joseph Goldfarb, Ph.D., Department of Pharmacology, Box 1215, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an Equal Opportunity Employer.



AEIVEOS

Aeiveos Sciences Group is a biotechnol-ogy research company dedicated to elucidating the molecular mechanisms of aging and applying this knowledge to reducing the negative impacts of aging on human health. Opportunities exist for talented, creative scientists in the following positions:

Molecular Biologist to conduct differential gene expression research on molecular mechanisms of aging and caloric re-striction. Requires a Ph.D. and 0-2 years of postdoctoral research experience in molecular biology. This position will involve cloning and characterization of aging-associated genes. (Reference Code: AŠG-DGE)

Biochemist/Molecular Biologist to investigate pathways of free radical-mediated damage. Requires a Ph.D. degree and 0-2 years of postdoctoral research experience studying oxidative damage or related topics. (Reference Code: ASG-MMP)

Molecular Biologist to study mechanisms of aging and oxidative stress in long-lived species. Requires a Ph.D. degree and 0-2 years of postdoctoral research experience in molecular cloning and analysis of differential gene expression. Additional experience in biochemistry and tissue culture is preferable. (Reference Code: ASG-NAP)

Qualified candidates should send a CV and names and contact information for three references to: Aeiveos Sciences Group, (Reference Code), P.O. Box 31083, Seattle, WA 98103-1083. Fax: (206) 547-3380.

SENIOR RESEARCH FACULTY **POSITION IN IMMUNOLOGY** LA JOLLA INSTITUTE FOR ALLERGY AND IMMUNOLOGY

Applications at the Associate/Full Professor level from individuals with wellrecognized research programs are invited for a senior position in T cell biology. Work in animal models of autoimmune, infectious, or malignant disease, including the use of transgene/knockout technologies, are areas of particular interest, but applications from individuals working in other areas of T cell immunology are also welcome. The successful applicant will work in an expanding and well-equipped facility in the midst of the La Jolla scientific community (Scripps, UCSD, The Salk Institute, The Burnham Institute). The position includes generous set-up funds, ongoing institutional support, and ample space for 12-18 individuals in a new building.

Candidates should forward a letter outlining research interests and a curriculum vitae to:

> **Faculty Search Committee** La Jolla Institute for Allergy and Immunology **10355 Science Center Drive** San Diego, CA 92121

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School of Biological Sciences



The School of Biological Sciences at the University of East Anglia, with molecular biology, cell biology and population biology sectors, occupies a unique position at the heart of the Norwich Research Park (NRP). Embracing the John Innes Centre (including the Sainsbury Cambridge and Nitrogen Fixation Laboratories), the Norwich Laboratory of the Institute of Food Research and the MAFF Food Science Laboratory, the NRP comprises the largest concentration of Molecular Biologists in Western Europe. Building is about to start on an adjacent site of the new Norfolk and Norwich Hospital, one of the largest non-teaching hospitals in the country. This will provide further opportunities for the enhancement of the School's research and teaching profile across the range of its activities.

As part of a rolling programme of new appointments the University is now seeking to fill the following four vacancies:

CHAIR IN CANCER STUDIES (REF: AC110)

This Research Chair is funded by the Norfolk and Norwich Big C Appeal. Applications are invited from individuals with interests in the molecular and cellular biology of cancer. Wellsupported laboratory facilities, including tissue culture, are available within a research department which has a cancer group, with potential for further funding from other charitable sources. There will be opportunities to contribute to undergraduate and graduate teaching programmes. The post is available from September 1997 for a period of five years.

CHAIR IN MOLECULAR GENETICS OF DEVELOPMENT (REF: AC111)

Applications for this permanent post are invited from those with a strong research programme in the molecular genetic and/or cellular analysis of eukaryote development. The appointee will play a crucial role in recruiting at least two lecturers funded by the Gatsby Foundation, providing an opportunity to build a critical mass in a chosen area. Suitable research areas include, but are not restricted to, molecular genetical or cell biological analysis of development in C. elegans or Drosophila, areas which complement the existing strengths of the School and the John Innes Centre, which includes the Sainsbury Laboratory, in population genetics, plant molecular genetics, cancer studies, microbial molecular genetics and structural studies of biomolecules.

LECTURER IN MOLECULAR BIOLOGY (REF: AC113)

Applicants for this post in the Molecular Biology Sector should have research experience in eukaryotic molecular biology and applications from scientists with interest in signalling in plant systems would be particularly welcome. The appointment will complement the existing strengths of the Norwich Research Park institutes in plant and microbial genetics and biochemistry, molecular cell biology, cell signalling and structural studies of biomolecules.

Informal enquiries may be made by contacting: Professor Colin Greenwood (telephone: 01603 592196 or fax: 01603 592250, or Email: c.greenwood@uea.ac.uk)





LECTURER IN POPULATION BIOLOGY (REF: AC112)

Biological Sciences and the adjacent School of Environmental Sciences has a group of 15 ecology faculty. Applicants for this post should preferably have post-doctoral experience and will be expected to develop a strong research programme in population biology which will allow them to develop links with other research activities in ecology. Current research strengths are in molecular ecology and evolution, animal behaviour, population dynamics and conservation biology. The successful candidate will be expected to contribute to teaching in ecology and evolution, with the exact areas being dependent on his/her background. Candidates with interests in plant population biology, theoretical population biology and the integration of population dynamics and genetics using molecular techniques are particularly encouraged to apply, but applicants with other backgrounds will also be considered.

Informal enquiries may be made by contacting Professor A R Watkinson (telephone: 01603 592267, fax: 01603 592250, Email: a.watkinson@uea.ac.uk)

Five year appointments will be made to both lectureships. Salary will be on the Lecturer A salary scale £15,154 -£19,848 per annum (under review) plus USS benefits.

Salary for the professorial posts will be negotiable within the professorial salary range, minimum £31,999 per annum (under review) plus USS benefits.

The Dean of Biological Sciences, Dr Ian Gibson (delephone: 01603 592184, Email: i.gibson@uea.ac.uk) may be consulted informally for further details of the School's scientific activity. Information about the School can also be found at its Worldwide Web address: http://www.bio.uea.ac.uk/

Further particulars and an application form for each post should be obtained from the Director of Personnel and Registry Services, University of East Anglia, Norwich, NR4 7TJ (answerphone: 01603 593493, Email: Personnel@uea.ac.uk), to be returned by 30 September 1996. Please quote the appropriate reference number.

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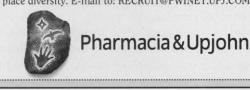
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Pharmacia & Upjohn, a global pharmaceutically focused company, has an opening for a Research Scientist.

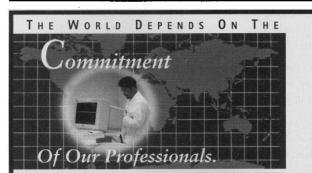
Working with our Infectious Diseases Research Group, the successful candidate will conduct independent research on selected molecular targets relevant to the discovery of novel agents for the treatment of infectious diseases. The molecular targets include bacterial and viral pathogenesis processes, metabolic pathways, DNA replication, protein synthesis, and regulation of gene expression. This scientist will employ molecular biology, microbial genetics, virology, and biochemistry to design mechanistic assays for the implementation of high throughput screens. The incumbent is expected to play a significant role in our Antibacterial Program, and will carry out high-quality work war-ranting publication in peer-reviewed journals.

In addition to a Ph.D. degree in microbiology, molecular biology, virology, cell biology, or biochemistry, a minimum of 2 years of postdoctoral training and 3-5 years of independent research experience are required. Strong background in prokaryote genetics, pathogenesis, and molecular biology with proficiency in techniques required for experimentation in these areas is highly advantageous

Pharmacia & Upiohn, Inc. offers a competitive salary, benefits and relocation assistance commensurate with the expected contribution. For confidential consideration please send your resume/CV to: Pharmacia & Upjohn, Inc., Corporate Recruiting, Position #327, 7000 Portage Road, Kalamazoo, MI 49001. We are an equal opportunity employer with a commitment to work-place diversity. E-mail to: RECRUIT@PWINET.UPJ.COM



BIOINFORMATICS



Revolutionary new products. Unsurpassed research

A commitment to redefining the future of health care. That's Abbott Laboratories, and it's the talent of our professionals that makes us the undisputed leader we are today. If you're looking for a professional environment built on innovation, look at the opportunities available at Abbott Laboratories. Currently, our Pharmaceutical Products Division is meeting this commitment with several innovative breakthroughs and now seeks a Bioinformatics Section Manager to help support our scientists.

BIOINFORMATICS SECTION MANAGER

You will lead computer specialists in software R&D for bioinformatics. This will include implementing and developing strategies for new technolo-gy/algorithms, operating a distributed UNIX network, and leading software efforts in C, relational data and the Web. You will also collaborate with biologists and chemists, provide user support, and act as the scientific computing liaison

We require a Ph.D. in Biology, Molecular Biology or Chemistry and 4 years of research experience in Biology/Molecular Biology, including a background supporting software development in a medical or research environment. We also require 2 years of project leadership/supervisory skills. Excellent interpersonal and communications skills are a must.

With 50,000 employees worldwide and over \$10 billion in annual sales, we've established ourselves as a respected and innovative leader in the health care industry. We offer an outstanding compensation and benefits package including profit sharing and a stock retirement plan. In addition, we are located in an attractive suburban setting approximately 30 miles north of Chicago. For confidential consideration, please send your resume with salary history to; Abbott

ABBOTT

LABORATORIES

Laboratories, Job #96-LHD-1662, D583, AP6B, 100 Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment **Quality Health Care Worldwide**



Wyeth-Ayerst Research, a division of Fortune 150 American Home Products Corporation, has an opportunity for a Senior Pharmacologist in the Central Nervous Systems Disorders department of their pharmaceutical research facility in Prínceton, NJ.

Position will have primary responsibility for performing patch clamp electrophysiological recordings of cell lines transfected with cDNA's coding for ion channels. As part of the neurodegenerative and psychiatric disorders programs, the incumbent will work as part of a team evaluating compounds interacting with potassium or calcium channels for their effects on channel induced currents, as well as for their efficacy and speci-ficity of action. Requirements include a B.S./M.S. degree in Biology with 4-10 years relevant experience which should include patch clamp electrophysiological recording tech-niques, including whole cell and single channel recording. Candidates should be familiar with cell culture techniques, in vitro channel expression methods, biophysical analysis and computer software.

computer sortware. Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please send your resume with salary requirements to: Wyeth-Ayerst Research, Human Resources Dept., Position #OPSCI-1949, P.O. Box 7886, Philadelphia, PA 19101-7886, or fax your resume (in fine mode if possible) directly into our centralized Research resume database at (610) 989-4854, e-mail:jobs@RAMAIL1.wyeth.com (ASCII format, no attachments, subject: resume). Principals Only. Equal Opportunity Employer, M/F/D/V.

WYETH

AYERST Leading The Way for a Healthier World

Senior Assistant/ Associate Scientist

Clear a Path to Discovery.

At Parke-Davis our dedicated team members have made us a world leader in developing innovative pharmaceutical products. As our strategy for pharmaceutical discovery leads to further breakthroughs, we are seeking a Molecular Biologist/Biochemist to study the molecular mechanisms of immune cell activation.

The successful candidate will be involved in studies concerning isolation and characterization of genes involved in transcriptional regulation or signal transduction. Technical expertise in RNA/DNA isolation, cDNA cloning, DNA sequencing, PCR analysis/cloning, in vitro mutagenesis, transfection, bacterial/eukaryotic expression, protein purification, DNA foot printing and tissue culture are required. Qualified candidates will have a BS and 2+ years of experience or a Master's degree with up to 2 years of experience.

We offer an attractive compensation package, as well as a tremendous environment for continued growth and success. Please send or e-mail your resume to: Parke-Davis Pharmaceutical Research, Human Resources, Box CJM 96111, 2800 Plymouth Road, Ann Arbor, Mi 48105. E-mail: resume@aa.wl.com.



Equal opportunity in action. Smoke-free work environment.



Behavioral Pharmacologist

An opening is available for a research scientist to work in the department of Behavioral Pharmacology in Novo Nordisk's Health Care Discovery organisation in Maaloev, Denmark. The research in the department is focused on obesity and womens health care and therefore, a background in neuroendocrinology is an advantage.

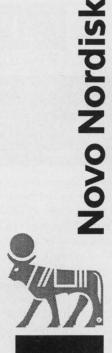
Qualifications:

- · Previous documented expertise in behavioral pharmacology in animals.
- "Self-starter", must be able to define own research direction in a projectoriented environment.
- Goal and resultoriented.
- Good interpersonal skills; must be able to establish a network within the company.
- Must be effective in using own and other peoples time in a creative, but yet resultoriented manner.
- Is able to cope with and appreciate culturel differences and diversity.
- Must not be afraid of producing written documentation of results and ideas.
- Must be able to motivate and supervise technicians.

In return the company offers:

- The opportunity to work in a projectoriented environment where many scientific disciplines are integrated in the discovery of new drugs.
- Excellent facilities in newly built laboratories in Maaelov, north of Copenhagen.
- · Many opportunities for development of professional and personal skills.
- Competitive salary and benefit package.

For further information, please contact Erik B. Nielsen, Phone no. (45) 4443 4690, Fax (45) 4466 2980, e-mail: ebn@novo.dk. Written applications should be marked "Pharmacologist.7237" and sent to the Personnel Department D&D, Krogshoejvej 55, DK-2880 Bagsvaerd, Denmark.



Novo Nordisk A/S is the world leader in insulin and diabetes care and also the world's largest producer of industrial enzymes. The company also manufactures and markets a variety of other pharmaceutical and bioindustrial products. Headquartered in Denmark, Novo Nordisk employs more than 13,200 people in 53 countries and markets its products in 130 countries. More information can be obtained from our homepage: http://www.novo.dk

Novo Nordisk A/S Novo Allé DK-2880 Bagsvaerd Denmark

Imagine The **Possibilities**

At Berlex, we've built our reputation on FDA-approved product successes and a proven track record in the pharmaceutical industry. Currently, we are seeking a Postdoctoral Fellow to focus on myelination/demyelination/remyelination processes and help us provide a basic research style environment that is both idea- and resource-rich.

Postdoctoral Fellow Oligodendrocyte/Myelin

Located in the beautiful San Francisco Bay Area, this two-year Postdoctoral Fellowship offers opportunities for publication, plus ample scientific exchange with key academic members, including collaborators at UC Berkeley and UCSF. The successful candidate will work with in vivo and in vitro models in rodents, primates and humans. This will demand strong molecular biology skills and a neuroscience background.

As a US subsidiary of an international Fortune 500 company, Berlex is proud to offer a highly motivating compensation package, including relocation assistance. To apply, send your cover letter to the attention of Dr. Jean Merrill along with your CV/resume to: BERLEX, HUMAN RESOURCES EMPLOYMENT, 15049 SAN PABLO AVE., DEPT. PDF, RICHMOND, CA 94804-0099. Principals only, please. EOE.



Dean Of Applied Sciences and Liberal Arts Institute of Technology

Stevens Institute of Technology is seeking an individual of vision with an excellent record of scholarship to assume a leadership position as the Dean of the School of Applied Sciences and Liberal Arts. The responsibilities of the successful candidate will include developing and integrating the science and liberal arts curricula; collaborating with the deans of the schools of engineering & technology marketing, as well as management, to integrate science and the liberal arts into their curricula; and championing the development of the faculty in applied mathematics. chemistry, chemical biology, computer science, applied physics, and the liberal arts & social sciences as part of the Institute's strategic plan. Additionally, the selected individual will assist faculty in the pursuit of excellence in teaching and research; promoting mutually beneficial programs with industry; and building on the momentum of a successful capital campaign to continue obtaining needed resources.

Applicants must have a demonstrated record of leadership and accomplishment as either a head of science or engineering program, or as a dean of a school with significant involvement in engineering or the sciences

Applications and nominations must include a curriculum vitae and list of references. Submissions will be accepted until September 30, 1996.

> Arthur Shapiro, Provost Stevens Institute of Technology Castle Point on Hudson Hoboken, NJ 07030 201-216-5228 201-216-8326 facsimile ashapiro@sitvxc.stevens-tech.edu

Stevens is an Equal Opportunity/Affirmative Action Employer

PRIZE



POTAMKIN PRIZE FOR RESEARCH IN PICK'S, ALZHEIMER'S AND RELATED DISEASES

A prize of \$100,000 will be awarded by the American Academy of Neurology to a person(s) in recognition of major contributions to the understanding of the causes and the prevention, treatment, and ultimately the cure for Pick's, Alzheimer's and related diseases.

Candidates may be nominated on a world-wide basis from any of the biological disciplines including bio-chemistry, molecular biology, molecular genetics, pharmacology, immunology, physiology, cell biology, neuropathology or epidemiology.

A nomination application, nominating letter citing the scientific accomplishments of the candidate in detail, two supporting nominating letters, a curriculum vitae, and up to six (6) selected reprints in nine (9) complete sets are required.

The deadline for receipt of materials is November 1st, 1996. No nomination will be considered unless it is complete. The awardee(s) must be present for the AAN Scientific Program, at is annual meeting in Boston, Massachusetts on Tuesday, April 15, 1997.

Request application and submit nomination to: Potamkin Prize for Research In Pick's, Alzheimer's and Related Diseases American Academy of Neurology 2221 University Avenue SE Ste. 335 Minneapolis, MN 55414 Phone: 612/623-8115

The Potamkin Prize is funded through the Potamkin Foundation.

ANNOUNCEMENT



FUNDING AVAILABLE

CaP CURE, the Association for the Cure of Cancer of the Prostate, is soliciting proposals for its 1996/1997 funding year. The organization's goal is to find a cure for advanced prostate cancer.

Applications are competitive and accepted from individuals with or without institutional affiliation. Awards range from \$50,000 - \$200,000 for the year. Applications (3-5 pages) can be for basic research, clinical investigations or a combination and must be relevant to the treatment of advanced prostate cancer. We encourage interdisciplinary collaborations between basic scientists and clinicians. (For-profit companies are not eligible.) Applications will be accepted August 15, 1996 through September 30, 1996. Awards will be announced by November 1, 1996.

> For consideration, please first request application guidelines:

CaP CURE 1250 Fourth Street, Suite 360 Santa Monica, CA 90401 Phone: (310) 458-2873 Fax: (310) 458-8074

SULTAN QABOOS UNIVERSITY SULTANATE OF OMAN College of Agriculture Position Announcements

Sultan Qaboos University, the national university of Oman, invites applications for the following positions:

OCEANOGRAPHER/MARINE ECOLOGIST (assistant, associate, or full professor), Department of Fisheries Science and Technology, College of Agriculture.

Applicants should possess a Ph.D. degree in oceanography/marine ecology. The incumbent will undertake teaching and research in biological, physical, and chemical oceanography, or tropical marine ecology. Experiences in modeling of oceanic dynamic processes and remote sensing are desirable. Ref: ADV/AGRI/07/96.

FISHERIES TECHNOLOGIST (assistant, associate, or full professor), Department of Fisheries Science and Technology, College of Agriculture.

Applicants should possess a Ph.D. or equivalent degree in marine engineering, vessel technology, gear technology, or related fields from a reputable university. The incumbent will undertake teaching and research in vessel, fishing gear, or fish harvest technology or related subjects in fisheries technology. The successful candidate is expected to develop and improve the academic program in a specialized area of fisheries and contribute to advanced courses including student research projects, seminars, and other duties assigned by the Head of the Department.

Candidates should have a practical knowledge of vessel design, operation, and maintenance, gear fabrication, catching, and post-harvest handling.

Ref: ADV/AGRI/06/96.

MARINE AQUACULTURIST (assistant, associate, or full professor), Department of Fisheries Science and Technology, College of Agriculture.

Applicants should possess a Ph.D. degree in aquaculture or related disciplines from an English medium university. The incumbent will undertake teaching and research in warm water aquaculture. Experience in fish and shellfish biology, water quality, and aquaculture farm management are desirable. Ref: ADV/AGRI/05/96.

FOOD CHEMIST (assistant, associate, or full professor), Department of Food Science and Nutrition, College of Agriculture. The incumbent will undertake teaching and research in food chemistry or related subjects in food sciences. The successful candidate is expected to develop and improve the academic programme in a specialized area of food science and contribute to advanced courses including student research projects, seminars, and other duties assigned by the Head of the Department. The incumbent will supervise technicians and other support personnel and collaborate with scientists in other departments of the University, government agencies, and private sectors in the development of research appropriate for improving the food and agriculture in Oman.

Applicants should possess a Ph.D. degree in food science or related fields from a reputable university. Ref: ADV/AGRI/04/96. **FOOD MICROBIOLOGIST** (assistant, associate, or full professor), Department of Food Science and Nutrition, College of Agriculture. The incumbent will undertake teaching and research in food microbiology or related subjects in food sciences. The successful candidate is expected to develop and improve the academic programme in a specialized area of food science and contribute to advanced courses including student research projects, seminars, and other duties assigned by the Head of the Department. The incumbent will supervise technicians and other support personnel and collaborate with scientists in other departments of the University, government agencies, and private sectors in the development of research appropriate for improving the food and agriculture in Oman.

Applicants should possess a Ph.D. degree in food science or related fields from a reputable university. Ref: ADV/AGRI/03/96.

AGRICULTURAL OR BIOSYSTEMS ENGINEER (assistant, associate, or full professor) in the area of Food/Machinery Engineering. The incumbent will be a faculty member in the Department of Bioresource and Agricultural Engineering in the College of Agriculture.

The selected candidate will advance the Department's undergraduate teaching in Food and Power/Machinery related courses and will contribute to the academic program in general, including seminars, student research projects, graduate courses, and other duties under the direction of the Department Head. The language of instruction is English. The candidate will also be expected to develop a research program, appropriate to his/her own interests, which will benefit agriculture and associated industries in Oman. The teaching/research split is approximately 50%, although it can vary as necessary. Requirements include an earned Doctorate degree from a reputable university.

Ref: ADV/AGRI/02/96.

Evidence of sensitivity to cultural diversity and fluency in both spoken and written English are necessary. Excellent communication skills and a strong sense of commitment and enthusiasm are essential. Applicants for all positions should have the ability to work in a team environment within the institution and related research organizations. Desirable qualifications include at least two years of experience in a similar position at a recognized university and a demonstrated record of academic and research accomplishment. Apart from a very attractive tax free salary, the University offers free furnished accommodation, annual leave with round trip air tickets, end of service gratuity, and free medical treatment in Government Hospitals in the Sultanate. Interested candidates are requested to submit a letter of application and full resume, quoting the appropriate reference number, to:

> The Director, Personnel Affairs Sultan Qaboos University P.O. Box 50, Al-Khod-123 Sultanate of Oman

POSITIONS OPEN

DIRECTOR OF THE CLINICAL RESEARCH CENTER

The University of Medicine and Dentistry of New Jersey (UMDNI)-Robert Wood Johnson Medical School (RWJMS) invites nominations for the position of **DI-RECTOR** of the Clinical Research Center and **CHIEF** of the Division of Clinical Pharmacology. Candidates should have a medical degree and a record of achievement in clinical research, preferably in an academic environment.

The Director of the Clinical Research Center directs a state-of-the-art clinical research center performing clinical research. The research agenda includes investigator initiated projects and drug development in collaboration with the pharmaceutical industry. The Director is expected to encourage and support collaborative and cooperative programs in clinical research and clinical pharmacology by faculty of UMDNJ and other New Jersey institutions of higher education, as well as with the private sector. The Director is expected to facilitate the institution's goals of technology transfer and to have a broad view of clinical research endeavors at the Medical School. The search committee seeks an experienced and resourceful leader. The individual should be effective in the context of an academic community.

Founded in 1961, the UMDNJ-Robert Wood Johnson Medical School, with campuses in Piscataway/New Brunswick/Camden, is one of seven academic units of the University of Medicine and Dentistry of New Jersey. Located in Central New Jersey, approximately one hour from Manhattan and Philadelphia, the region has a population of 3 million people and serves as the only academic health center for the region. Within the past two years, the RWJMS and its hospital partners have constructed over \$215 million of New Jersey.

Please send nomination or curriculum vitae to: Judith Neubauer, Ph.D., Associate Dean for Research, Search Committee Chair, UMDNJ-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854. Application deadline is September 15, 1996. UMDNJ is an Affinnative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans, and a member of the University Health System of New Jersey.

The Surgical Services and the Center for Engineering in Medicine at the Massachusetts General Hospital in collaboration with the Shriners Burns Institute in Boston invite applications for a FACULTY POSITION at the instructor/assistant/associate professor level. Candidates must have earned an M.D. and/or a Ph.D., and possess an outstanding track record in the areas of carbohydrate, lipid, and/or amino acid metabolism in acute and chronic disease. The successful candidate will have skills in conventional methodology for studying metabolic disorders as well as experience and/or interest in defining the molecular bases for these disorders and in developing nutritional strategies and programs. Please send applications to: Professor Martin L. Yarmush, The Center for Engineering in Medicine, Massachusetts General Hospital, Bigelow 1404, 55 Fruit Street, Boston, MA 02114. The Massachusetts General Hospital is an Equal Opportunity/Affirmative Action Employer.

Tenure-track ASSISTANT PROFESSORSHIPS in biochemistry and organic chemistry. Research interests in polymer or environmental chemistry a plus for the organic position; any area in biochemistry. Candidates must hold Ph.D.; be effective, enthusiastic teachers at undergraduate and graduate levels; and develop innovative teaching and research programs. By September 20, 1996 submit curriculum vitae, description of teaching philosophy and research plans, and three reference letters to: Professor Mary Lou Caspers, Chair, Chemistry Department, University of Detroit Mercy, P.O. Box 19900, Detroit, MI 48219-0900. Equal Opportunity/Affinnative Action Employer; actively seeks applications from women and minority candidates.

BIOMEDICAL RESEARCH SCIENTIST

The Department of Pediatrics at the University of Illinois at Chicago invites applicants for a research position with our hemoglobin group. Appointment will be at the rank of **RESEARCH ASSISTANT PROFESSOR**. Requirements include a Ph.D. and substantial experience in hematopoietic progenitor cell biology; animal marrow transplantation experience desirable. Contact: George R. Honig, M.D., Ph.D., Professor and Head, Department of Pediatrics (m/c 856), 840 South Wood Street, Chicago, IL 60612. The University of Illinois is an Affinative Action/Egual Opportunity Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR CHEMICAL CARCINOGENESIS

A FACULTY POSITION in the Division of Environ mental and Occupational Health (EOH), School of Public Health, and the Cancer Center, University of Minnesota, is available for a well-qualified professional with training and research experience in carcinogen metabolic activation and detoxification mechanisms, carcinogen-DNA interactions, repair of carcinogen-DNA adducts, or structure activity relationships in carcinogenesis. Incumbent with develop an independently funded research program in chemical carcinogenesis. Ínitial contract will be for a three-year period with potential for renewal. Qualifications include earned doctorate in bio-organic, organic, or medicinal chemistry, or a related discipline; at least three years of postdoctoral experience in the field of chemical carcinogenesis; and demonstrated research and teaching skills. Starting date is negotiable; salary and rank will be commensurate with qualifications and experience. Submit curriculum vitae, names and addresses of three referees, and a brief statement of interest to: Dr. Stephen Hecht and Dr. Deborah Swackhamer, Search Committee Co-Chairs, c/o EOH, School of Public Health, University of Minnesota, Box 807 UMHC, 420 Delaware Street SE, Minneapolis, MN 55455. Deadline for applications is October 15, 1996. The University of Minnesota is an Equal Opportunity Educator and Employer

RESEARCH INSTITUTE DIRECTOR WITH ACADEMIC APPOINTMENT

Muriel Whiteside Foundation, St. Luke's Hospital, Duluth, Minnesota and the University of Minnesota-Duluth (UMD), School of Medicine seek to fill a new position as **RESEARCH DIRECTOR** of the Whiteside Institute for Clinical Research. Generous space and startup research funding provided. Responsibilities include administration of the Institute, promotion of local clinical research, conducting clinical research on cancer, lung or heart disease, and expansion of community research funding. Applicant must be a graduate of an accredited U.S. training program (Ph.D. or M.D.) with experience in clinical research and procuring grants. Administrative experience and skills to nurture research in the medical community desired. Applicants should submit a letter of interest, a curriculum vitae, and three references by September 30, 1996 to: Dan Benzie, M.D., Whiteside Search Committee, UMD School of Medicine, 10 University Drive, Duluth, MN 55812. Telephone: 218-726-7949. The University of Minnesota is an Equal Opportunity/Affinnative Action Employer.

ATMOSPHERIC SCIENTIST ASSISTANT PROFESSOR TENURE-TRACK

San Jose State University (SJSU) and California State University (CSU) Monterey Bay seek an Atmospheric Scientist for a joint tenure-track appointment at the AS-SISTANT PROFESSOR level (Ph.D. in atmospheric science required). Responsibilities include designing interdisciplinary courses and distance learning technology to teach on both campuses, as well as establishing an active research program. Start date is on or before January 22, 1997. Refer to the World Wide Web Page (http:// metsunl.sjsu.edu) or call the Department of Meteorol ogy at SJSU, Telephone: 408-924-5200 for complete announcement. Apply to: Dr. Peter F. Lester, Chair, Department of Meteorology, San Jose State University, One Washington Square, San Jose, CA 95192-0104. Application review begins August 15, 1996.

ACADEMIC SCIENTIST

The Pulmonary and Critical Care Medicine Division at the University of Maryland School of Medicine is recruiting a senior scientist at the tenure-track ASSOCIATE PROFESSOR/PROFESSOR level to join the Pulmonary Vascular Biology Program. Candidates should possess a Ph.D. or equivalent degree in physiology or pharmacology, have expertise in vascular cellular or molecular biology, and have a consistent record of independent publication and extramural funding. Send curriculum vi tae to: Lewis J. Rubin, M.D., Head, Pulmonary and Critical Care Medicine Division, c/o JoAnn Gibbs, Academic Programs Office, Department of Medicine, University of Maryland Medical Center, 22 South Greene Street, N3E10, Baltimore, MD 21201. University of Maryland at Baltimore encourages women and minorities to apply and is an Affirmative Action/Equal Opportunity/ADA Employer

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POSITIONS OPEN

SAINT MICHAEL'S COLLEGE TERRESTRIAL ECOLOGIST

The Biology Department of Saint Michael's College invites applications for a tenure-track position in ecology at the ASSISTANT PROFESSOR level, to begin January or September 1997. The successful applicant will have the Ph.D. with extensive experience in terrestrial ecology at the population or community level. Teaching assignments will include upper-level courses in ecology and invertebrate biology, participation in a team-taught gen-eral biology course for majors, and non-majors courses with laboratory components. Total teaching load is 21 hours per year. Responsibilities include maintaining an active research program in which undergraduates can become involved, advising, and service to the College community. Send curriculum vitae; undergraduate and graduate transcripts; statements of teaching experience, interests, and philosophy; research plans and philosophy; and three letters of recommendation to: Dr. Donna Bozzone, Biology Chair, c/o Office of Human Resources, Saint Michael's College, Winooski Park, Colchester, VT 05439. Review of applications will begin on September 30, 1996. For more information, visit our WWW site at http://smcvax.smcvt.edu/www/smc_cwis/bio.html. Saint Michael's College is a Catholic institution of higher education in the liberal arts and sciences tradition. Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS

The Division of Molecular and Cellular Pathology, Department of Pathology, University of Alabama at Birmingham, is seeking individuals who are interested in joining an active and growing group of investigators in basic research and graduate training. Applicants should have a Ph.D. and/or M.D. degree and are expected to develop independently funded research programs. Special consideration will be given to individuals with experience in the biochemistry of bone cells and/or the extracellular matrix, although experience in any area of cellular signal transduction is desirable. Tenure status and rank will be determined by qualifications. Please send a detailed curriculum vitae including description of research, recent reprints, and names of three references to: Thomas M. Lincoln, Director, Division of Molecular and Cellular Pathology, Department of Pathology, University of Ala-bama at Birmingham, 1670 University Boulevard, Birmingham, AL 35294-0019. The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer and welcomes applications from qualified women and minorities.

RESEARCH ASSISTANT/ASSOCIATE

POSTDOCTORAL Research position available October 1, 1996. Position studies the cellular mechanisms of lung injury and epithelial cell transformation. A prime focus is a newly identified receptor tyrosine kinase RON, a member of proto-oncogene Met family. Ph.D. degree required. Experience in molecular biology, protein biochemistry, and cell biology is desirable. Send curriculum vitae, cover letter with statement of research interests, and names of three references to: Dr. M. H. Wang, Division of Pulmonary/Critical Care Medicine, Wayne State University, Harper Hospital, 3 Hudson, 3990 John R, Detroit, MI 48201. Equal Employment Opportunity/ Affirmative Action.

FACULTY

The Department of Surgery at Wayne State University (WSU) School of Medicine invites applications for a faculty position, at the rank of **PROFESSOR**. This is a tenured position. Applicants must have an M.D. degree, be Board-certified/Board-eligible in Cardiothoracic Surgery, and have experience in teaching and research. Excellent clinical and research opportunities. Send curriculum vitae to: David Fromm, M.D., Professor and Chair, Department of Surgery, Wayne State University, School of Medicine, 6C/UHC, 4201 St. Antoine, Detroit, MI 48201. WSU is an Equal Opportunity/ Affinnative Action Employer.

RESEARCH ASSOCIATE—Position available immediately in Molecular Genetics. Ph.D. required; experience in positional cloning essential. Candidate must have excellent technical writing skills; ability to write papers, grants essential. Possibility exists for long-term position and advancement. Salary and benefits competitive. Send letter of interest, curriculum vitae, and names of three references to: Ms. C. Farrell, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.

POSTDOCTORAL POSITIONS

We are seeking qualified candidates for multiple postdoctoral opportunities. Exceptional candidates will be considered for Los Alamos Postdoctoral Fellowships or the highly competitive J. Robert Oppenheimer Fellowship appointments.

THE CHEMICAL SCIENCE AND TECHNOLOGY DIVISION

We are seeking candidates with backgrounds in the areas below. For specific information regarding each of the positions available, access the Postdoc Job Opportunities page at http://www.hr.lanl.gov/html/jobs/postdoc. Access the division home page at http://mwanal.lanl.gov/julie/CST DO.html for further information regarding the divison:

Bioscience and Biotechnology (#PD96076) - Ph.D. in Chemistry, Biochemistry, Molecular Biology, Biophysics, or related area -Reference AD #PD96107-A

Chemical Kinetics, Reactions, and Dynamics Group (#PD96106) -Ph.D. in Chemistry, Engineering or Physics - Reference AD #PD96107-B

Chemical and Environmental Research and Development (#PD96094) - Ph.D. in Chemistry, Chemical Engineering or Materials Science - Reference AD #PD96107-C

The Chemical Science and Technology, Materials Science and Technology, and Life Science Divisions (PD#96095) - Ph.D. in Chemistry, Biochemistry, Physics, Biophysics, or Materials Science - **Reference AD #PD96107-D**

LIFE SCIENCES DIVISION

We are seeking candidates to conduct research in the areas below. Access the division home page at http://www-ls.lanl.gov/~wilder/lsdiv/lsdivhome.html for further information. Reference AD #PD96108

Genome - Participate in the worldwide effort to map and sequence each human chromosome.

Cell and Molecular Biology - Investigate the mechanistic bases by which cell growth and genomic stability are altered by exposure to chemical and physical carcinogens, especially low-LET and high-LET ionizing radiations and reactive oxygen species.

Cytometry - Develop new technology and instrumentation for measuring properties of cells, biological particles, and molecules; and the application of cytometry for solving problems in cell and molecular biology.

DNA Damage and Repair - Understand the mechanisms by which cells can recognize, process, and repair damage to DNA caused by physical agents such as ionizing radiation.

Environmental Molecular Biology -Study the environment using a combination of classical and molecular techniques. Understand changes at the population and individual level that are caused by different anthropogenic activities.

Structural Biology -Understand how the three-dimensional structures of proteins and nucleic acids allow them to carry out their functions.

A Ph.D. within the last three years or soon to be completed is required. Annual starting salaries currently range from \$42,740 to \$46,180 plus a generous, comprehensive benefits package. For consideration, submit TWO COPIES of a resume and publication listing (including the names, addresses and phone numbers of at least three people who will provide references) to: Postdoctoral Program, AD #, Los Alamos National Laboratory, MS P290, Los Alamos, NM 87545. Note: Advertisement # of position you are applying for must be referenced in address.

Affirmative Action/Equal Opportunity Employer. Individuals with disabilities needing reasonable accommodation should call (505) 667-8622. A teletype Device for the Deaf (TDD) is available by calling (505)665 5357. Los Alamos National Laboratory is operated by the University of California for the US Department of Energy.



JSPS Short Term Fellowships for Biomedical and Behavioral Research in Japan

Through arrangements made with the Fogarty International Center (FIC) of the National Institutes of Health (NIH), the Japan Society for the Promotion of Science (JSPS) is offering 30 fellowships for U.S. researchers in the biomedical and behavioral sciences to pursue collaborative research visits to Japan for periods ranging from seven to sixty days. These fellowships are intended to enhance U.S.-Japanese collaboration in biomedical and behavioral research by providing flexible opportunities for qualified American scientists to work with colleagues in leading Japanese laboratories on projects of mutual interest. Although intended primarily for senior researchers, doctoral candidates and postdoctoral researchers (Ph.D. or M.D. equivalent experience) may also apply. Applicants must be U.S. citizens or U.S. permanent residents.

Eligible host institutions include Japanese public or private universities, inter-university research institutes, and research institutes under the jurisdiction of the Ministry of Education, Science, Sports, and Culture (Monbusho), and other research institutes designated by JSPS. Inquiries regarding eligible host institutions in Japan may be addressed to FIC.

E-mail requests for a detailed program announcement and application instructions are welcome at: **snyderm@nih.gov**. The deadline for receipt of applications is October 1, 1996. Awardees will be expected to begin their fellowships in Japan by March 31, 1997.

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

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

BIOINFORMATICS



The **Institute for Biomedical Computing** (http://ibc.wustl.edu) is an independent faculty of Washington University with seven tenure track members and over 30 actively collaborating faculty from medical, biological, mathematical, engineering, and computer science disciplines. Current research areas at the Institute include computational molecular biology, molecular design, RNA structure prediction, quantitative image analysis, optical sectioning microscopy, and molecular biophysics.

Biomedical Engineering is a newly formed department in the School of Engineering and Applied Sciences. Genome Analysis and Computational Molecular Biology have been identified as targets for growth in the dapartment.

Faculty Positions in Computational Molecular Biology/Genome Analysis

The Institute for Biomedical Computing and Department of Biomedical Engineering at Washington University in St. Louis invite applications for two tenure track faculty position at the rank of Assistant Professor for scientists [Ph.D. or equivalent] engaged in novel applications of computing to solve problems molecular biology and molecular medicine.

Successful candidates will be expected to establish an independent extramurally funded research program; to interact with and teach students at the undergraduate and graduate levels; and to participate in the newly created department of biomedical engineering at Washington University. Particular attention will be given to candidates using experimental data to test and validate computational techniques.

Postdoctoral Position in Computational Genome Analysis

A postdoctoral position with Prof. David States is available immediately in the Institute for Biomedical Computing at Washington University in St. Louis to work in the area of computational genome analysis. Research will focus on the development of novel algorithms and software tools for the analysis of molecular sequence data and for the automation of primary and tertiary structures.

The successful candidate must be highly motivated and able to work independently providing project leadership and management. Opportunities for collaboration with large scale sequence projects and human genome mapping and sequencing centers are available. Knowledge of programming and the statistical analysis of quantitative data are essential.

The deadline for applications is September 1, 1996. To apply, send a curriculum vitae, a copy of each of three of your most significant publications, and a brief statement of research interests to:

Dr. David States, Director

Institute for Biomedical Computing, Washington University 700 South Euclid Ave., St. Louis MO 63110

FAX: (314) 362-0234, Email: states@ibc.wustl.edu

Washington University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

ALBANY MEDICAL COLLEGE POSTDOCTORAL POSITIONS NEUROSCIENCE

Albany Medical College announces a college-wide expansion in biomedical research and training. Applications are invited for two postdoctoral positions within the following areas: neurodegenerative diseases, cerebral ischaemia, nervous system development, synaptic plasticity, and the neuropharmacology/ neurobiology of drug addiction. The Albany Medical College offers a competitive salary and benefits package.

Candidates must have a Ph.D. and/or M.D. degree and a background in neuroscience research. Applicants should submit curriculum vitae with three references to: **Dr. Stanley Glick, Chairman of Pharmacology and Neuroscience, Albany Medical College (A-136), Albany, NY 12208.**

EXTRACELLULAR MATRIX AND CELL SIGNALING

Postdoctoral positions are available for research in the areas of extracellular matrix biology and receptor-mediated cell signaling. Positions are available in the individual laboratories of an interdisciplinary group of scientists working in the areas of gene regulation, cell growth control, integrin function, receptorlinked signaling, and cell adhesion. The Albany Medical College offers a competitive salary and benefits package. Interested applicants should send a current C.V., a statement of research interests, and three letters of recommendation to: P. J. McKeown-Longo, Ph.D., **Department of Physiology and Cell Biology** (A-134), Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208.

An equal opportunity and affirmative action employer.

LeukoSite, Inc. located in the Kendall Square area of Cambridge, MA, is a leader in inflammation research and the development of novel therapeutics for the selective immunosuppression of chronic inflammatory diseases. We have collaborations with leading academic labs in the U.S. and Europe, and a growing publication record (Choe et al., Cell 85: 1135-1148, 1996; Ponath et al., J Exp Med 183: 2437: 2448, 1996; Shyjan et al. J Immunol 156: 251-2857, 1996).

POSTDOCTORAL SCIENTISTS

Two Postdoctoral Scientist positions are available immediately to study the structure and functions of chemokine receptors, a subfamily of G protein-linked seven transmembrane domain proteins, in inflammation and HIV-infection; and a third Postdoctoral position to study the molecular and cellular functions of lymphocyte homing receptors. Candidates with a strong record of accomplishment, and extensive experience in membrane protein purification and related biochemical skills, or background in cell and molecular biology are encouraged to apply.

Interested candidates should submit their resume with the names of three references to: Personnel Manager, LeukoSite, Inc., 215 First Street, Cambridge, MA 02142. An Equal Opportunity Employer.



Agracetus

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

Postdoctoral Fellow/Research Associate

A postdoctoral fellow 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 (*Sci*ence Vol. 266; p. 1811, 12/16/94).

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

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

> Equal Opportunity Employer Drug-free Workplace

GENO§YS

Genosys Biotechnologies, Inc. is a leading international producer of oligonucleotides, peptides, genes, and molecular biology products for the research and industrial communities.

Research Scientist Position for our R&D Division. Applicants should have a Ph.D. with 3-5 years of experience or equivalent in molecular biology. Responsibilities include developing new product lines and technologies and conducting laboratory benchwork. The position requires innovative thinking and the ability to plan and execute independent research. Practical experience in PCR, DNA sequencing, and cloning techniques is required. The successful candidate should be self-motivated with a keen awareness of current literature and technologies. Customer support skills are required. Genosys is growing into new product areas, where the successful candidate will be an integral part of our expansion.

Genosys offers a competitive compensation, a benefits package, and a highly professional environment. Please send curriculum vitae and list of references to: Human Resources, Genosys Biotechnologies, Inc., 1442 Lake Front Circle, Suite 185, The Woodlands, TX 77380. Genosys Biotechnologies, Inc. is an equal opportunity employer.

NIH Has A New Address.

The National Institutes of Health has introduced a new web site. Now, the latest news about clinical and research training opportunities at NIH can be accessed by visiting us at http://helix.nih.gov:8001/0e/

At the site, you can quickly obtain information regarding clinical and postdoctoral training. Review the NIH tenure-track openings. Take a look at the NIH Postdoctoral Research Fellowship Opportunities Catalog which chronicles research being conducted in all NIH laboratories. You can even apply electronically for positions. All from the convenience of your keyboard.

Plus, the web site links to all NIH institute and laboratory home pages, provides a calendar of events, and offers links to many other areas.

We used to ask you to call us or send your *curriculum vitae*. Now, the best way to find out about world class opportunities at NIH is through the world wide web.



National Institutes Of Health

Office Of Education http://helix.nih.gov:8001/0e/

The NIH is an Equal Opportunity Employer

NIH Postdoctoral Position—AIDS Research HIV Env/CD4 Interactions, Fusion Cofactors, Tropism

Projects: 1) Identification of cofactors on CD4+ cells required for HIV fusion and entry [Virology (1993) 193:483; Science (1994) 264:1156]; role of fusion cofactors in tropism of HIV and SIV for different CD4-positive cell types [PNAS (1995) 92:9004; J. Virol. (1996) 70:5487]. These studies make use of a novel reporter gene assay for fusion [J. Virol. (1994) 68:5411]. We recently cloned a cDNA encoding a putative chemokine receptor that functions as a fusion cofactor for T-cell line-tropic HIV-1 strains [Science (1996) 272:872]; we also identified a distinct chemokine receptor as a fusion cofactor for macrophage-tropic strains [Science (1996) 272:1955]. 2) Structure/function analysis of env/CD4/cofactor interactions and CD4-induced conforma-tional changes [J.Virol.(1993) 67:913]. 3) Analysis of role of fusion cofactors in pathogenesis and transmission. 4) Design of novel AIDS therapeutics and screening methods based on env/ CD4/cofactor interactions. 5) Paramyxovirus glycoprotein/receptor interactions and fusion mechanisms [J. Virol. (1995) **69**:3341].

Experimental approaches include expression of recombinant proteins (emphasis on vaccinia virus vectors); biochemical, genetic, and immunochemical analyses of fusion reactions; development of novel functional cDNA library screening methods.

Position available immediately (August1996); later starting dates considered. Experience in molecular biology, protein chemistry, immunology, membrane biochemistry, or virology strongly pre-ferred. Send CV and names of three references to:

Edward A. Berger, Ph.D. Chief, Molecular Structure Section Laboratory of Viral Diseases, NIAID Bldg. 4, Rm. 236 National Institutes of Health Bethesda, MD 20892 Phone: (301) 402-2481, FAX: (301) 480-1147 email: edward_berger@nih.gov NIH is an Equal Opportunity Employer. LABORATORY OF CARDIOVASCULAR SCI-ENCE, GERONTOLOGY RESEARCH CEN-TER, NIA, NIH invites applications for a postdoctoral position beginning on September 1, 1996. Qualified candidates must have a doctoral degree (M.D. or Ph.D.). The postdoctoral fellow will join a program to apply modern techniques of biophysics (e.g., voltage-clamp, cell calcium and contraction measurements) and pharmacology to study cardiac G proteincoupled receptor, Ca²⁺ and phosphorylation mediated signal transduction and its functional significance in health, aging and disease models.

Applicants should send a curriculum vitae and the names, addresses and telephone numbers of three references to:

Dr. Edward G. Lakatta Chief of Laboratory of Cardiovascular Science Gerontology Research Center NIA, NIH, 4940 Eastern Avenue Baltimore, MD 21224 Tel.: 410/558-8202; Fax: 410/558-8150 NIH is an Equal Opportunity Employer **IBIA NEUROSCIENCES, INC.,** is expanding its interdisciplinary research and development on therapeutics for diseases and disorders of the central nervous system. We have established an impressive record in the development of innovative technologies integral to the field of neuroscience and the biopharmaceutical industry. We are now seeking experienced Scientists to support our drug discovery and development efforts for the neuropharmaceuticals of the future.

ADME/SAFETY LABORATORY

The ADME laboratory will determine preliminary safety/tolerability and drug disposition profiles in rodents as an integral part of our Drug Discovery and Development program.

Ph.D. - Senior Research Scientist

The successful applicant will be knowledgeable and experienced in methods necessary for the isolation, identification and quantitation of small organic molecules in biological fluids and tissues, and in preliminary safety pharmacology (e.g., cardiovascular and behavioral profiles). Minimum of 5 years' industrial post-doctoral experience (or equivalent) engaged in planning, conducting and interpreting ADME experiments is necessary. Supervisory skills and experience are essential.

BS/MS - Assistant/Associate Scientists

We are seeking 2 candidates with a minimum of 3 years' post-BS/MS (or equivalent) experience and the ability to work with minimal supervision. One position requires an experienced *in vivo* pharmacologist with knowledge of dosing, blood sampling and necropsy of rodents. Expertise in performing basic cardiovascular studies and CNS safety profiles is essential.

The other position is in the field of small organic molecule analytical methods and sample analysis. Use of LC-MS, GC-MS and HPLC is necessary, as well as experience in a drug metabolism laboratory.

ANALYTICAL CHEMISTRY

Ph.D. - Research/Senior Research Scientist

A new position has been established in our Chemistry Department to support our growing combinatorial chemistry/high throughput synthesis effort. The major responsibility of this position will be to lead the development of analytical methods suitable for the quality control of large libraries of compounds. This position reports directly to the V.P. of Chemistry and plays a major role in technical planning and implementation associated with automation and data handling. A Ph.D. plus experience in a combinatorial chemistry environment is desirable.

Located on San Diego's beautiful La Jolla coastline, SIBIA Neurosciences offers not only a challenging environment in an aesthetically pleasing setting, but also a competitive salary and benefits package. To apply, please send your C.V. and the names of 3 references to: Lynn Alba, Director of Human Resources, SIBIA Neurosciences, Inc., 505 Coast Blvd., South, Ste. 300, La Jolla, CA 92037, FAX (619) 452-9279, e-mail SIBIA@cerfnet.com. EOE.



SCIENTIST OR SENIOR SCIENTIST Analytical Bio-inorganic Chemist - R&D

Individual with PhD plus 2-5+ years postdoctoral experience or equivalent and familiarity with a variety of standard analytical assays and analytical instrumentation. Must have demonstrated experience developing new and innovative analytical methods to solve unique problems. Experience in any of the following areas is preferred: magnetic particles, colloid chemistry, protein-cation interactions, nucleic acids, detergent chemistry, DNA amplification, and medical diagnostics. Individual will work on a team to improve assay chemistry, develop R&D analytical tools, develop and transfer QC methods, and develop specifications for selected incoming materials. (Code: ABC)

SCIENTIST

Individual with PhD in Chemistry plus 2 or more years postdoctoral experience in chemistry or molecular biology and extensive research experience with nucleic acids. The preferred candidate will be familiar with the synthesis and modification of nucleic acids. Individual will join multidisciplinary team to develop novel methods to isolate, purify, amplify, modify, and detect nucleic acids. (Code: NAC)

SCIENTISTS AND RESEARCH ASSOCIATES

Individuals with a proven track record developing diagnostic products employing either nucleic acid or immunoassay technologies. Two or more years experience in assay development, with MS or PhD in Life Sciences or Chemistry. **(Code: DNA)**

Gen-Probe offers an exciting work environment, excellent benefits and competitive salaries. Please send your resume, indicating position code, to: **GEN-PROBE INCORPORATED**, Attn: **HR Dept/(Code)**, **9880 Campus Point Dr., San Diego, CA 92121.** Gen-Probe supports a drug-free work environment. We are an Equal Opportunity Employer.



$\sqrt{\lambda}$ third wave technologies, inc.

NUCLEIC ACID DIAGNOSTICS

Third Wave Technologies, Inc., a leading biotechnology company, is pioneering the development of novel reagents and automated systems for research and clinical DNA and RNA diagnostic applications. Third Wave is actively seeking applicants for the following positions:

Senior Scientists/Scientists - Ph.D. with 0-3+ years of postdoctoral experience and skilled in molecular biology with a concentration in cancer and/or infectious disease.

Assay Development Scientist - Ph.D. skilled in assay development for infectious disease with 3+ years of postdoctoral and/or related industrial experience.

Polymer Scientist - Ph.D./M.S. with 3-5 years of experience characterizing and developing surfaces and surface chemistry for nucleic acid assays.

Oligonucleotide Synthesis Specialist - Ph.D./M.S. with 3-5 years of experience in DNA sequence, sequencing, and purifications.

Electrical/Software/Mechanical Engineer - B.A./B.S./B.S.E.E./ B.S.M.E. with 5+ years of experience with electronics instrumentation design and development, and experience with software/systems.

Third Wave Technologies, Inc. offers an attractive benefit and relocation package including stock options. Qualified candidates should send their resume to Human Resources Department, Third Wave Technologies, Inc., 2800 S. Fish Hatchery Road, Madison, WI 53711.

Tenure-Track or Tenure-Level Positions

Cardiovascular Physiology

A position is available in the Cardiology Branch for a research scientist to direct an independent applied physiology laboratory focused on developing methods to promote angiogenesis as treatment for ischemic cardiovascular disease. The candidate may have a PhD or MD degree and have achieved independent research status as evidenced by publication in major peer-reviewed journals. Research experience in angiogenesis and the development of animal models for cardiovascular disease is desirable. Salary and research support will be commensurate with experience and the position. A tenure-track candidate will be supported for up to six years before being considered for tenure. Applications must be received within six weeks of the publication of this advertisement. Office of the Scientific Director (OE-118), NHLBI, 10 CENTER DR MSC 1668, Building 10, Room 7N214, BETHESDA MD 20892-1668.

Parasite Immunology

The Laboratory of Parasitic Diseases seeks a PhD or MD scientist to develop an independent research program related to the immunobiology of parasitic infection. Applicants should have extensive experience in the study of immunoregulatory mechanisms of cytokine biology in the context of parasitic disease and must be U. S. citizens or permanent residents. Preference will be given to candidates with a record of accomplishment in research on schistosomiasis. Appointment will be at the tenure-track (Assistant Professor) or tenure (Associate Professor equivalent) level and salary and research support will be commensurate with experience and position. Applications must be received within six weeks of the publication

of this advertisement. Dr. Thomas Nutman, Chair, NIAID Search Committee (OE-118), Building 4, Room 126, 4 CENTER DR MSC 0425, BETHESDA MD 20892-0425.

Molecular Oncology

The Metabolism Branch is seeking a tenure-level or tenure-track investigator to apply the techniques of modern molecular genetics to clinically relevant issues in cancer or immunodeficiency. The search committee is looking for an imaginative and ambitious individual to establish a vigorous, internationally recognized independent research program. Applicants should have a strong record of achievement in translational clinical research or in molecular genetics. The successful candidate will be given broad latitude in choosing particular research directions, but areas of special interest in the Branch's focus on oncology and immunology include angiogenesis, apoptosis, cell cycle control, stem cell biology, gene isolation and identification, as well as gene transfer for therapy of human disease. Applications are due by September 3, 1996. Dr. Ira Pastan, Chair, NCI Search Committee (OE-118), Building 10, Room 4N115, 10 CENTER DR MSC 1374, BETHESDA MD 20892-1374.

To Apply

Please send a cover letter, curriculum vitae, bibliography, a one- to twopage statement of research interests and goals, and selected publications to the address listed with each position. In addition, please arrange to have letters of recommendation sent from faree references who can provide an evaluation of your professional qualifications.



National Institutes Of Health

Office Of Education

The NIH is an Equal Opportunity Employer

National Institutes of Health National Institute on Deafness and **Other Communication Disorders** SENIOR STAFF FELLOW

The National Institute on Deafness and Other Communication Disorders (NIDCD) is recruiting for a Senior Staff Fellow. The position is open immediately for a Ph.D. or M.D. scientist with postdoctoral research experience and a strong publication record in the molecular neurobiology of olfaction. The candidate will be expected to develop a program of research with the goal of elucidating at the molecular level the mechanisms governing the structure, function, regulation and/or develop-ment of the olfactory system. The position is located in the Laboratory of Molecular Biology, Division of Intramural Research, NIDCD.

Candidates must have either an M.D. degree and/or Ph.D. degree, as well as postdoctoral research experience working on the molecular mechanisms governing the structure, function, regulation and/or development of the olfactory system. Preference will be given to candidates with a strong peer-reviewed publication record in these areas of research. The salary will depend on the qualifications of the candidate. Applicants may be eligible for an appointment in the Commissioned Corps of the U.S. Public Health Service. The period for the initial appointment is two years. Candidates may be eligible for relocation expenses.

If you wish to apply for this position, please submit a resume or curriculum vitae and a bibliography by August 28, 1996.

Additional information about the position and qualification requirements may be obtained by contacting: Ms. Gayle Mundell, Personnel Management Specialist, NIDCD Personnel Management Branch, 31 Center Drive, MSC 2320, Bethesda, Maryland 20892-2320; or by calling (301) 402-0508 or TDD (301) 402-1134.

NIH is an Equal Opportunity Employer

TENURE TRACK POSITION Epidemiology Branch Division of Epidemiology, Statistics, and **Prevention Research** National Institute of Child Health and **Human Development**

The Epidemiology Branch of the Division of Epidemiology, Statistics and Prevention Research, National Institute of Child Health and Human Development announces the availability of a tenure track position to develop an independent research program in perinatal epidemiology (this position is equivalent to an Assistant Professor). The area of investigation should complement those of current staff, and may include studies of risk factors for or interventions against disorders of pregnancy and adverse birth outcomes (perinatal and infant mortality, low birth weight, intrauterine growth retardation, pre-term births, congenital malformations). The candidate should have an M.D. with advanced training in epidemiology (M.P.H. or the equivalent), or a Ph.D. in epidemiology, and must have a strong record of research in perinatal epidemiology, including publications in major peer reviewed journals.

Submit a two-page statement of research interests and goals, a curriculum vitae, and three letters of recommendation by October 1, 1996 to:

Heinz W. Berendes, M.D., Director **Division of Epidemiology, Statistics and Prevention** Research, National Institute of Child Health and Human **Development, National Institutes of Health** 6100 Executive Blvd., Room 7B05 Bethesda, Maryland 20892-7510 Fax: 301-402-2084

Lilly Postdoctoral Fellowship Program

As a Postdoctoral Fellow at Eli Lilly and Company, you will gain sound practical experience and focused training to significantly expand your scientific knowledge and abilities. The professional environment at Lilly offers a balance of independence and flexibility along with collaborations and partnership with a mentor. Your fellowship is designed to provide you with the breadth and caliber of experience which will prepare you for a career in industry or academia.

Your work at Lilly will be directed toward one of the five disease categories which the company has targeted as part of its strategic focus. These are:

- Cardiovascular diseases
- Cancer
- Infectious diseases

 Endocrine diseases, including diabetes and osteoporosis

Central nervous system and related disease

Your research in one of these areas will be conducted as part of the discovery or development process, evaluating novel compounds with therapeutic potential, and in continuing to develop the product as it is introduced to the market.

Lilly's emphasis on collaborations strengthens research efforts in a wide range of disciplines which include, but are not limited to the following:

- Analytical Chemistry
- Molecular Biology
- Animal Science
- Biochemistry
- Pharmaceutical Chemistry
- Cell Biology
- Pharmacology
- Pharmacokinetics
- Toxicology
- Physical Chemistry
- Immunology
- Computational Chemistry
- Physiology
- Medicinal Chemistry
- Microbiology
- Virology

For current job openings please see our home page at *http://www.lilly.com*.

Send responses to: Corporate Recruiting, Eli Lilly and Company, Attn: ADSCMPD08, Lilly Corporate Center, Indianapolis, IN 46285. We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace. For other job opportunities, please access our Job Bank at: http://www.lilly.com or phone our Jobline: 1-800-892-9121.



Knowledge is Powerful Medicine.

Scientific Programmer/Analyst

Bioinformatics

Immunex Corporation, located in Seattle, WA, is a leading biopharmaceutical company focused on the discovery, development, manufacture, and marketing of products to treat cancer and autoimmune disease.

Immunex is expanding our Bioinformatics Group. Responsibilities include maintaining/updating inhouse and public domain sequence databases; supporting/ expanding existing Web interfaces to various bioinformatics related projects; assisting in the creation of databases for in-house sequencing efforts. The successful candidate will be well-versed in the C programming language and have a thorough knowledge of Web programming, including HTML/Perl/CGI scripting. Requirements include experience with a modern RDBMS such as Sybase or Oracle, a solid knowledge of the Unix operating system and familiarity with VMS. Knowledge of Java/object-oriented programming methodologies preferred.

Requirements: BS/BA in Biology/Computer Science/or the physical sciences; 2-3 years experience in scientific programming; excellent oral/written communication skills; demonstrated willingness to work on a team. This position offers an excellent growth opportunity.

Immunex, the recipient of statewide and national recognition for its work/life programs, offers a competitive salary and benefits package. For consideration, please send a cover letter and resume, referencing Job #7215.0215 to:

Immunex Corporation Attn: Human Resources Department 51 University Street Seattle, WA 98101 Jobline: (206)389-4060

Equal Opportunity Employer



For more information on Immunex, see our homepage at www.immunex.com

INDEPENDENT TENURED/TENURE TRACK POSITION AT METABOLISM BRANCH, NCI

The NCI's Metabolism Branch is conducting a search for a tenure-level or tenure track investigator to initiate independent research that applies the techniques of modern molecular genetics to clinically relevant issues with a special focus on cancer or immunodeficiency. For over three decades the Metabolism Branch, NCI, headed by Thomas A. Waldmann, M.D., has been an exemplar of patientoriented clinical research in the fields of immunology and oncology using approaches that extend from funda-mental molecular genetics applied to the regulation of gene expression to carefully controlled clinical trials. Areas of special interest that have been brought to practical application include: somatic gene therapy for cancer and immunodeficiency diseases, antigen processing and presentation to T lymphocytes with application to vaccine design for AIDS and cancer, and the development novel cytokine receptor-directed therapies for the treatment of cancer. especially those approaches using humanized monoclonal antibodies armed with radionuclides. We are seeking an imaginative and ambitious individual who is capable of establishing a vigorous, internationally recognized, independent research program. The applicant should have a strong record of achievement in translational clinical research or in molecular genetics with relevance to human cancer or immunodeficiency. The successful candidate will have broad latitude in determining particular research directions. However, areas of special interest that are related to the Branch focus on oncology and immunology and include angiogenesis, apoptosis, cell cycle control, stem cell biology, gene isolation and identification as well as gene transfer for therapy of human disease. Applicant should send a detailed description of research plans, curriculum vitae, selected publications and the names of three references to:

IRA PASTAN, M.D., CHAIR SEARCH COMMITTEE BUILDING 10, ROOM 4N115 NATIONAL INSTITUTES OF HEALTH 9000 ROCKVILLE PIKE BETHESDA, MD 20892-1374 FAX: 301-496-9956

To ensure full consideration, application should arrive by September 3, 1996.

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

NCI is an Equal Opportunity Employer

UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER Postdoctoral/Predoctoral Fellowships in Cardiovascular Research

The Ryburn Cardiovascular Center invites applications for fellowship positions in basic or clinical research broadly relevant to cardiovascular disease. Positions include health insurance and are supported by an NIH-sponsored training grant, SCOR, PPG, and R01 awards.

Training grant faculty include:

R.S. Williams (muscle development)

J. Mitchell (autonomic neurobiology)

M. Yanagisawa (endothelins)

J. Stull (muscle biology)

H. Hobbs (human genetics)

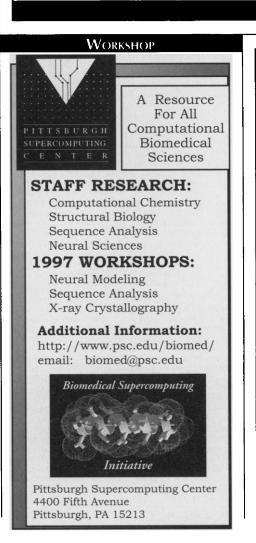
- E.N. Olson (muscle development) S.A. Johnston (gene transcription)
- R. Meidell (lipoprotein metabolism)
- R.G. Victor (autonomic neurobiology) R. C. Newgard (diabetes/metabolism) R.
 - R. Butow (mitochondrial genetics)
 - I I Benjamin (he
 - I.J. Benjamin (heat shock proteins) D. Hillis (coronary disease)

Additional information is available at http://www.swmed.edu/home_pages/ Cardiology/index.html.

Applicants should submit a curriculum vitae, bibliography, three letters of recommendation, and a brief description of research interests to:

Dr. R. Sanders Williams The University of Texas Southwestern Medical Center 6000 Harry Hines Blvd., NB11.200 Dallas, TX 75235-8573

UT Southwestern Medical Center is an equal opportunity/affirmative action employer.



G PROTEIN SIGNAL TRANSDUCTION

The structure and function of G protein subunits is being investigated with emphasis on the beta-gamma complex. The assembly of betagamma heterodimers and their interactions with G protein alpha subunits, receptors and effectors are being studied using molecular biologic and biochemical techniques. Position available September 1, 1996. Candidates should have less than five years postdoctoral experience. Please reply to:

William F. Simonds, M.D. MDB/NIDDK NATIONAL INSTITUTES OF HEALTH BIdg. 10/Room 8C-101 10 CENTER DRIVE MSC 1752 BETHESDA, MD 20892-1752

> Tel (301) 496-9299 Fax (301) 402-0374 wfs@helix.nih.gov

POSITIONS OPEN

ASSISTANT PROFESSOR CONNECTIVE TISSUE BIOLOGY NORTHWESTERN UNIVERSITY

The Division of Oral Biology is seeking a tenure-track ASSISTANT PROFESSOR to begin January 1, 1997 if possible, but no later than September 1997. The candidate should hold the Ph.D., D.D.S./Ph.D., or M.D./ Ph.D. degree. The candidate is expected to develop, and maintain, an independent research program suitable for the training of Ph.D. candidates and Postdoctoral Fellows. Teaching dental students and graduate students is required. Preference will be given to candidates with interests in basic connective tissue biology, craniofacial developmental biology, and/or genetics; immunology/tumor cell biology; bone biology; or wound healing and tissue repair. The candidates' expertise can be in basic cell, molecular, or structural biology. Send résumé and names and addresses of three references to: Professor Saryu N. Dixit, Division of Oral Biology, Northwestern University Dental School, 303 East Chicago Avenue, Chicago, IL 60611. Deadline for application: October 1, 1996. An Affirmative Action/Equal Opportunity Employer

ASSISTANT OR ASSOCIATE PROFESSOR Forest Genetics/Tree Breeding University of Minnesota

TENURE-TRACK position, emphasis on tree breeding strategies and intensive culture. The position will initially be located at the University's Experiment Station at Grand Rapids, Minnesota. Deadline: October 15, 1996. Request full position description from: Dr. Howard Hoganson, Department of Forest Resources, University of Minnesota, 1530 North Cleveland Avenue, St. Paul, MN 55108. Telephone: 218-327-4362 or 612-624-3400; FAX: 612-625-5212; Email: hhoganso@ forestry.umn.edu. The University of Minnesota is an Equal Opportunity Educator and Employer.

UNIVERSITY OF SOUTH CAROLINA Molecular, Cell, and Developmental Biology

The Department of Biological Sciences at the Univer sity of South Carolina invites applications for a tenure track faculty position at the level of ASSISTANT PRO-FESSOR. The Department is interested in all areas of molecular, cell, and developmental biology, although individuals with expertise in signal transduction are partic-ularly encouraged to apply. The University maintains a wide range of shared core facilities that are readily available to all faculty. These include, among others, facilities for oligonucleotide synthesis, monoclonal antibody production, transgenic mice, automated DNA sequencing, light and electron microscopy, and laser scanning confocal microscopy. The Search Committee will begin review ing applications on October 15, 1996. Interested individuals should send updated curriculum vitae, a description of research interests, and three letters of recommendation to: Dr. Vicki Bowman Vance, Search Committee Chair, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208. An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS IN IMMUNOLOGY Duke University Medical Center

The Department of Immunology invites applications for **TENURE-TRACK FACULTY** positions at all levels. Candidates working in lymphocyte signal transduction, general lymphocyte biology, or lymphocyte development are encouraged to apply. Interested individuals should send a curriculum vitae, a statement of research interest, and the names of three references to:

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

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

POSTDOCTORAL RESEARCH ASSOCIATE. Immediate opening. Candidates for later start also encouraged to apply. Work in human immunoglob genes and autoantibodies, using combinatorial lg library and phage display. Candidate should have experience in molecular biology and protein purification. Salary variable, depending on experience. For further information and to send curriculum vitae: Dr. D. Rubinstein, Division of Hematology/Oncology, Boston University, 88 East Newton Street, Room E-501, Boston, MA 02118. Telephone: 617-638-7514; FAX: 617-638-7065.

POSITIONS OPEN

THE NEUROSCIENCES INSTITUTE SAN DIEGO Molecular Neurobiology

Applications are invited for the postdoctoral position of **JUNIOR FELLOW** in Experimental Neurobiology to study biological mechanisms underlying formation, release, and disposition of anandamide, an endogenous arachidonic acid derivative that activates brain cannabinoid receptors. Applicants should have experience with molecular biology techniques and a background in molecular pharmacology. Fellows will receive stipends appropriate to their qualifications and experience. Submit a curriculum vitae, statement of research interests, and the names of three references to: Dr. Daniele Piomelli, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121. FAX: 619-626-2099.

RESEARCH SCIENTIST FISH ECOLOGY

The Great Lakes Center seeks **RESEARCH SCIEN-TIST** in fish ecology. Specifically, the successful applicant will develop and exercise computer models on spatial ecology, fish bioenergetics, and predator-prey interactions. Will administrate a set of UNIX workstations (SUN, Silicon Graphics). Ph.D. in fisheries, aquatic ecology, or related field required.

Send letter of interest, curriculum vitae, and names and addresses of three references by August 30, 1996 to: Dr. Stephen B. Brandt, Great Lakes Center R-1, State University College at Buffalo, 1300 Elmwood Avenue, Buffalo, NY 14222.

Penn State is a premier research institution, ranked thirteenth nationally in total research and development expenditures and second nationally in private industry sponsored research support. In 1994–95, the University's total research and development expenditures were \$344.3 million. A major portion of the research activities take place at the University Park Campus and at the College of Medicine in Hershey.

The Pennsylvania State University's NIH funded General Clinical Research Center (GCRC) is recruiting three or four funded **PHYSICIAN SCIENTISTS** to help fulfill our key mission of human investigation. Scientists in the areas of diabetes/obesity, epidemiology, sleep, and cardiovascular/autonomic control are sought. One position, an endowed professorship in human research in the College of Health and Human Development, will serve as medical director at the University Park GCRC site. Clinical and pathophysiologic collaboration at the College of Medicine is encouraged.

At the College of Medicine, an ASSOCIATE DI-RECTOR is sought. This investigator will have the opportunity to collaborate with muscle metabolic, neural control, and sleep programs. Senior funded investigators with innovative human investigation programs are being recruited for the remaining positions. Attractive starter packages as well as outstanding facilities are available for all positions. Interested candidates should send a curriculum vitae to: Hershey Medical Center, College of Medicine, Pennsylvania State University, P.O. Box 850, Hershey, PA 17033 care of Lawrence Sinoway, M.D., GCRC Director and William J. Evans, Ph.D., Director of the Noll Physiological Research Center. The Pennsylvania State University is an Equal Oppenmity Employer.

POSTDOCTORAL POSITION Regulation of Gene Expression Pathogenic Yeast, Molecular Biology

A POSTDOCTORAL POSITION is available to study the regulatory mechanisms employed by *Candida albitans*, to control expression of morphology-specific genes. Evidence of productivity in projects utilizing prokaryotic molecular biological tools is required. Interested applicants should send a cover letter and curriculum vitae to: Dr. Paula Sundstrom, Department of Medical Microbiology and Immunology, College of Medicine, The Ohio State University, 333 West 10th Avenue, Columbus, OH 43210. Equal Opportunity/Alfinnative Action Employer.

A POSTDOCTORAL POSITION is available December 1, 1996 to study lipid-derived second messengers in vascular smooth muscle, with specific interest in phospholipase A_2 and isoforms of phospholipase C. Individuals experienced in biochemical and molecular techniques are invited to send a curriculum vitae and names of three references to: Edward F. LaBelle, Ph.D., Bockus Research Institute, The Graduate Hospital, One Graduate Plaza, Philadelphia, PA 19146. An Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT RESEARCHER, Position Number 086179T, University of Hawaii (UH), 100%, non-tenured, to begin approximately November 1, 1996. To apply molecular biology/genetics to the understanding of sexual behavior and development in Hawaiian *Drosophila*. Candidate must have a Ph.D. in the field of molecular biology with background in *Drosophila* biology/cvolution. Background in techniques such as RT-PCR, 2-hybrid systems, and differential display; computer literacy in regard to statistical analysis desirable. Minimum salary: \$40,524 per annum. Submit letter of application, statement of research interests, and curriculum vitae, and have at least three letters of reference sent to: Dr. Kenneth Y. Kaneshiro, Center for Conservation Research and Training, UH, 3050 Maile Way, Honolulu, HI 96822. Inquiries: Email: kykanesh@ hawaii.edu. Closing date: September 13, 1996.

RESEARCH ASSOCIATE PROFESSOR position (non-tenure-track): NMR spectroscopist. Ph.D. in NMR, at least seven years in MRS/MRI of shift reagent aided and multiple quantum ²³Na NMR in tissues and organs; software and coil design for NMR acquisition. U.S. citizen or permanent resident; extensive publication record and at least one active, transferable, major research grant. Apply to: Dr. G. A. Elgavish, UAB, Department of Biochemistry and Molecular Genetics, THT-336, Birmingham, AL 35294-0006 before August 26, 1996. Affirmative Action/Equal Oppermuity Employer.

ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY AND TOXICOLOGY The Medical College of Georgia

Applications are invited for a tenure-track position as **ASSISTANT** or **ASSOCIATE PROFESSOR** of Pharmacology and Toxicology at the Medical College of Georgia. The successful candidate must hold a Ph.D. or M.D. degree and will be expected to establish an independent extramurally funded research program utilizing molecular and/or cellular approaches. We desire applicants with outstanding research accomplishments in the areas of neuropharmacology, neural signal transduction, or neurophysiology who can collaborate with investigators from several disciplines as part of a growing neuroscience community. Excellent core resource facilities exist including those for DNA sequencing, analytical chemistry, transgenic animals, and aged primates. Teaching responsibilities will be in medical and graduate courses. Competitive salary, laboratory space, and start-up funds are available. Please send a curriculum vitae, a letter describing research plans, and the names of three referees to: Search Committee, Department of Pharmacology and Toxicology, Medical College of Georgia, Augusta, GA 30912-2300. Application deadline is October 15, 1996. The Medical College of Georgia is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL SCIENCE FELLOWSHIPS

The Mary Ingraham Bunting Institute of Radcliffe College, a multidisciplinary residential research center, offers **FELLOWSHIPS** for women scholars, scientists, artists, and writers. Office space, auditing privileges, and access to libraries and most other resources of Radcliffe College and Harvard University are provided. Residence in the Boston area and participation in the Institute community are required during fellowship appointment. Applicants must have held the Ph.D. or appropriate terminal degree for at least two years prior to appointment (September 1997).

SCIENCE SCHOLARS Fellowship Program (funded by The Office of Naval Research) is open to women in fields of astronomy, molecular and cellular biology, biochemistry, chemistry, cognitive and neural sciences, computer science, electrical engineering, aerospace/mechanical engineering, geology, materials science, mathematics, physics, naval architecture and ocean engineering, oceanography, and all fields that relate to the study of oceans. *Must be a U.S. citizen*, Stipends are \$37,800 plus \$3,000 in research expenses for appointment September 15, 1997 through August 15, 1998. **BIOMEDICAL RESEARCH** Fellowship Program

BIOMEDICAL RESEARCH Fellowship Program (pending renewal by The Burroughs Wellcome Fund) is open to women in all fields of biomedical research. *Must be a U.S. citizen or permanent resident*. Stipends are \$36,000 plus \$3,000 in research expenses for appointment, September 15, 1997 through August 15, 1998.

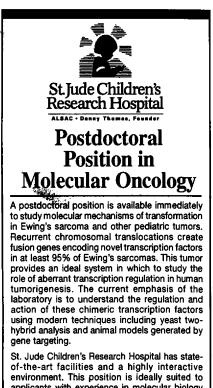
Åpplication deadline: October 15, 1996. Write or call for application: 34 Concord Avenue, Cambridge, MA 02138. Telephone: 617-495-8212; Email: Bunting_ Fellowships@radcliffe.harvard.edu. National Institute on Alcohol Abuse and Alcoholism (NIAAA)

National Institutes of Health (NIH) Bethesda, MD

Position available for a Board Certified or eligible psychiatrist or neurologist with training in brain imaging to develop an independent research program on alcoholism and antisocial behavior. The program will focus primarily on functional imaging (PET, SPECT, and MRI) and complement ongoing behavioral, molecular genetic, and neuroendocrine studies on alcoholism and on individuals at high risk of developing alcoholism. Individuals with research interests in ligand development, receptor regulation, and receptor polymorphisms should apply. The incumbent is expected to develop an independent research program on CNS receptor and metabolic regulation in humans and nonhuman primates. A twopage statement of research interests and goals should be submitted with three letters of recommendation. U.S. citizenship or permanent residency required. Laboratory of Clinical Studies, NIAAA, c/o Ms. Kathleen Hanratty, Building 31, Room 1B58, 31 Center Drive, MSC 2088, Bethesda, MD 20892-2088.

Deadline for receipt of applications: August 31, 1996

NIH is an Equal Opportunity Employer



of-the-art facilities and a highly interactive environment. This position is ideally suited to applicants with experience in molecular biology and a background in cancer biology or signal transduction. Interested candidates should send a curriculum vitae and three letters of recommendation to: Suzanne J. Baker, Ph.D., Department of Developmental Neurobiology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. AA/EOE. Providing the infrastructure for scientists to conduct world-class research ...

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From molecules to medicines. At Schering-Plough, scientists are discovering and developing the novel therapeutics that challenge humankind's most debilitating diseases. To continue this important work, we seek talented scientists with knowledge and dedication.

ALLERGY PRINCIPAL SCIENTIST

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The senior level scientist we seek will lead a group of scientific professionals engaged in ongoing research of preclinical programs in the areas of allergic and pulmonary disorders. To qualify, you will need a PhD and a minimum of 5 years of postdoctoral experience leading pharmaceutical research. Background must include pulmonary pharmacology and drug development research, as well as expertise using in vitro pharmacological methodologies. Hands-on experience with in vivo models of lung disease is highly desirable. Strong verbal and written communication skills in addition to a successful record of published works are essential. To be considered for this position, please respond to Human Resources-BG, Dept. DD96-40.

ASSOCIATE SCIENTIST

We seek a talented researcher to join a team engaged in continuing in vitro research for several high priority allergy programs in the areas of allergic and pulmonary diseases. To qualify, you will need a BS in Biology or a related field and 4-7 years of experience or an MS and 2-4 years of experience in in vitro experimentation and pharmacological techniques. Experience with in vivo techniques and GLP is highly desirable. Strong verbal, written and computer skills are essential. Knowledge of pharmacology is a plus. To be considered for this position, please respond to Human Resources-BG, Dept. DD96-39.

HIGH THROUGHPUT SCREENING

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ASSOCIATE SCIENTIST

We seek a talented biochemist to join a team of professional scientists involved in automated high throughput screening for novel therapeutic entities. To qualify, you will need a BS in Biochemistry or related discipline and 4-7 years of experience or an MS and 2-4 years of experience. Background must include development of quantitative enzyme and/or receptor binding assays using modern assay technologies. Expertise in laboratory automation and/or applications programming using Visual Basic, Visual C++ and object-oriented or other programming languages is very helpful. Excellent organization and communication skills are essential. To be considered for this position, please respond to Human Resources-DS, Dept. DD96-46.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume indicating the Dept. Code for your position of interest and salary requirements to: Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer.

We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.

Schering-Plough Research Institute

Using Science For Human Advantage

POSITIONS OPEN

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 investigations in areas of cancer, genetic and metabolic diseases, neuroscience, heart diseases, or other disorders related to neo-natal and child health. Clinical area of interest should be related to one of the above subspecialty disciplines or in neonatology or critical care. Laboratory space, protected time, joint clinical/basic science appointments, collaboration or mentorship by senior investigators, and substantial intramural funding is available. Junior investigators with potential for extramural funding or senior investigators with active funding are encouraged to apply. Interactions with other faculty in clinical/basic science departments as well as the Sanders-Brown Center for Aging, Markey Cancer Center, School of Biological Sciences, and College of Agriculture provide a particularly stimulating research environment. Permanent visa/citizenship required. Interested individuals should send curriculum vitae and statement of past experience and future plans to: V. Mankad, Chairman, Department of Pediatrics, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536-0284.

COORDINATOR, Medical Surveillance, for manufacturer in the Cincinnati area. Monitor and report adverse events occurring in clinical trials of marketed and new drug applications. Assist in the development and review of clinical protocols, including clinical trials for transdermal methods of drug delivery. Perform drug information tasks, including tracking, evaluation, prevention, and reporting of adverse drug reactions. Evaluate drug safety labeling. Identify and prepare labeling changes for marketed prescription products. Generate safety tables and data for regulatory narratives on Investigational New Drug and New Drug Application reporting. Prepare clinical bibliographies for Food and Drug Administration Reports. Doctor of Pharmacy or Ph.D. in pharmacology required plus one year of experience in the job described or one year of experience as a pharmacologist or resident in drug information with experience in drug information, drug safety labeling, Investigational New Drug and New Drug Application reporting, and clinical bibliographies preparation for Food and Drug Administration annual reports. One year of experience also must involve work with transdermal method of drug delivery.

40 hours per week, 8:00 to 4:30, salary \$61,000 per year. Must have proof of legal anthority to work indefinitely in U.S. Send two résumés and cover letters (no calls) to: ES Sp Prgms, Reference Number 2074, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

DEVELOPMENTAL BIOLOGY OF CELL-ECM INTERACTIONS Harvard Medical School

POSTDOCTORAL FELLOWSHIP in molecular biological and genetic approaches to the syndecan family of cell surface proteoglycans in development, tissue repair, and genetic diseases of mice and humans. Background in carbohydrates, molecular genetics, or ES cells useful. Available 1996–1997. Three-year appointments. Salary competitive. Send curriculum vitae and names of three references to: Merton Bernfield, Children's Hospital, **300 Longwood Avenue, Boston, MA 02108**.

NORTHERN ILLINOIS UNIVERSITY

PLANT MOLECULAR VIROLOGY. Anticipate two positions available immediately. 1) Study targeted recombination between viral and cellular RNAs in transgenic plants. 2) Investigate mechanism of viral RNA recombination using mutants of plant virus replicase proteins. M.S. with training or B.S. with equivalent experience required; experience in transgenic plants/protein biochemistry desirable. Send preference, curriculum vitae, and three references to: Jozef J. Bujarski, NIU, Plant Molecular Biology Center, DeKalb, IL 60115. Application deadline: September 15, 1996. Equal Employment Opportunity/Affinative Action Institution.

SENIOR RESEARCH TECHNICIAN

Requires extensive documented experience in molecular biology including sequence analysis, cloning, mutagenesis, PCR, protein expression, transfection, cell culture. Previous experience working with HIV desired. Team player. Please send curriculum vitae to: **Beatrice Hahn, M.D., University of Alabama at Birmingham, 701 South 19th Street, 613 LHRB, Birmingham, AL 35294**.

POSITIONS OPEN

ASSISTANT SCIENTIST ECOSYSTEMS ECOLOGIST

The Ecosystems Center of the Marine Biological Laboratory, Woods Hole, invites applications for an assistant scientist (ASSISTANT PROFESSOR level) to join a multidisciplinary group of ten research scientists. Applicants should be primarily oriented toward the ecosystem level of research with additional skills that would complement those of the center scientists. These complementary skills include community and population ecology, micro biology, ecosystem modeling, GIS modeling, hydrology/ hydrodynamics, and isotope geochemistry. Present research of the center staff is in terrestrial and aquatic systems in the arctic, temperate, and tropical regions; research approaches include biogeochemistry and modeling, especially at scales extending to the globe. Applicants should submit curriculum vitae, letter of application describing research interests, and names and addresses of four references to: Search Committee, The Ecosystems Center. Marine Biological Laboratory, Woods Hole, MA 02543. Review of applications is expected to begin on 1 October 1996. For more information about the Center, please send a request to info@lupine.mbl.edu. Equal Op portunity/Affirmative Action/Non-smoking workplac

PEDIATRIC ENDOCRINOLOGY TRAINING PROGRAM George P. Chrousos, M.D.

The Developmental Endocrinology Branch, NICHD, is recruiting CLINICAL FELLOWS for a three-year Pediatric Endocrinology Training Program starting late une 1997. Year one is full-time training in basic clinical endocrinology and clinical research on inpatient wards and outpatient clinics. Years two through three provide a supervised training period in laboratory and clinical research projects. Incumbents are eligible for assistance in repayment of educational loans. Beginning salary is \$39,270. Send curriculum vitae and references to: George P. Chrousos, M.D., Developmental Endocrinology Branch, NICHD, NIH, Building 10, Room 10N262, 10 Center Drive MSC 1862, Bethesda, MD 20892-1862. The NIH is an Equal Oppertunity Employer.

INNATE HOST DEFENSE The Cleveland Clinic Research Institute

TWO POSTDOCTORAL POSITIONS are immediately available to study antimicrobial peptides involved in host defense of mucosal surfaces (*PNAS*, **88**:3952, 1991; *ibid.*, **90**:4596, 1993; *ibid.*, **93**:5156, 1996; *JBC*, **267**:23216, 1992; *ibid.*, **271**:4038, 1996). Applicants should have a significant background in peptide/protein isolation or molecular biology. Strong preference will be given to highly motivated individuals with excellent interpersonal and communication skills. The Cleveland Clinic Research Institute, with approximately 100 principal investigators and an annual research budget of \$35 million, provides an exciting environment for biomedical research. Send curriculum vitae and three letters of reference to: C. L. Bevins, M.D., Ph.D., **Department of Immunology, Research Institute NN-10**, **9500 Euclid Avenue, Cleveland, OH 44195**.

POSTDOCTORAL POSITION Medical University of South Carolina Division of Endocrinology

A POSTDOCTORAL POSITION is available immediately to investigate the genetics of non-insulin dependent diabetes mellitus (NIDDM). The project aims to identify loci with significant linkages for diabetes and prediabetic phenotypes and to isolate genes involved in the pathogenesis of NIDDM. Research experience in molecular genetics and positional cloning is required. Some computational skills and experience using statistical packages for linkage analysis would be desirable. Candidates should send a curriculum vitae, letter of research interests, and three references to: Dr. George Argyropoulos, Ph.D. or Professor W. Tim Garvey, M.D., Medical University of South Carolina, Division of Endocrinology, Department of Medicine, 171 Ashley Avenue, Charleston, SC 29425-2222. Telephone: 803-792-1022; FAX: 803-792-1270; Email: argyrog@musc.edu.

SENIOR RESEARCH ASSOCIATE position available immediately to investigate structure and function of iron-containing proteins using physical and biochemical techniques. Ph.D. in biophysics, biochemistry, bioinorganic chemistry, or related areas required. Extensive experience in EPR and Mössbauer spectroscopies of metalloenzymes is preferred. Send curriculum vitae to: B. H. Vincent Huynh, Physics Department, Rollins Research Center, Emory University, Atlanta, GA 30322.

POSITIONS OPEN

ACADEMIC POSITION

ASSISTANT PROFESSOR. The Department of Chemistry and Biochemistry of The University of Texas at Austin solicits applications for a tenure-track assistant professorship beginning September 1, 1997. Exceptional candidates whose research training and interests are in areas of experimental physical chemistry or inorganic chemistry/materials chemistry are especially encouraged to apply. Candidates who have demonstrated outstanding research ability and who show promise in teaching should forward by October 1, 1996, a curriculum vitae, short descriptions of research plans, and three letters of reference to: Search Committee, Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, TX 78712. Equal Opportunity/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available immediately in the Department of Veterans Affairs Medical Center, Baltimore, Maryland to study neuropathogenesis, retroviral immunity, and vaccine development using a murine leukemia virus model of human disease. Applicants should have a background in neurobiology, virology, immunology, or molecular biology. Please submit a curriculum vitae, statement of research interests, and names of three references to: Dr. Deanna S. Robbins, Department of Veterans Affairs Medical Center, 10 North Greene Street, Baltimore, MD 21201. FAX: 410-605-7906. Equal Employment Opportunity.

POSTDOCTORAL POSITION

A position is available to study the molecular basis of circadian rhythms in the fruit fly, *Drosophila* (see *Science*, **207**:805–808, 808–811 and 811–815, 1995; and *Cell*, **84**:677–686, 1996). Applicants with less than three years of postdoctoral training are preferred. Send curriculum vitae and names of three references to: Amita Sehgal, Ph.D., Department of Neuroscience, 233 Stemmler Hall, University of Pennsylvania Medical School, Philadelphia, PA 19104.

POSTDOCTORAL POSITION available to study the mechanism of transmembrane signaling between GPI-anchored glycoproteins and integrins in leukocytes and tumor cells. Previous experience with recombinant DNA technology, leukocyte biology, and signal transduction is highly desirable. Interested applicants (*who must be U.S. citizens or permanent residents*) should send a statement of research experience, a curriculum vitae, and the names of three references (plus addresses and telephone numbers) to: Dr. Robert F. Todd, Division of Hematology/Oncology, 3119 Taubman Center, University of Michigan Hospital, Ann Arbor, MI 48109-0374.

POSTDOCTORAL POSITIONS available in a group studying the functional aspects of two different tumor suppressor genes. Recent Ph.D. in biochemistry or molecular biology with a strong background in protein biochemistry and/or signal transduction is preferred. Send curriculum vitae and names of three references to: Dr. Vijaya Ramesh, Molecular Neurogenetics Unit, Massachusetts General Hospital East, Building 149, 6th Floor, Charlestown, MA 02129. Email: Ramesh@ helix.mgh.harvard.edu.

POSTDOCTORAL POSITION available immediately to study molecular mechanisms underlying malignant transformation. A strong background in molecular and cell biology is required. Experiences with PCR, immunohistochemistry, and antibody production are desirable. Send résumé and names of three references (with their telephone numbers) to: Mark Dayton, M.D., Ph.D., Department of Medicine, Section of Hematology/Oncology, LSU Medical Center–Shreveport, 1501 Kings Highway, Shreveport, LA 71130. LSU Medical Center is an Equal Opportunity Educator and Euployer.

POSTDOCTORAL POSITION available immediately for an NIH-funded project to study the structurefunction relationship and regulation of expression of ribonucleotide reductase of the malaria parasite. This laboratory focuses on characterization of components involved in signal transduction and cell cycle regulation in *Plasmodium faleiparium*. Ph.D. in biochemistry or molecular biology is preferred. Please send curriculum vitae with names and telephone/fax numbers of three references to: **Debopam Chakrabarti**, Ph.D., **Department of Molecular Biology and Microbiology**, **University of Central Florida**, **Orlando**, **FL 32816**. **Email:** dchak@pegasus. cc.ucf.edu. An Affinancire Action/Eaual Opportunity Eurolover.

GROUP LEADER IN STRUCTURAL BIOLOGY

The Biology Department at Brookhaven National Laboratory seeks a Structural Biologist with a proven record of research achievement and who will provide vision and leadership to an experienced team in the operation and future development of synchrotron x-ray and neutron stations for structural biology at the National Synchrotron Light Source (NSLS) and the High Flux Beam Reactor (HFBR).

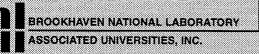
The Biology Department develops, uses, and makes accessible to the general research community a unique combination of complementary facilities for structural biology. These include stations for x-ray crystallography, time-resolved small-angle x-ray scattering, and UV spectroscopy at the NSLS; stations for neutron crystallography, membrane scattering, and small-angle scattering at the HFBR; and the high-resolution Scanning Transmission Electron Microscope (STEM) facility. We are the home of the Protein Data Bank (PDB), the archive of threedimensional structural information about biomacromolecules, and are developing a capability for largescale genome sequencing.

Interactive programs of basic research in structural, molecular and cell biology provide a stimulating research environment and an important impetus for the continual improvement of these facilities. We have about twenty programs on genome organization and structure; replication, damage and repair of DNA; mutation and oncogenesis; regulation of gene expression; structure and function of enzymes, viruses, ribosomes, chromatin and other nucleoprotein complexes; and the energetics and molecular genetics of plants.

We are looking for a Structural Biologist who interacts well with others and who will be an effective leader of a team of approximately fifteen scientists and technical specialists who develop and operate structural biology stations at the NSLS and HFBR. We are also looking for leadership in developing training programs, workshops, and outreach programs that take advantage of our facilities, in cooperation with established and emerging structural biology programs at the State University of New York at Stony Brook, Cold Spring Harbor Laboratory, and other nearby research institutions.

A curriculum vitae, list of publications, description of research experience and interests, and the names of at least three people who can be contacted for letters of reference should be supplied to: Dr. Joel Sussman, Search Committee Chair, Biology Department, Brookhaven National Laboratory, Upton, Long Island, NY 11973-5000, USA. Telephone: 516-344-3415, Fax: 516-344-3407. E-mail: emrick@bnl.gov.

Brookhaven National laboratory is located in pleasant surroundings on Long Island, about 60 miles from New York City. We are an equal opportunity employer m/f/d/v.



Boehringer Mannheim Corporation

Boehringer Mannheim, a world leader in the field of Medical Diagnostics, Biochemicals, and Medical Research, has these challenging, professional opportunities available in our Indianapolis, Indiana headquarters.

Principal Scientist Dept. 480461

This position requires a Bachelor's degree in a scientific discipline (PhD or DVM preferred) and at least 4 years of experience in cartilage biology and biochemistry. Strong project management and supervisory skills are also essential. Key responsibilities include inventing, testing and developing new biologic devices and cartilage repair products for orthopedic markets, as well as selecting appropriate biologicals, carrier materials and models for testing these concepts.

Research Investigator

Dept. 480469

This position requires a degree in an area of the Life Sciences (PhD in Chemistry, Biochemistry or a related area preferred) and at least 2 years of experience in immunoassays development. Detailed knowledge of solid phase immunoassays using gold sol or latex particle technology and demonstrated experience in immunochemistry techniques also essential. Responsibilities will include lab work and participating in multifaceted projects involving close interaction with Business Development, Engineering, Manufacturing, Quality Control and Marketing groups. If you have the background we require, this entry level position offers a valuable opportunity to learn with an industry leader.

We offer an excellent compensation and benefit program including a 401(k). Qualified applicants should send a resume, including salary requirements and Dept. #, to:

> Boehringer Mannheim Corporation Human Resources 9115 Hague Road P.O. Box 50457 Indianapolis, IN 46250-0457

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Job Line 1-800-349-7035

POSITIONS OPEN

VETERINARY LABORATORY MICROBIOLOGY SERVICES MANAGER

A position is available as Veterinary Laboratory Microbiology Services Manager, which will serve as the Chief of Microbiology of the Bureau of Veterinary Diagnostic Laboratories, Summerdale, Pennsylvania. The laboratory is part of the Pennsylvania Animal Diagnostic Laboratory System (PADLS) with laboratories at the Pennsylvania State University and the University of Pennsylvania School of Veterinary Medicine. The position is responsible for the function and operation of the Microbiology and possibly the Immunology areas of the laboratory. The diagnostic laboratory performs procedures in pathology, histology, toxicology, microbiology and immunoserol ogy on mammalian, avian, and aquatic species. A new laboratory is under construction; substantial equipment including development of a new computer system has been acquired in the past several years and provisional AAVLD accreditation is underway. Research and educa tional activities are encouraged and there is collaborative activity with the university laboratories. Training opportunities and professional self-development is encouraged and supported. A Ph.D. in microbiology and three years as a microbiologist in a full-service veterinary diagnostic laboratory is required. Postdoctoral/research experience desirable.

The Commonwealth of Pennsylvania offers a full benefit program including: paid life and medical insurance; dental, vision, hearing, and paid prescription plan; vacation; and an excellent retirement plan. A bonus program is also offered for this position. Salary range is \$46,044 to \$70,005.

This is a civil service position; a job announcement and required application materials must be obtained by contacting: Ms. Beth Williamson, Pennsylvania Department of Agriculture, 2301 North Cameron Street, Harrisburg, PA 17110. Telephone: 717-787-1065. Completed application and supplement must be filed at this address by September 27, 1996. Résumés alone will not be accepted.

COORDINATOR, Medical Surveillance, for manufacturer in the Cincinnati area. Monitor and report adverse events occurring in clinical trials of new drug applications. Assist in the development and review of clinical protocols. Develop criteria for drug utilization evaluations, conduct drug utilization evaluations, and target drug analyses across a wide range of therapeutic areas including cardiac, internal medicine, infectious diseases, and geriatrics. Prepare safety narratives to be sent to the Food and Drug Administration, write safety sections of patient protocols, and summarize/tabulate large amounts of medical/scientific data into concise and readable doc uments in the postmarketing surveillance area. Provide objective critical analyses of clinical data from studies con ducted on investigational and marketed products. Doctor of Pharmacy or Ph.D. in pharmacology required plus one year of experience in the job described or one year of experience as a pharmacologist or resident in clinical pharmacy with experience conducting drug utilization evaluations, drug information, target drug analysis, and proto-col reviews. One year of experience also must involve work in a range of therapeutic areas including cardiac, internal medicine, infectious diseases, and geriatrics.

40 hours per week, 8:00 to 4:30, salary \$61,525 per year. *Anist have proof of legal authority to work indefinitely in U.S.* Send two résumés and cover letters (no calls) to: ES Sp Prgms, Reference Number 2075, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

ASSISTANT RESEARCH SCIENTIST Medical College of Georgia

Position available (non-tenure-track) December 1, 1996 to study the mechanism of action of peptides, such as endothelin and substance P, on lipid-derived second messenger production in iris smooth muscle. Candidate should have a Ph.D. in biochemistry or pharmacology and about two years of postdoctoral experience. He or she will be encouraged to apply for extramural funding. Salary range is between \$30,000 and \$35,000, depending upon experience. Applicants should submit a curriculum vitae plus the names and addresses of three references to: **Professor Ata Abdel-Latif, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100.**

The Medical College of Georgia is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH SCIENTIST. Linkage Genetics (LGI), the leading provider of DNA marker services to plant and animal breeders on a global basis, is seeking a postdoctoral scientist to lead and direct development of microsatellite markers in several plant species. The position, located at LGI's headquarters in Salt Lake City, is funded for a minimum of two years and is available immediately. The scientist filling the position will be responsible for the development of DNA microsatellite (SSR) markers in sugar beet (*Beta vulgaris*); will serve as project scientist and primary liaison with the organization funding sugar beet SSR research; will manage LGI activities in maize, sunflower, and brassica SSR development efforts; and will serve as a member of the Linkage Genetics R&D team.

The applicant must have a Ph.D. in molecular biology, plant molecular biology, molecular genetics, or related fields and knowledge of DNA microsatellite markers and how to develop them, molecular marker technology in general, PCR technology, sequencing technology, plant and mammalian molecular biology, genetics and molec-ular genetics, linkage analysis, and linkage map development. Demonstrated fluency in English, excellent oral and written communications skills, and the ability to interact positively and proactively with LGI management and technical staff, sponsoring organizations, collaborators, and the research community in general are also requirements for the position. Interested individuals should send a curriculum vitae; a letter stating research interests and experience; and the names, addresses, and telephone numbers of three references to: Linkage Genetics, Human Resources: Attention: R&D, 2411 South 1070 West, Suite B, Salt Lake City, UT 84119.

An Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study calcium signaling mechanisms and the relationship between calcium pool function and cell growth (see *J. Biol. Chem.*, **271**:883, 1996). Experience in molecular characterization of signal transduction mechanisms, single cell measurements, and imaging techniques is desirable. Applicants should have a recent Ph.D. (up to three years) in biochemistry, cell biology, physiology, or related areas, and have a strong research record with publications in major journals. Send curriculum vitae, brief description of research interests, and telephone numbers of three references, and arrange for letters to be sent to; Dr. Donald L. Gill, Department of Biochemistry and Molecular Biology, University of Maryland School of Medicine, 108 North Greene Street, Baltimore, MD 21201.

PLANT SCIENTIST Perennial Grain Development

The Land Institute (non-profit) seeks a Ph.D. to join a program in NATURAL SYSTEMS AGRICULTURE devoted to breeding for high seed yield, plant vigor, and disease resistance within diverse field plots of perennial grasses, legumes, and sunflowers. Contribute to a curriculum including crop evolution, plant breeding principles, population genetics, and biotechnology/computer modeling in the develop-lish, secure grants, and teach. Send curriculum vitae, research/training interests, and three letters of recommendation to: Dr. Jon K. Piper, The Land Institute, 2440 East Water Well Road, Salina, KS 67401. Telephone: 913-823-5376; Email: the land@igc.apc.org.

The Academy of Natural Sciences' Patrick Center for Environmental Research seeks POSTDOCTORAL/RE-SEARCH ASSISTANT in Environmental Organic Geochemistry to conduct and actively seek funding for applied studies in environmental geochemistry within the context of the center's mission. The Patrick Center conducts a mix of applied research and contract studies on aquatic ecosystems (freshwater and marine). Candidate will manage and conduct all organic analysis (e.g., hydrocarbons including PAHs, pesticides, ortho and non-ortho congener PCBs, non-traditional organics, etc.), from extraction through analysis, data interpretation, and methods development for water, sediment, and tissue. Minimum qualifications: recent Ph.D. (or M.S. with excellent experience) in analytical environmental chemistry, marine organizational geochemistry, environmental engineering, or related discipline. Experience with "clean" sample techniques, GC/MS/FID/ECD, computers, and environmental/geochemical fate and transport required. Re-view of applications begin September 1, 1996. Send curriculum viace, one-page description of research experience and interests, and three references to: **Ms. Helen Kelleher, An**nouncement Number 540, The Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103. The Academy of Natural Sciences is an Equal Oppor tunity/Affirmative Action Employer.

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POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for NIH-sponsored project to identify the determinants of cell-specific expression of the dopamine transporter. Other active projects focus on molecular pharmacological characterization of dopamine receptors—see http://www.teleport.com/~nevek/. Molecular biology experience is essential, as is enthusiasm and a willingness to work hard. Send curriculum vitae and names of three references to: Dr. Kim Neve, VA Medical Center (151LL), 3710 SW U.S. Veterans Hospital Road, Portland, OR 97201. FAX: 503-721-7839; Email: nevek@teleport.com.

POSTDOCTORAL POSITION in glycobiology lab to purify/characterize Golgi membrane proteins and/or analyze glycoproteins. Ph.D. in biochemistry, strong background in protein biochemistry or oligosaccharide analysis required. Experience with cell culture, radioisotopes, and molecular biology a plus. Send statement of research interests; curriculum vitae; and names, addresses, and telephone numbers of three referees to: Dr. Barbara Criscuolo Waldman, Department of Biological Sciences, CLS 401, University of South Carolina, Columbia, SC 29208. Email: bwaldman@biol.sc.edu.

POSTDOCTORAL POSITION, Institute of Marine and Coastal Sciences of Rutgers, The State University of New Jersey. All fields relevant to marine and coastal sciences will be considered. Please send curriculum vitae and research proposal, along with three references, to: Dr. J. Frederick Grassle, Institute of Marine and Coastal Sciences, Rutgers, The State University of New Jersey, P. O. Box 231, New Brunswick, NJ 08903-0231. Applications are due by October 1, 1996. *Rutgers is an Equal Opperunity/Affinatative Action Employer.*

POSTDOCTORAL POSITION available to study the regulation of HIV replication using antisense and gene therapy technology. Experience in molecular biology is required; knowledge of methods for RNA analysis, gene therapy vector development, and HIV biology helpful. Send curriculum vitae and names of three references to: Dr. Randal A. Byrn or Dr. Jerome E. Groopman, Hematology/Oncology Research Laboratory, Harvard Medical School, Deaconess Hospital, One Deaconess Road, Boston, MA 02215, FAX: 617-424-6237; Email: rbyrn@nedhmail.nedh.harvard.edu.

POSTDOCTORAL POSITION available immediately with NIH funding to study the molecular mechanisms of bacterial enterotoxins. Responsibilities will include membrane receptor purification, cloning and expression of receptors and ligands, and transfection experiments. Ph.D. graduates with strong background in molecular biology or cell biology are encouraged to apply. Send curriculum vitae and three letters of reference to: Drs. J. T. LaMont and C. Pothoulakis, Beth Israel Hospital, Harvard Medical School, Division of Gastroenterology, Dana 501, 330 Brookline Avenue, Boston, MA 02215. FAX: 617-667-2767.

POSTDOCTORAL POSITION available immediately to study integrin biochemistry and cell adhesion. Areas of research include osteoporosis, tumor metastasis, factors regulating cellular signaling, protein engineering, and structural biology. Applicants should have a recent Ph.D. with experience in molecular biology, cellular biology, and/or receptor biochemistry. Send curriculum vitae, a brief summary of research experience and interests, and the names of three references to: The Burnham Institute, Attention: Jeffrey W. Smith, 10901 North Torrey Pines Road, La Jolla, CA 92037. FAX: 619-646-3192. Equal Opportunity Euployer.

POSTDOCTORAL POSITIONS available immediately to study biocatalysts in drug/chemical detoxication (enzymes, antibodies). Candidates should have experience in either 1) synthetic/medicinal chemistry, 2) enzymology/catalytic antibodies or 3) molecular biology/protein expression. Send curriculum virae and three letters of reference to: John Cashman, Ph.D., Seattle Biomedical Research Institute, Job 96-11, 4 Nickerson Street, Seattle, WA 98109-1651. Seattle Biomedical Research Institute is an Equal Opportunity/Affinantive Action Employer.

POSTDOCTORAL POSITION in vascular biology to study free radical effects on signal transduction. Strong background in electrophysiology and molecular biology desired. Send curriculum vitae to: Stephen J. Elliott, M.D., Cardiovascular Research Center, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226. Equal Opportunity/Affirmative Action Employer.

NATIONAL CANCER INSTITUTE DIVISION OF BASIC SCIENCES BETHESDA, MARYLAND Opening Date: June 17, 1996 Closing Date: August 5, 1996 Announcement Number: CA-96-00094 SENIOR SCIENTIST LABORATORY OF CELLULAR AND MOLECULAR BIOLOGY

The Division of Basic Science (DBS), National Cancer Institute (NCI), National Institutes of Health (NIH), is seeking an outstanding individual to fill a Senior Scientist position in the Laboratory of Cellular and Molecular Biology; Chief, Jacalyn H. Pierce, Ph.D. Candidates should be internationally recognized for their expertise, leadership, and collaborative capabilities in the area of signal transduction.

The goal of his/her research program will be to investigate topics involving growth factor and cytokine receptor structure/function, tyrosine and serine/threonine kinases and phosphatases, identification and analysis of downstream effector molecules such as those in the JAK/STAT and Ras/MAP kinase pathways, and nuclear events that occur as the result of activation of different signaling cascades. Emphasis will be placed on the role of signal transduction pathways in the development of cancer.

The selected scientist will be responsible for ensuring the effective functioning of his/her program by creating and maintaining an interactive scientific environment that supports and enhances the research projects of the investigators within the program. The selected scientist is someone who possesses excellent scientific judgment, is able to recruit and mentor the best scientists, and possesses strong managerial skills.

Candidates must possess a medical and/or other doctorallevel degree in a biomedical or related field. In addition, candidates must be either U.S. citizens, citizens of treaty allied countries, or nonresident aliens with valid work visas. Total annual compensation will be commensurate with eduction and experience and ranges from \$52,867 to \$148,400.

Applicants should send a cover letter of interest in the position, a statement of research interests, curriculum vitae, bibliography, and the names and addresses of five individuals who can be contacted as references. Letters of reference should not be submitted by the applicant. This material should be sent to:

> Ms. Toni McKeown National Cancer Institute Human Resources Management Branch 6120 Executive Boulevard Room 537, EPS Rockville, MD 20852

Applications may also be faxed to (301) 402-9333.

If you need additional information, please call Ms. Toni McKeown, NCI Human Resources Management Consulting Branch, on (301) 402-2812.

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

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Affymetrix The Future Is Here!

You are looking at the future. The future in biomedical research, industrial and clinical diagnostics, and genomics. We are the creators of the GeneChipTM -- a new revolutionary technology that is transforming how we acquire, analyze and manage genetic information. It's what we are working on at Affymetrix and it could just launch your career into a whole new exciting direction!

SENIOR SCIENTISTS

Genomics

You will develop and apply methods of gene expression monitoring using high density oligonucleotide arrays. This will involve developing methods of sample preparation, probe design and data analysis. You will also direct and implement internal research and cultivate outside collaborations in gene expression, mapping, genetics, medical diagnostics and cell biology. Your PhD in Biochemistry, Biophysics, Genetics, Molecular Biology or related field must be supported by 1-3 years' relevant experience in DNA/RNA and standard molecular biology procedures/concepts. A proven research and publication record, strong analytical/computational skills, and an understanding of the physical chemistry of biological macromolecules.

Resequencing

Working with Affymetrix collaborators and commercial/academic partners, you will lead the application of DNA probe arrays for polymorphism screening. This will include designing DNA probe arrays to detect mutations in known genes, as well as applying molecular biology protocols to clone, amplify, label and hybridize target DNAs. Along with data analysis methods expertise, you will need a PhD in Molecular Biology or Molecular Genetics and 2+ years' experience in DNA sequencing and analysis. Assay and protocol development experience is a must; human genetics background desirable.

We also have several BS/MS level **Research Associate** positions available in the areas of **Molecular Biology**, **Product Development** and **Chemistry**.

Offering a small company atmosphere with big scientific potential, Affymetrix provides attractive salaries, comprehensive benefits, and the exhilarating synergy of our world-class multidisciplinary team. For consideration, please send or fax your resume to Affymetrix, Human Resources, M/S MB, 3380 Central Expressway, Santa Clara, CA 95051, Fax (408) 481-0422. We are an equal opportunity employer.



POSITIONS OPEN

POSTDOCTORAL POSITIONS are available at the following medical centers. All positions offer competitive salaries and excellent benefits packages.

BAYLOR COLLEGE OF MEDICINE

Opportunities available to study one or more of the following: the molecular basis of an inherited neurodegenerative disease caused by CAG repeat expansion using molecular biological/biochemical and transgenic animal approaches; genes that are important for vertebrate nervous system development disorders; and vertebrate homologs of genes essential for *Drosophila* nervous system development. Qualified candidates will possess a strong molecular/biochemistry and/or neurobiology background. Send curriculum vitae and three letters of reference to: **Baylor College of Medicine, Attention: Dr. Huda Y. Zoghbi, One Baylor Plaza, Room 610E, Houston, TX 77030.** Equal Opportunity Employer.

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Study the immunological and myelopoeitic defects in mice deficient in sclectin ligands (see *Cell*, **86**:4), and in other systems where the function of leukocyte and/or endothelial cell surface glycoproteins is under investigation using molecular, cell biological, transgenic, and gene ablation approaches (see *JBC*, **270**:21437; *JBC*, **270**: 25047; *JBC*, **269**:15162). Qualified candidates will possess a Ph.D. and/or M.D. degree and will have a strong background in biochemistry, genetics, developmental biology, immunology, or myelopoiesis. Send curriculum vitae, letter of application including research interests, and three letters of reference to: University of Michigan Medical School, MSRBI, Attention: Dr. John B. Lowe, Room 3510, 1150 West Medical Center Drive; Ann Arbor, MI **48109**-0650. Email: JohnLowe@ UMICH.EDU. *Equal Opportunity Employer*.

UNIVERSITY OF PENNSYLVANIA

Study cell cycle control of cellular division to include the control of mitotic events using a *Nenopus*-extract based *in vito* system, as well as the yeast S. *cerevisiae*. Qualified candidates should possess a Ph.D. and have a strong background in biochemistry and experience with molecular biology. Send curriculum vitae, research interests and background, and the names and telephone numbers of three references to: University of Pennsylvania School of Medicine, Attention: Dr. Sandra L. Holloway, 446a CRB, 415 Curie Boulevard, Philadelphia, PA 19104-6145. *Equal Opportunity Employer*.

YALE MEDICAL SCHOOL

Study the molecular events that occur during early lymphocyte development, with a focus on V(D)J recombination, the site-specific recombination reaction that assembles antigen receptor genes. Qualified candidates will possess a Ph.D. and experience in molecular biology. Send curriculum vitae and three letters of reference to: Yale Medical School, Section of Inmunobiology, Attention: Dr. David Schatz, Box 208011, New Haven, CT 06520-8011. Equal Opportunity Employer.

The Center for Neurodynamics, University of Missouri-St. Louis, seeks **POSTDOCTORAL SCIENTIST** for a nultidisciplinary program that has as its primary focus stochastic mechanisms in information transfer by the nervous system. Candidates must have experience in electrophysiological recording and computerized data acquisition/ analysis; applicants experienced in electrosensory systems especially encouraged. Salary is competitive and position is renewable for three years starting September 1, 1996, pending receipt of grant. Send application, résumé, and names of three references to: Dr. Lon A. Wilkens, Department of Biology, University of Missouri-St. Louis, 8001 Natural Bridge Road, St. Louis, MO 63121-4499. Email: slawilk@umslvma.umsl.edu. Closing date: October 1, 1996. *An Equal Opportunity Institution*.

POSTDOCTORAL POSITION MOLECULAR GENETICS

Available immediately for an individual proficient in molecular biology. Preference will be given to applicants with experience in DNA/RNA subtraction and tissue culture work. Successful candidate will work with an international, multidisciplinary team on genetics of complex cardiovascular disease. Please forward curriculum vitae, personal statement, and three references to: K. Lindpaintner, Department of Medicine, BWH, Harvard Medical School, 75 Francis Street, Boston, MA 02115. FAX: 617-264-6830.

POSITIONS OPEN

THE NEUROSCIENCES INSTITUTE SAN DIEGO Cellular and Molecular Neurobiology

Applications are invited for the **POSTDOCTORAL POSITION** of Junior Fellow in Experimental Neurobiology to study the formation and function of synapses using molecular, cell biological, and fluorescence imaging techniques. Applicants should have a background in molecular and cellular neurobiology, preferably with some experience in neuronal *in vitro* systems. Fellows will receive stipends appropriate to their qualifications and experience. Submit a curriculum vitae, statement of research interests, and names of three references to: Dr. Olaf Sporns, The Neurosciences Institute, 10640 John J. Hopkins Drive, San Diego, CA 92121. FAX: 619-626-2099.

POSTDOCTORAL POSITION in biochemistry/ molecular biology to work on aspects of dental enamel proteins and biomineralization. A postdoctoral position is available in the Center for Craniofacial Molecular Biology (University of Southern California School of Dentistry) in Los Angeles. The position is initially available for one year. The laboratory works on fundamental processes of dental enamel biomineralization. (See also: htpp//www. usc.edu/hsc/dental/ccmb/index.html). Applicants should have a strong background in biochemistry (protein chemistry, enzymology) and/or molecular biology (cloning and expression of recombinant proteins). Evidence of an aptitude for self-motivated research with an interest in biomineralization processes is an advantage. Please send applications (curriculum vitae and three references) to: A.G. Fincham, Ph.D., Center for Cranio facial Molecular Biology, University of Southern California, 2250 Alcazar Street, Los Angeles, CA 90033, U.S.A. Email: alanfinc@zygote.hsc.usc.edu.

POSTDOCTORAL FELLOWSHIP PROGRAM Molecular Host Defense

Positions available immediately to study antimicrobial peptides (defensins, protegrins) of human and animal phagocytes and epithelia under the direction of **Profs. Robert Lehrer** and **Tomas Ganz**. Experience is required in one or more of the following: a) peptide chemistry/purification, b) microbial structure and pathogenesis, c) cell biology of phagocytes or epithelia. Please send curriculum vitae and the names of three references to: **Molecular Host Defense Laboratorics**, **37**-055 CHS, UCLA School of Medicine, Los Angeles, CA 90095-1690. FAX: 310-206-8766. Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the regulation and biological role of transcription factors (including NF-KB/Rel and NF-AT) in T-cell activation and human T-cell leukemia virus (HTLV)-mediated Tcell transformation. Applicants should have a Ph.D. degree and strong background in molecular/cell biology. Experience with transgenic mice is desired but not required. Send curriculum vitae and names and addresses of three references to: Dr. Shao-Cong Sun, Department of Microbiology and Immunology, Pennsylvania State University College of Medicine, P.O. Box 850, Hershey, PA 17033-0850. FAX: 717-531-6522; Email: sxs70@psu.edu. For your health, Hershey Medical Center is a smoke-free campus. We are an Equal Opportunity/ Affinative Action Employer and encourage univority and female applicants to apply.

POSTDOCTORAL POSITION available September 1, 1996 to investigate the functional significance of variation in insect cytochrome P450 monooxygenases. Ph.D. or postdoctoral experience in molecular biology is required; familiarity with baculovirus expression systems, RFLP, site-directed mutagenesis, or insect physiology is desirable. Send curriculum vitae and three letters of reference to: Dr. May Berenbaum, Department of Entomology, 320 Morrill Hall, University of Illinois, 505 South Goodwin, Urbana, IL 61801-3795. Email: maybe@uiuc.edu.

POSTDOCTORAL POSITION available immediately to study regulation of cardiac myocyte function and gene expression by cytokines and NO. Submit curriculum vitae and references to: Mitchell Finkel, M.D., Department of Medicine, Section of Cardiology, West Virginia University Health Sciences Center, P.O. Box 9157, Morgantown, WV 26506. FAX: 304-293-7828. This position will remain open until filled. Equal Opportunity/Affinative Action Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP PHYSICAL SCIENTIST Protein Folding

POSTDOCTORAL FELLOWSHIP is available for a physical scientist to study the dynamics and kinetics of protein folding using methods that include laser T-jump, nanosecond-resolved spectroscopy, and ultrarapid mixing. Applicants should have a strong background in experimental physics or physical chemistry and must have less than five years of postdoctoral experience. Send curriculum vitae, publication list, and three letters of reference to: Dr. William A. Eaton, Chief, Laboratory of Chemical Physics, Building 5, Room 104, National Institutes of Health, Bethesda, MD 20892-0520.

POSTDOCTORAL POSITION NEUROSCIENCE

I am moving to the Biology Department of Georgia State University in Atlanta, Georgia and am looking for a **POSTDOCTORAL** with electrophysiology experience to begin January 1997. Will participate in ongoing systems- and cellular-level research on neuromodulation using 2-model invertebrate motor systems (*Tritonia* and crustacean stomatogastric). For more information see: http://nbal9.med.uth.tmc.edu/~pkatz/. Send your curriculum vitae and the names and addresses of three references to: Paul S. Katz, Department of Neurobiology and Anatomy, University of Texas Medical School, P.O. Box 20708, Houston, TX 77225.

POSTDOCTORAL POSITION

Retina Group, Department of Neuroscience, University of Pennsylvania. Functional Architecture of Mammalian Retina: intracellular recording from amacrine cells; determine their synaptic connections by confocal LM and EM; quantify exocytosis/endocytosis *in vitro*; identify Gprotein mediated, second messenger systems with molecular approaches. Send curriculum vitae and letters of recommendation to:

> Peter Sterling, Ph.D. University of Pennsylvania Department of Neuroscience 123 Anatomy/Chemistry Building Philadelphia, PA 19104-6058 Email: peter@retina.anatomy.upenn.edu

POSTDOCTORAL POSITION available fall 1996 to investigate the role of endothelial cells in activating T cells and modulating immune responses. Three years of experience in immunology, molecular biology, and/or vascular biology is required. Please send curriculum vitae; a brief statement of research interests; and the names, addresses, and telephone numbers of three referees by September 15, 1996 to: Dr. Christopher C. W. Hughes, Department of Molecular Biology and Biochemistry, University of California, Irvine, Irvine, CA 92697.

The University of California, Irvine is an Equal Opportunity Employer committed to excellence through diversity.

POSTDOCTORAL FELLOW

The Division of Biomedical Marine Research of the Harbor Branch Oceanographic Institution, located in Fort Pierce, Florida, has a **POSTDOCTORAL FEL-LOWSHIP** available immediately for an individual to participate as a member of a multidisciplinary team to discover novel marine natural products with therapeutic potential. The field of research is open to applicants with experience in marine natural products chemistry; molecular/cell biology and bioassay development of novel isolation methodologies. Please send a résumé and brief statement of research interests to: **Personnel Services**, **5600 U.S. 1, North, Fort Pierce, FL 34946**. *Affirmative Action/Equal Opportunity Employer*.

POSTDOCTORAL POSITION in genetics of aging available to study genes that determine yeast longevity and their human counterparts, age-dependent regulatory elements, and mammalian cellular senescence (J. Biol. Chem., 269:15451, 1994; J. Biol. Chem., 269:18638, 1994; BBRC, 219:370, 1996; Der. Genet, 18:154, 1996; Science, 273:54, 1996). Experience in molecular techniques essential and in yeast genetics helpful. Send curriculum vitae with bibliography and names, telephone, FAX, and Email of three referees to: Dr. S. Michal Jazwinski, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112. Affirmative Action/Equal Opportunity Employer.

QUALITY AIR FORCE

Air Force Materiel Command (AFMC) invites applications from leading scientists and engineers interested in shaping the research and technology program of the Air Force.

ARMSTRONG LABORATORY, HUMAN SYSTEMS CENTER

The ARMSTRONG LABORATORY provides the Air Force with technologies to select, classify and train Air Force personnel; develop medical standards for selection and retention of aircrews, design protective equipment, life support and aircrew escape systems; specify human factors design for weapon systems to enhance human operator performance and logistics supportability, develop safe human exposure criteria for electromagnetic radiation and toxic chemicals, safeguard the quality of the environment; and remediate chemical pollution. The laboratory brings together in one organization the physical, medical and behavioral science and engineering disciplines and specialized research facilities required to address all aspects of the human role in Air Force operations.

CHIEF SCIENTIST, HUMAN RESOURCES is the primary scientific advisor to the Director on scientific and engineering aspects of human resources research and development programs, involving interdisciplinary fields such as behavioral science, cognitive science, operations research, computer science, psychometrics, human performance, flight and maintenance simulation, computer aided design, acquisition logistics, and information modeling. (Announcement ST 96-13) Duty Location: Brooks AFB TX

SENIOR SCIENTIST, AVIATION PSYCHOLOGY conducts research and development activities in aviation psychology for Air Force, including such topics as instructional theory, instructional development, instructional evaluation, instructional measurement, aircrew training methodologies, team training, feedback in instruction, aircrew training device assessment, and the integration of various aircrew training methodologies and media into a total training systems. (Announcement ST 96-14) Duty Location: Mesa AZ

QUALIFICATIONS: Candidates must demonstrate scientific experience and achievements at the national and international level, evidenced by citations, patents, publications, honors, leadership activity in their field, including election as a Fellow or comparable recognition, and academic standing--normally a degree at the doctoral level.

Salary range is \$86,595 - \$120,478

APPLICATION INFORMATION: Call the AFMC Senior Civilian Management Office at (513) 257-1094 or DSN 787-1094 for a copy of pertinent announcement describing specific qualification requirements and application procedures. Applications must be postmarked by <u>13 Sep 96</u>.

DEPARTMENT OF THE AIR FORCE AN EQUAL OPPORTUNITY EMPLOYER

GLOBAL CAREER OPPORTUNITIES

Astra is an international research-based pharmaceutical company in a period of rapid growth. The company's operations are focused on research, production and marketing of pharmaceutical products through subsidiary companies in about 40 countries. Through agents and licencees Astra products are available in an additional large number of countries. The number of employees is approximately 17,000, of whom 6,000 are in Sweden. Group sales in 1995 amounted to 36 billion Swedish Crowns, of which 92 percent are in markets outside Sweden.

ASTRA HÄSSLE

Astra Hässle is situated in Göteborg, Sweden and is a research company with 1,200 employees. Research is aimed at developing new pharmaceuticals for cardiovascular and gastrointestinal diseases. Seloken® (metoprolol), Plendil® (felodipine), Imdur® (isosorbide-5-mononitrate), Logimax® and Losec® (omeprazole) are drugs developed by Astra Hässle scientists.

Pharmacologist

Astra Hässle, an international leader in the development of pharmaceuticals in the cardiovascular and gastrointestinal areas, is offering an excellent opportunity for an independent researcher in the field of integrative cardiovascular *in vivo* physiology/pharmacology with emphasis on lipid and carbohydrate metabolism.

The selected candidate will share major responsibilities within the Preclinical Research Unit in a project directed to the discovery of therapeutic agents for treatment of metabolic disturbances that contribute to cardiovascular disease. The successful candidate will lead a small research group within the Department of Cardiovascular Pharmacology and act as a specialist pharmacologist interacting with other scientists in biochemistry, molecular biology, medicinal chemistry etc. The potential candidates must have a Ph.D. or equivalent degree and at least two years postdoctoral experience with a record of independent research. In addition to experience with intact animal models, knowledge of modern techniques of biochemistry, cell and molecular biology will be positively considered.

Astra Hässle has modern preclinical research facilities with excellent equipment, located in Mölndal, a pleasant suburb of Göteborg on the west coast of Sweden.

For more information, please contact Dr. Bengt Ljung, tel. no. +46 31 776 12 91, or fax. no. +46 31 776 37 06 (project leader) or Dr. Per-Ove Sjöqvist, tel. no. +46 31 776 12 27, (acting head, Department of Cardiovascular Pharmacology). During the period of summer vacation we can be reached via fax. no. +46 31 776 37 06 or 776 37 58.

Applications with full details should be marked "55/96 Pharmacologist" and sent to the following address not later than August 30, 1996: Astra Hässle AB, Human Resources, Att. Victoria Barkby, S-431 83 Mölndal, Sweden. Fax. no. +46 31 776 37 46.



POSITIONS OPEN

POSTDOCTORAL POSITION PHARMACOLOGY

A POSTDOCTORAL SCIENTIST is needed to engage in whole cell and single channel patch-clamp studies of recombinant ion channels in heterologous expression systems. The research involves human voltage gated sodium channels expressed in Xeuopus oocytes or transfected cultured mammalian cells, as well as native myocytes from mammalian heart. Extensive experience in computerized data analysis including Pelamp software desirable. Back ground knowledge of cellular ion channel biophysics and drug channel interactions is also highly desirable. Opportunities to learn molecular biological approaches to the study of ion channels is available. Familiarity with computer programming a plus. Candidates must have a Ph.D. in physiology, biophysics, or an equivalent degree with a minimum of one year of experience in electrophysiology. Candidates should send a curriculum vitae and the names of two references to:

Dr. Paul B. Bennett Departments of Pharmacology and Medicine, 560 MRB 11 Vanderbilt University School of Medicine Nashville, TN 37232-6602 An Affinnative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH SIGNAL TRANSDUCTION

Positions funded by the Lucille Markey Foundation Program in Structural Biology of Signal Transduction Molecules are available immediately in the Center for Cancer Biology and Nutrition, Alkek Institute of Bio-sciences and Technology, Texas A&M University in the Texas Medical Center in Houston to study mechanisms of the Fibroblast Growth Factor (FGF) and Transforming Growth Factor Beta (TGFB) families of bioregulators in development, prostate, liver, and the cardiovascular system. One position will involve transgenic mouse ap proaches, and seeks applicants with combined backgrounds and experience in mouse genetics/physiology and cell and molecular biology. One position will involve study of structure related to function of protein and carbohydrate components of the systems. Applicants with experience in structure determination and analytical methods as crystallography, CD, NMR, molecular modeling, and/or calorimetry preferred. Interested persons should forward curriculum vitae and a summary of research interests, and have three references sent to: Dr. W. L. McKeehan, c/o Ms. Diana Taylor, Department CCBN, Albert B. Alkek Institute of Biosciences and Technology, Texas A&M University, 2121 West Hol-combe Boulevard, Houston, TX 77030-3303. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS Molecular Mechanisms of Development

TWO POSITIONS are available fall 1996 to do research on either homeotic gene regulation (see: *Science*, **264**:968, 1994) or mechanisms of TGF- β signaling in *Drosophila* (see *Cell*, **78**:251, 1994; *Cell*, **80**:899, 1995; *Cell*, **81**:781, 1995; *Cell*, **85**:489, 1996). Applicants must have a Ph.D. and one year of experience in protein biochemistry/tissue culture and/or genetics. Applicants should send a current curriculum viaze and the names of three referees by November 30, 1996 to:

Dr. Michael B. O'Connor Department of Molecular Biology and Biochemistry

University of California, Irvine, CA 92717 The University of California is an Equal Opportunity Employer

committed to excellence through diversity.

MYASTHENIA GRAVIS FOUNDATION FELLOWSHIP

POSTDOCTORAL RESEARCH FELLOWSHIP available for outstanding candidate with M.D., Ph.D., D.V.M., or equivalent degree, conducting research pertinent to myasthenia gravis (MG) in the laboratory of a qualified senior investigator. Investigations concerned with mechanism of neuromuscular transmission; imnunology, molecular or cell biology of the neuromuscular synapse; the etiology/pathogenesis, diagnosis, or treatment of MG. Submit by November 1, 1996. Stipend competitive. For fellowship guidelines, please contact: Myasthenia Gravis Foundation of America, 222 South Riverside Plaza, Suite 1540, Chicago, IL 60606. Telephone: 312-258-0522.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN CANCER BIOLOGY University of Wisconsin-Madison

The Department of Human Oncology and the University of Wisconsin (UW) Comprehensive Cancer Center, invites applications for several highly competitive NIHfunded **POSTDOCTORAL FELLOWSHIPS** to begin before March 31, 1997. Applicants should be recent Ph.D.'s (or equivalent) with strong research background in biochemistry, cell biology, molecular biology, genetics, immunology, pharmacology, or related fields, who wish to apply their skills to cancer-related problems.

Faculty and research programs include: Hirak Basu, Ph.D., role of DNA structure in regulating cell growth, gene transcription, and replication; David Boothman, Ph.D., DNA damage-induced gene expression, therapeutics; Steven S. Clark, Ph.D., oncogenes and signal transduction, leukemia, developmental immunology; Michael Gould, Ph.D., molecular biology of breast cancer, cancer prevention and therapy; Timothy Kinsella, M.D., modifiers of radiation damage; Amy R. Moser, Ph.D., genetics of cancer susceptibility, carcinogenesis; Shigeki Miyamoto, Ph.D., rel/NF_kB transcription factors; R. Timothy Mulcahy, Ph.D., drug resistance, regulation of glutathione synthesis; Catherine Reznikoff; Ph.D., molecular carcinogenesis, cancer genetics; Mark Ritter, M.D., Ph.D., cell cycle regulation; Paul Sondel, M.D., Ph.D., tumor immunology, cytokine receptors, gene therapy; Ajit K. Verma, Ph.D., protein kinase C and retinoic acid receptors in carcinogenesis.

For further information about research programs and how to apply, qualified individuals (U.S. citizens or pennaneut residents), should contact: Director, Cancer Biology Program, K4/510A CSC, University of Wisconsin, 600 Highland Avenue, Madison, WI 53792. Telephone: 608-262-7393; Email: humcabio@macc.wisc.edu.

POSTDOCTORAL POSITIONS MAMMALIAN FERTILIZATION Mount Sinai School of Medicine Department of Cell Biology and Anatomy

Applications are requested for **POSTDOCTORAL FELLOW** positions from candidates with experience in molecular biology and transgenic mouse research to investigate aspects of species-specific fertilization in mammals. Please send your curriculum vitae and the names of three references to: Dr. Paul M. Wassarman, Department of Cell Biology and Anatomy, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. Equal Opportunity Employer.

POSTDOCTORAL POSITION

A POSTDOCTORAL POSITION is available for ongoing NIH-funded research on the molecular mechanisms underlying the specificity of protein kinase C (PKC) isotype signal transduction pathways. Projects include the study of the role of individual PKC isotypes in cellular proliferation, differentiation, and cell cycle control (e.g., PNAS, 92:9156, 1995; JBC, 261:15045, 1996). A Ph.D. and expertise in the areas of molecular biology, signal transduction, and biochemistry are required. Applicants should send a curriculum vitae, summary of research interests/career goals, and names of three references to: Alan P. Fields, Ph.D., Sealy Center for Oncology and Hematology, University of Texas Medical Branch, 301 University Boulevard, Galveston, TX 77555-1048. FAX: 409-747-1938; Email: afields@beach. utmb.edu. Equal Opportunity/Affinative Action Employer, Minorities/Feundes/Disabled/Veterans. University of Texas Medical Branch hires only employees authorized to work in the U.S.

TWO POSTDOCTORAL POSITIONS NEUROSCIENCE Children's Hospital of Philadelphia/ University of Pennsylvania

The first position involves the study of cellular and molecular mechanisms of oligodendrocyte plasticity in the pathogenesis of myelin diseases, in particular multiple sclerosis and phenylketonuria. The second position involves the study of the cellular and molecular mechanisms of patterning and cell migration in the developing vertebrate brain. Applicants with a doctoral degree and experience in cell culture, biochemistry, and/or molecular biology are desired. Please send a curriculum vitae and the names of three references to: Dr. Charissa A. Dyer or Dr. Jeff Golden, Abramson Research Building, Room 516, Children's Hospital of Philadelphia, 34th and Civic Center Boulevard, Philadelphia, PA 19104. Email: golden@email.chop.edu.

POSITIONS OPEN

POSTDOCTORAL TRAINING PROGRAM Cellular and Molecular Aspects of Aging

Positions are available for **POSTDOCTORAL TRAINEES** (Ph.D. and/or M.D.) to obtain two years of specialized training in the methods and models of research on aging. This program is funded by the National Institute on Aging and directed by a consortium that includes:

-Allegheny University of the Health Sciences (formerly Medical College of Pennsylvania and Hahnemann University) (Drs. V. J. Cristofalo, E. Friedman, D. Murasko, and J. Roberts).

-Thomas Jefferson University (Dr. R. Baserga).

-University of Medicine and Dentistry of New Jersey (Dr. H. Ozer).

-The Wistar Institute (Dr. E. Levine).

Research emphases include: cell cycle kinetics/dynamics; growth factor regulatory mechanisms; growth regulatory genes; cellular transformation and immortalization; regulation of gene expression; cytogenetics; nutrition, aging, and cancer; immune parameters as biomarkers of aging; immune suppression; vascular cell physiology; cardiovascular physiology/pharmacology; adrenergic neurotransmission.

Address applications (curriculum vitae, three letters of recommendation, and graduate school transcripts) to: Vincent J. Cristofalo, Ph.D., Audrey Meyer Mars Professor and Director, Center for Gerontological Research, Allegheny University of the Health Sciences, 2900 Queen Lane, Philadelphia, PA 19129-1191.

NEUROSCIENTIST FOR THE NUN STUDY

The Nun Study, a longitudinal study on aging and Alzheimer's disease, is recruiting a **POSTDOCTORAL** scholar with strong neurohistological and neuropathological skills, and training or experience in morphology and cellular and molecular biology of the central nervous system. The successful candidate will work with an epidemiologist (**David A. Snowdon**, **Ph.D.**) and a neuropathologist (**William R. Markesbery, M.D.**) in the analysis of autopsied normal and diseased brains and the preparation of manuscripts. Excellent communication skills, computer literacy, and an aptitude for quantitative approaches to the epidemiologic study of the neuropathology of dementia are required. Send application letter, curriculum vitae, and three representative publications, and arrange for three letters of reference to be sent to: **David A. Snowdon**, Ph.D., **303 Sanders-Brown Building**, Lexington, KY **40536-0230**. Web page: http://www.coa.uky.edu/nunnet. *An Equal Opportuni ty/Alfinuative Action Employer*.

RADIATION ONCOLOGY POSTDOCTORATE

The Department of Radiation Oncology at the Medical College of Virginia/Virginia Commonwealth University (MCV/VCU) has a **POSTDOCTORAL POSITION** available in its Research Section.

Responsibilities include signal transduction mechanisms responsible for hepatocyte differentiation, regeneration, and growth. These studies will involve examination of the role(s) of protein kinase cascades, protein phosphatases, and other second messengers in freshly isolated hepatocytes.

Qualifications: A Ph.D. in molecular or cellular biology, or similar degree with a strong background in cellular and molecular biology. Experience with construction of recombinant adenoviruses and protein biochemistry a plus.

Send curriculum vitae with three references to: Dr. Paul Dent, MCV/VCU, Department of Radiation Oncology, P.O. Box 980058, Richmond, VA 23298-0058. FAX: 804-828-6042; Email: pdent@gems. vcu.edu.

POSTDOCTORAL/RESEARCH ASSOCIATE Institute for Gene Therapy and Molecular Medicine

Position available immediately for highly motivated individual to study the development and application of recombinant adeno-associated viral (AAV) vectors for somatic gene transfer into liver, muscle, or the central/ peripheral nervous system. Applicants must have a Ph.D. or M.D. degree and previous experience in virally mediated gene transfer or molecular virology. Experience with survival surgery in laboratory animals is desirable. Send curriculum vitae and the names of three references to: **Randy C. Eisensmith, Ph.D., Institute for Gene Therapy and Molecular Medicine, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. Equal Opportunity Employer.**

BIOINFORMATICS



Genetics Institute is recognized as a leader in the discovery of important biotherapeu-tics. To date, nine of our novel regulatory proteins have advanced to human clinical evaluation or commercialization. Our continued success will be fueled by our collaborative work environment, which fosters individual creativity and group accomplishment.

Genetics Institute has taken bold steps to capitalize on the unique and historic opportunities brought about by the Genomics revolution. Our scientists have devised the Signal Sequence Trap, a biological selection for genes encoding secreted proteins. We're now implementing this patented technology on a large scale and are rapidly discovering growth factors and other potential protein therapeutics, isolating the corresponding full-length cDNA's, and expressing the novel proteins.

To further our understanding of the biology of these and other proteins, we are beginning a systematic and comprehensive survey of gene expression. Our researchers, in collaboration with scientists at Affymetrix, have been developing high-throughput, massively parallel Gene Expression Monitoring capabilities. As a result of the rapid progression of this technology, we now face the exciting prospect of using large quantities of gene expression infor-mation to help us better understand biological processes and identify exciting therapeutic factors and targets.

The rapid accumulation of sequence, expression, and other biological information has created opportunities for scientists at a variety of levels with skills in the biological and computer sciences

COMPUTATIONAL BIOLOGISTS

We are seeking highly motivated mid- to senior-level individuals with experience in data management and information intensive data analysis to develop bioinformatics capabilities to support these programs. Qualified individuals will design and implement tools for gaining insights into biological systems using data from the Signal Sequence Trap and Gene Expression Monitoring project alone and in combination with other publicly available biological information.

Strong candidates will have demonstrated the ability to take responsibility for user-oriented software development projects. Technical flexibility, persistence and initiative, and the ability to communicate effectively are all critical skills. Qualifications include a Ph.D. in a relevant field (e.g. Computer Science, Information Systems or Biology) and 5+ years' experience developing information systems for biological applications. Important software skills include relational DBMS development, user interface design, programming in C/C++ and Perl.

Genetics Institute offers competitive salaries and benefits, including comprehensive health care, dental and life insurance, three weeks' paid vacation, 401(k), stock purchase plan, relocation assistance, and an on-site exercise facility.

For consideration, please send or fax resume, suitable for scanning into our database, to: Human Resources Department, Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140. Fax: (617) 876-8847. Genetics Institute is dedicated to building strength through diversity.



Harnessing the Body's Power to Heal



Astra combines the stability of a growing international organization with the entrepreneurial spirit of a newly formed research group. We value your talents, are dedicated to promoting professional development, and offer you an extensive list of benefits to ensure your wellbeing. Please send your C.V., indicating the appropriate position, to: Astra Research Center Boston, Human Resources, 128 Sidney Street, Cambridge, MA 02139-4239; FAX (617) 576-4668.



Pursuing knowledge through the power of equal opportunity.

The story of Astra Research Center Boston begins with Astra, an international organization based in Sweden. With over \$5 billion in worldwide annual sales and over 17,000 employees, Astra is one of the most innovative and rapidly growing pharmaceutical companies in the world. Driven by our mission to improve human health and quality of life, we have maintained a strong commitment to innovative research throughout our growth.

Astra Hässle, a successful research company in the Astra Group, is now moving forward into a new era with the establishment of Astra Research Center Boston. The initial research focus of Astra Research Center Boston will be the development of small molecule drugs and vaccines to improve therapies against Helicobacter pylori. As a contributing member of our new organization, you will discover that our commitment to human health is paramount and provides the foundation of our world class drug discovery unit.

MANAGER RESEARCH INFORMATICS

You will be managing and developing our use of genomic, biochemical, biological and chemical information in the drug discovery ocess. The successful candidate will have a Ph.D. in molecular biology, bioinformatics, computational biology or related disciplines and five or more years of experience in informatics.

SCIENTIFIC COMPUTING AND DATABASE MANAGER

You will be responsible for managing and developing our chemical and biological databases. Experience developing client server systems with Oracle and/or Sybase is required. UNIX background is essential. Requires a MS in Computer Science and at least 5 years' related experience. A background in chemistry, biology or lab automation is desirable.

Manager of Scientific Information Systems

Tularik is a privately-held biotechnology company dedicated to the discovery and development of new therapeutic drugs. Twenty proprietary, mechanism-based assays that model specific human disease are being used to evaluate individual small molecules and combinatorial libraries.

We are looking for an experienced, hands-on person to take charge of scientific information systems. You will develop and implement scientific information systems in the areas of DNA and protein sequence analysis, chemical structure databases, and small molecule screening databases. Working in collaboration with our scientific staff, you will help set the direction of scientific information management. Requires database programming experience in C & UNIX. Willingness and ability to be hands-on is critical. Experience with combinatorial chemistry library management and integration with screening databases is desired. Experience with DNA and protein sequence analysis, and Oracle is helpful.

Tularik offers productive and experienced leadership, equity participation, a competitive salary & benefits package, and a very exciting research environment. For consideration, please submit your CV to:

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Tularik

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FOUR POSITIONS IN BIOLOGICAL SCIENCES UNIVERSITY OF CALIFORNIA, DAVIS

Two Positions in Structural Biology/X-Ray Crystallography

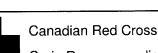
The Division of Biological Sciences, University of California, Davis, invites applications for Assistant Professor and Associate Professor of Molecular and Cellular Biology positions (pending budgetary approval). The assistant professorship is a tenure-track position and the associate professorship is tenured. Both positions are in the division's Section of Molecular and Cellular Biology and can include an initial appointment in the Agricultural Experiment Station. Candidates must have a Ph.D. (or equivalent) and an outstanding record of research achievement. Successful candidates are expected to develop strong research programs in high resolution structural biology and to teach at the graduate and undergraduate levels. Candidates for the associate professorship must have a demonstrated research and teaching record commensurate with criteria for tenure within the University of California. The section particularly wishes to recruit individuals who are using crystallography to solve fundamental problems in biology. Successful candidates might complement the section's existing research strengths in protein-nucleic acid interactions, enzymology, cytoskeleton and cell function, signal transduction, and molecular mechanisms of development. The interests of the two selected candidates will complement those of two recently appointed crystallographers. The faculty research programs will be supported by a state-of-the-art core facility for crystallography built jointly by the Section of Molecular and Cellular Biology and the Department of Chemistry. Applicants should submit (1) a curriculum vitae, (2) a statement of current and proposed research, and (3) a statement of teaching experience and interests, and arrange to have three letters of recommendation sent to: Dr. Ronald J. Baskin, Chair, Structural Biology Search Committee, Section of Molecular and Cellular Biology, University of California, Davis, CA 95616-8519. Closing date: Open until filled, but all application materials, including letters of recommendation, must be received by September 3, 1996 to be assured full consideration.

Two Positions in Molecular Genetics/Molecular Biology

The Section of Molecular and Cellular Biology, Division of Biological Sciences, also invites applications for two tenure-track positions at the level of Assistant Professor (pending budgetary approval). Both positions can include an initial appointment in the Agricultural Experiment Station. Candidates must have a Ph.D. (or equivalent) and an outstanding record of research achievement. Successful candidates are expected to develop a strong research program in the general areas of gene expression or nucleic acid molecular biology and to teach either genetics or biochemistry at the graduate and undergraduate levels. Appropriate research areas include, but are not limited to, the interactions between signal transduction pathways and transcription, cell-cycle regulation of gene expression, the role of transcriptional regulators in differentiation and development, and protein-nucleic interactions. Appointment of the Rowe Chair in Human Molecular Genetics within the School of Medicine and the recent appointment and continued recruitment of faculty in structural biology in the Section of Molecular and Cellular Biology underscores the campus's commitment to developing increasing strength in mammalian genetics and structural biology. Applicants should submit (1) a curriculum vitae, (2) a statement of current and proposed research, and (3) a statement of teaching experience and interests, and arrange to have three letters of recommendation sent to: Dr. Michael E. Dahmus, Chair, Genetics/Molecular Biology Search Committee, Section of Molecular and Cellular Biology, University of California, Davis, CA 95616-8519. Closing date: Open until filled, but all application materials, including letters of recommendation, must be received by October 1, 1996 to be assured full consideration.

The University of California, Davis, is an affirmative action/equal opportunity employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences based on gender, cultural ethnicity, disability, and sexual orientation. In that spirit, we are particularly interested in receiving applications from individuals who would enhance the diversity of our workforce.





Croix-Rouge canadienne

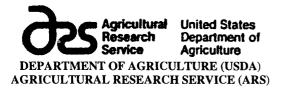
Director, Research and Development

Reporting to the Associate National Director, Medical and Scientific Affairs, you will plan, manage and lead the Society's Research and Development Program. Key responsibilities will include implementing the R&D strategic plan by coordinating and directing research according to strategic priorities, attracting and retaining recognized researchers, developing and exploiting outside funding opportunities, and establishing and implementing a program to enhance the profile of the R&D Program.

We are seeking a scientist with widely recognized expertise in transfusion medicine research obtained through a Ph.D. in biology, biochemistry or a related transfusion field, and six to ten years of related experience. Candidates with an equivalent combination of eduction and experience will also be considered. A current university faculty appointment or the ability to obtain one is desirable, as is experience in forming and leading a large R&D group. Strong communication skills in English are essential, and fluency in French is a definite asset.

Qualified applicants are invited to send their resume in confidence, quoting competition number 96-098, no later than September 30, 1996, to:

> **Human Resources Department** The Canadian Red Cross Society 1800 Alta Vista Drive Ottawa, Ontario K1G 4J5 Canada



ARS is seeking an interdisciplinary Research Plant Pathologist/ Zoologist/Microbiologist, GS-434/410/403-11/12 in the Nematology Laboratory, Plant Sciences Institute, Beltsville Agricultural Research Service. Salary is commensurate with experience (GS-11: \$37,094-\$48,222 per annum; GS-12: \$44,458-\$57,800 per annum). The position involves planning and conducting independent and cooperative research primarily on the taxonomy and systematics of plant-parasitic nematodes; developing improved methods for identifying plant-parasitic nematodes of economic importance to U.S. agriculture; and developing improved schemes for classifying nematodes and determining their relationships to each other. In addition to the basic educational requirements, applicants must demonstrate 1) knowledge of the principles, methods, techniques, and procedures of plant pathology, plant nematology, zoology, parasitology, or microbiology; 2) ability to use molecular techniques (including DNA analysis, protein electrophoresis, etc.) or cladistics for taxonomic and systematic purposes; 3) knowledge of plant-parasitic nematodes and their relationship to plant diseases; and 4) knowledge of taxonomy and the systematics of plant-parasitic nematodes. Applicants must also demonstrate the ability to design, plan, and conduct research on the taxonomy and systematics of nematodes (particularly plant-parasitic nematodes) and publish results. For information on the research program and/or position, contact Dr. David Chitwood, 301-504-5660. For information on application procedures/forms, please call for a copy of the announcement on 301-344-4638. Applications in response to this advertisement should be marked DB-6-047(B-6-09).

USDA is an Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE PROFESSOR (UNTENURED) OF FOREST MANAGEMENT

The Yale University School of Forestry and Environmental Studies seeks to appoint an Assistant or untenured Associate Professor of Forest Management. The candidate is expected to teach courses in forest management and policy and to develop and maintain an active research program. Individuals with backgrounds in either management or social sciences are acceptable. A close acquaintance with the actual management of forests is highly desirable. Interest and ability to participate effectively in an interdisciplinary setting are essential.

The deadline for receipt of application materials is October 1, 1996. We recognize that the field of forest management is very broad and each candidate should provide us with a statement of how their own discipline and interests would contribute to the interdisciplinary subject of forest management. Please also include a statement of research and teaching interests, a curriculum vitae, and the names and addresses of three references.

PROFESSOR OF TROPICAL FOREST ECOLOGY AND AGROFORESTRY

The Yale University School of Forestry and Environmental Studies seeks to make a tenured appointment in tropical forest ecology and agroforestry. The individual must have an outstanding record of research achievement and demonstrated interest and ability in interdisciplinary collaboration, especially the integration of natural and social sciences for land management in tropical areas. Effectiveness in teaching in a professional, interdisciplinary setting is essential.

The deadline for receipt of application materials is October 15, 1996. Please include a statement of research and teaching interests, a curriculum vitae, and the names and addresses of three references.

Application materials for both positions should be sent to: Professor Kristiina Vogt, Chair, Yale University, School of Forestry and Environmental Studies, 370 Prospect Street, New Haven, Connecticut 06511. For further information on both of these positions you may contact Professor Vogt by phone 203/432-5076 or email kdvogt@yalevm.cis.yale.edu.

Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.

BEHAVIORAL PSYCHOPHARMACOLOGIST GEORGIA STATE UNIVERSITY, ATLANTA

The Department of Psychology at Georgia State invites applications for a tenure-track position at the Assistant/Associate Professor level in Behavioral Psychopharmacology or Neuropharmacology. We seek broadly trained, outstanding candidates who can contribute effectively to the graduate instruction and research programs, and to undergraduate teaching in any area/s of the Department. The Department currently supports graduate programs and undergraduate interest areas in Neuropsychology and Behavioral Neurosciences, Psychological Foundations, Clinical Psychology, and Community Psychology. In addition, it houses, along with the Department of Biology, the Center for Brain Sciences and Health. Applicants from all areas of behavioral psychopharmacology or behavioral neuropharmacology subspecialization are welcome as long as there is a behavioral component to their research program. Research programs focused on mammalian model systems of the neurochemical basis of regulatory behaviors or neurochemical and psychoneuroimmunological system interactions would be of most interest and match the strength and needs of the Department. Teaching responsibilities at the undergraduate level might include some of the following: drugs and behavior, physiological psychology, or animal behavior. Graduate level teaching responsibilities might include: clinical psychopharmacology, functional neurochemistry, or behavioral pharmacology. A Ph.D. in psychology or a related behavioral discipline and postdoctoral training is required. The ability to conduct independent research, a strong record of research productivity, and a record of external funding, particularly for candidates at the Associate level, is also desired. Applicants should send a letter of application, a curriculum vitae, and one copy of selected publications, and should arrange for 3 letters of recommendation to be set to Chair, Behavioral Psychopharmacologist Search Committee, Department of Psychology, Georgia State University, University Plaza, Atlanta, GA 30303. Applications must be received by November 1, 1996 to be considered during the first selection review. However, applications will be accepted until the position is filled. *Georgia State University*, a unit of the University System of Georgia, is an Equal Opportunity/ Affirmative Action Employer; thus, applications from women and members of minority groups are especially encouraged.

Faculty Position in Biophysics University of California, Los Angeles

The Departments of Physics and Astronomy, Chemistry and Biochemistry and the Jules Stein Eye Institute invite applications for a senior faculty position in experimental biophysics. Exceptionally well-qualified junior applicants will also be considered for appointment at the assistant or associate professor level. Applicants should have a demonstrated ability to pursue an independent research program that involves collaboration with biochemists and molecular biologists. We are particularly interested in biophysicists with expertise in advanced probes such as optical methods, force microscopy, magnetic resonance, x-ray scattering, and the use of genetic manipulation. However, highly qualified individuals with interests in other areas of biophysics will be considered.

This search is being conducted jointly by the Physics and Astronomy, Chemistry and Biochemistry Departments of UCLA in collaboration with the Jules Stein Eye Institute of the UCLA Medical School, which has active biophysics-related research programs that include protein-folding, electron spin resonance, signal processing within cells, and molecular mechanisms of membrane transduction. The successful applicant would establish an affiliation with JSEI, ranging from an informal research collaboration to a joint faculty appointment, and would be expected to stimulate a biophysics teaching program.

Applicants should send a resume, a research statement, and names of at least three references to **F. V. Coroniti, Chair, Department of Physics and Astronomy, University of California, Los Angeles, CA 90095-1547.** For full consideration, applications should be received by September 15, 1996. *The University of California is an affirmative action/equal opportunity employer.*

PRODUCT MANAGER Nucleic Acid Analysis & Enzyme

STRATAGENE, a leader in the development and manufacture of molecular biology research products in La Jolla, California, has an immediate opening for a Product Manager for our Nucleic Acid Analysis & business unit products. Enzyme Responsibilities include generating, implementing, tracking and reporting tactical sales and marketing programs worldwide for these products. Specific knowledge of and experience with the following product groups are desirable: nucleic acids purification, DNA sequencing, PCR enzymes, mutagenesis, gene expression/ RNA analysis. A BS/BA degree in Molecular Biology or a related field (or equivalent) and at least 3-5 years' experience marketing molecular biology products are required. Other requirements include excellent communication skills, a strong understanding of the molecular biology market and laboratory experience

Interested candidates should send a resume to: STRATAGENE, 11011 N. Torrey Pines Rd., La Jolla, CA 92037, Attn: Professional Staffing 22048-96A. AA/EOE.



$\sqrt{\lambda}$ third wave technologies. Inc.

SENIOR ASSAY **DEVELOPMENT SCIENTIST**

Third Wave Technologies, Inc., a biotechnology company developing nucleic acid diagnostic products, is recruiting assay development scientists. Applicants should have a Ph.D. in molecular biology, medical microbiology, biochemistry, or a related field, as well as at least 3-5 years of experi-ence developing DNA probe assays. Scientists should have 2 or more years of postdoctoral experience related to development of nucleic acid detection assays for pathogenic microorganisms, genetic disorders, or cancer. Candidates should have demonstrated knowledge of all mechanics of nucleic acid hybridization and amplification technologies and demonstrated ability to supervise and successfully lead a group of scientists. Formal project management skills are an asset, but not required. Third Wave Technologies, Inc. offers an attractive benefit and relocation package including stock options. Qualified candidates should send their resume to Human Resources Department, Third Wave Technologies, Inc., 2800 S. Fish Hatchery Road, Madison, WI 53711.

GLOBAL CAREER OPPORTUNITIES

UNIVERSITY OF CAMBRIDGE

Department of Pathology University Lecturer in Immunology

Applications are invited for a University Lectureship in Immunology in the Department of Pathology.

Applications should hold a PhD or equivalent and have an outstanding record in research. He or she should also be enthusiastic about teaching, and should provide evidence of being able to attract research support funding. Any aspect of immunology will be considered if it complements existing work in the Division or if it provides interesting new approaches.

Salary scale £18,294 - £28,215.

Further information and application from: The Secretary, form Appointments Committee for the Faculty of Biology, 19 Trumpington Street, Cambridge CB2 1QA. Tel: (01223) 334998, fax: (01223) 332355. Closing date: 28 October 1996.

The University follows an equal opportunities policy.

UNIVERSITY OF **CAMBRIDGE**

Department of Zoology

Assistant Director of Research

Applications are invited for the post of Assistant Director of Research in the Department of Zoology to take up appointment as soon as possible. We are looking for a person with a potential, or established, research record in integrative or molecular neurobiology.

Salary scale: £18,294 - £26,430

Further information and application form from: The Secretary, Appointments Committee for Faculty of Biology, 19 Trumpington Street, Cambridge CB2 1QA. Tel: (01223) 334998. Fax: (01223) 332355. Informal enquiries should be addressed to Professor Malcolm Burrows, tel: (01223) 336601, email: mb135@cus.cam.ac.uk

Closing date: 6 September 1996.

The University follows an equal opportunities policy.

Scientist

Midwest Research Institute **Immediate Openings**

Midwest Research Institute (MRI), a leading contract research organization, has several scientific positions available in its Life Sciences Department in the areas of:

Pharmaceutical Product Development

- Formulation R&D Analytical & Bioanalytical
 - Chemistry
- Toxicology/ADME

Chemical Product Development

- Chromatography LC & GC (Turbo Chrom) Analytical Chemistry
- Toxicology Support
- Data Management

- Biotechnology

 Microbiology Infectious Disease,
 - Environmental Molecular Biology - PCR, Immunoassay, Diagnostics

Position qualifications range from B.S. to Ph.D. plus relevant experience, including project and group management. Previous experience in conducting research in compliance with GLP and/or GMP is desirable.

MRI offers competitive compensation, a comprehensive benefits package, and unique environment to meet personal challenges and enhance career growth. If interested in being a part of this select group of professionals, please send your resume marked "LSD" to:

Human Resources Department, Midwest Research Institute 425 Volker Boulevard, Kansas City, Missouri 64110 www.mriresearch.org



fax to (816) 753-2304 or e-mail to randerson@mriresearch.org EEO/AA, M/F/D/V A Drug Screening Employer

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Department of Health and Human Services, Public Health Service National Institutes of Health National Institute on Deafness and Other Communication Disorders

SUPERVISORY RESEARCH CHEMIST

(Chief, Laboratory of Neurochemistry)

Opening Date: July 22, 1996 Closing Date: August 26, 1996 (All applications must be post-marked by the closing date)

The National Institute on Deafness and Other Communication Disorders (NIDCD) is recruiting for the position of Chief, Laboratory of Neurochemistry (LN), NIDCD. The Chief, LN, NIDCD, is responsible for developing and directing basic research programs whose major goals are to isolate and characterize macromolecules of importance in neurotransmission, with a particular emphasis on receptors and transmitters of importance in auditory and vestibular sensory systems. In addition, the Chief will oversee intramural research to determine the molecular basis for selective gene expression in auditory and/or vestibular sensory systems. The Chief develops and implements experimental paradigms to achieve these goals, determines the ongoing effectiveness, and develops new or revised research areas, as well as establishing productive collaborative efforts with other programs at NIH or in other scientific institutions or laboratories to accomplish these goals.

This is a Civil Service position at the GS-15 level, with a base salary currently ranging from \$73,486 to \$95,531 per year depending on qualifications, with the possibility of a recruitment bonus. Depending on the qualifications of the applicant, the candidate may be eligible for inclusion in the Senior Biomedical Research Service. Alternatively, applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.

Further information about the position and qualification requirements may be obtained by contacting Ms. Gayle Mundell at (301) 402-0508 (Voice or TDD) or TDD (301) 402-1134. A CurriculumVitae and Bibliography should be submitted to:

Ms. Gayle Mundell, Personnel Management Specialist, NIDCD, National Institute on Deafness and Other Communication Disorders, 31 Center Drive, MSC 2320, Bethesda, MD 20892-2320.

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

NIH is an Equal Opportunity Employer

LABORATORY OF MOLECULAR CARDIOLOGY NHLBI, NIH, BETHESDA, MD

Postdoctoral Positions

The Laboratory of Molecular Cardiology investigates the regulation, expression, and function of contractile proteins and homeodomain proteins. We are particularly interested in the mechanism responsible for regulating these proteins in muscle and neuronal cells. Applicants should have a strong background in molecular and cell biology and biochemistry and less than 4 years of postdoctoral experience.

Robert S. Adelstein, M.D. - Neuronal Cell Myosin

The role of vertebrate nonmuscle myosin II isoforms in brain and heart development is being studied using mouse models and *in vitro* experiments. Of particular interest is the role of neuronal-specific isoforms of myosin II-B and their interactions with candidate proteins.

Sachiyo Kawamoto, M.D., Ph.D. - Gene Regulation

The regulation of nonmuscle myosin II heavy chain gene expression during cell proliferation and muscle and neuronal cell differentiation is being studied at the level of transcription and alternative splicing of pre-mRNA.

Yongsok Kim, Ph.D - Homeobox Genes

Studies include either function and regulation of the NK-homeobox genes or characterization of novel murine homeodomain-interacting protein kinases (*Hip1* and *Hip2*) during cardiac development using both *in vivo* transgenic animal model and *in vitro* embryonic stem cell culture system.

James R. Sellers, Ph.D. - Conventional and Nonconventional Myosins

The structure and function of both conventional and nonconventional myosins are being studied using a variety of techniques including *in vitro* motility and kinetic analyses. Myosins are obtained by either tissue purification or expression of recombinant (wild-type and mutant) proteins using the baculovirus system.

Please send a cover letter, C.V. and bibliography to the appropriate investigator at:

NIH, NHLBI
Building 10, Room 8N202
10 Center Dr MSC 1762
Bethesda, MD 20892-1762
Fax: (301) 402-1542

RA19T@nih.gov
kawamots@nih.gov
yongsok@helix.nih.gov
jsellers@helix.nih.gov

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The Materials Science Center of Cornell University expects to appoint an Associate Director of this interdisciplinary research center. Responsibilities include development and implementation of industrial outreach programs; development and implementation of educational outreach programs including undergraduate research and K-12 programs; overall management of a large shared equipment facility system; and supervision of the center business office involving the financial allocations to the 40+ research groups supported by the center. The position requires an advanced degree in the physical sciences or engineering. A minimum of 7 years of experience managing research in a major industrial or academic materials related research facility or laboratory is preferred. Send resumes and arrange to have three letters of recommendation sent to Professor John Silcox, Director, Materials Science Center, Room 627 Clark Hall, Cornell University, Ithaca, New York 14853. The search will continue until an appointment is made. Cornell University is an equal opportunity/affirmative action employer; applications from qualified women and minority candidates are encouraged. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.



NEXTRAN, an established leader in xenotransplantation research and an affiliate of Baxter Health Care, has the following positions available:

POSTDOCTORAL candidates must have a Ph.D. with experience in the following areas: molecular biology, gene regulation, and transplant immunology.

RESEARCH ASSOCIATE candidates must be B.S./M.S. level scientists with 3-5 years of experience in molecular biology, biochemistry, and/ or immunology. Qualifications are a B.S. in biology and 3+ years of experience. M.S. preferred.

NEXTRAN offers an excellent working environment, as well as competitive compensation and superior benefits. Qualified applicants are invited to submit a resume to:

> Human Resources NEXTRAN 303B College Road East Princeton, NJ 08540 FAX (609) 520-9864

MEDICAL UNIVERSITY OF SOUTH CAROLINA CHAIR

Department of Biochemistry and Molecular Biology

The MEDICAL UNIVERSITY OF SOUTH CAROLINA has initiated a search for a Ralph F. Hirschmann Chair of Biochemistry to lead its Department of Biochemistry and Molecular Biology. The Medical University is actively expanding its research base with facilities currently being renovated and a major new research building to be occupied by fall 1996. There are excellent opportunities to recruit new faculty into a department of 13 full time faculty. Significant resources are available to support new growth and revitalization. The Department currently has well-established research programs focusing on protein structure and function. The academic environment provides outstanding opportunities for research initiatives in interdisciplinary/interdepartmental programs/centers in cardiovascular biology, cancer, cell and molecular endocrinology, molecular medicine, and structural biology. In addition to the facilities within the Department, an expanding campus-wide Institutional Research Resource provides an array of analytical capabilities including image analysis, electron and confocal microscopy, DNA, peptide sequencing and synthesis, NMR, and mass spectrometry.

Candidates for this position should have a Ph.D. and/or M.D. degree, a distinguished record of scholarly activity, a nationally recognized research program that can synergistically interact with research strengths and interests of the University, and a commitment to scientific excellence with leadership skills to administer a comprehensive academic program. Interested individuals should submit a letter of application, curriculum vitae that includes a summary of their research activities, and three references to: Roger R. Markwald, Ph.D., Chairman, Biochemistry Search Committee, 601 CSB Dean's Office, College of Medicine, Medical University of South Carolina, 171 Ashley Avenue, Charleston, South Carolina 29425. Nominations and applications should be submitted by January 1, 1997.

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NIRIM

POST-DOCTORAL RESEARCH FELLOWSHIP

Applications of several excellent post-doctoral researchers are invited for the NIRIM COE (Center of Excellence) Research Fellowship in FY1997. Applicants are requested to join the COE Project in NIRIM, where search for and synthesis of new denser materials are carried out by using ultra high pressure techniques of a diamond anvil cell with laser heating system, a single and a double stage gun-type shock compression apparatus, and a large belt-type apparatus. Applicants must provide a well defined research proposal to be carried out within these scopes. The fellowships will be awarded for a period between August 1997 and March 1998. Salary is about \$4000/m. A round trip flight ticket and a fixed moving allowance will be provided.

Application forms (returnable by 30th Sept. 1996) and further particulars can be obtained from: **COE Secretariat, National Institute for Research in Inorganic Materials, 1-1 Namiki, Tsukuba, Ibaraki 305, Japan**

Tel: +81-298-51-3351 Fax: +81-298-55-2142 e-mail: kobayam@nirim.go.jp

Wanted: Committed, ambitious scientist. Must be a team player with a vision for the future. M.D./Ph.D., Ph.D., M.S. or B.S. degree necessary.

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POSITIONS OPEN

POSTDOCTORAL POSITIONS Epithelial Growth and Differentiation New York University Medical School

Three to four new **POSTDOCTORAL** positions to join two ongoing projects: 1) Role of mesenchyme: epithelial interactions in the growth regulation of hair folicles. Applicants with background in extracellular matrix, serine proteases and their inhibitors, and signal transduction are preferred. See *Cell*, 61:1329, 1990; *J. Cell Sci.*, **108**:3867, 1995. 2) Membrane specialization and molecular regulation of urothelial differentiation. Background in membrane biogenesis, gene regulation, and gene targeting desirable. See *J. Cell Biol.*, **125**:171, 1994; *J. Mol. Biol.*, **248**:887, 1995; *J. Biol. Chem.*, **270**:29752, 1995; *Proc. Natl. Acad. Sci. USA*, **92**:679, 1995. Applicants should send curriculum vitae and three letters of recommendation to: Tung-Tien Sun, Ph.D., Department of **Dermatology, NYU Medical School**, **550 First Avenue, New York, NY 10016. FAX: 212-263-8561; Email: sunt01@mcrcr.med.nyu.edu.** *Equal Opportunity Employer.*

TWO POSTDOCTORAL positions: One to do research on the structure and function of a novel receptor that regulates phagocytic and endothelial cell function. Must have one year of molecular biology experience with emphasis in various expression systems useful. The second position focuses on the role of complement and inflammation in Alzheimer's Disease. Candidates should have a Ph.D. in neuroscience, immunology, or a related field. Experience in biochemistry, protein/peptide chemistry, and/or cell biology is preferred. Both available September 1996. Interested candidates should send a curriculum vitae with the names and addresses of three referees by September 15, 1996 to: Andrea J. Tenner, Ph.D., Department of Molecular Biology and Biochemistry, University of California, Irvine, Irvine, CA 92697-3900.

The University of California, Irvine is an Equal Opportunity Employer committed to excellence through diversity.

> POSTDOCTORAL POSITION Harvard Medical School Brigham and Women's Hospital

Biochemistry of transcription activation by mammalian RNA polymerase II holoenzyme. Requires background in biochemistry, protein purification, and molecular biology techniques. Send curriculum vitae and names of three references to: Dr. Jeffrey Parvin, Department of Pathology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Brigham and Women's Hospital is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study hematopoietic lineage commitment, with a focus on the generation of lymphocytes. Targeted genetic manipulation of ES cells will be used to study the function of genes and cisregulatory elements in mice. A strong background in molecular biology is preferred. Experience with gene targeting in ES cells and knowledge of immunology are desirable. Please send curriculum vitae and names of three references to: Dennis M. Willerford, M.D., Division of Hematology, University of Washington School of Medicine, Puget Sound Blood Center, 921 Terry Avenue, Seattle, WA 98104-1256. Email: dwiller@u. washington.edu. Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION in retinal transplant program to study function and connections of retinal transplants to the eyes of experimental animals. Experience with microdissection and lab animals, histology, tracing techniques, electrophysiology, and/or electron microscopy desirable. Funding for 18 months; extension likely. Contact: Dr. R. Aramant, Department of Ophthalmology and Visual Sciences, University of Louisville, 301 East Muhammad Ali Boulevard, Louisville, KY 40202. Email: rbaram01@ulkyvm.louisville.edu. FAX: 502-852-0128.

POSTDOCTORAL POSITIONS to study T cells as vehicles to microscopic brain tumor. Starting June 1997. Include a brief, specific description on the basis for your interest, relevant experience, and fellowships for which you are eligible. Experience in cellular immunology, cell migration studies, or molecular biology desirable. Reply to: Dr. L. Lampson, CNS Immunology and Tumor Biology Lab, Neurology/LMRC 116, Brigham and Women's Hospital, Boston, MA 02115.

POSITIONS OPEN

GEORGIA INSTITUTE OF TECHNOLOGY Institute for Bioengineering and Bioscience

POSTDOCTORAL POSITIONS are available in tissue engineering and drug delivery. Research areas of interest include biomaterials, tissue engineering of cardiovascular substitutes, encapsulated cell therapies, cartilage, and genetic engineering of cells for tissue engineering applications. However, applicants with expertise in other tissue engineering areas will also be considered. Candidates should have an excellent background in one or more of the above fields, and be willing to work in an interdisciplinary environment and interact with both engineers and life scientists. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: **Professor R. M. Nerem, Director, Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA 30332-0363.** The Georgia Institute of Technology is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE position: Biomechanical response of cartilage to load. Understand mechanisms by which cartilage can sense and respond to its mechanical environment. Subject cartilage, *in vitro*, to mechanical loads that damage the matrix, in order to mimic select initiating events that lead to degeneration. Join laboratory with commitment to dissect the genetics of canine hip dysplasia and to understand the pathogenesis of osteoarthritis that invariably accompanies the dysplasia. Candidate should have a Ph.D. and be well-trained in either cell or molecular biology, or in biomechanics, with willingness to learn techniques necessary to bridge these disciplines. Available immediately. Send curriculum vitae and names of three references to: Dr. Nancy Burton-Wurster, JA Baker Institute for Animal Health, Cornell College of Veterinary Medicine, Ithaca, NY 14853. FAX: 607-256-5608. Comell University is an Equal Opportunity/Affirmative Action Educator and Employer.

POSTDOCTORAL POSITION DEPARTMENT OF ANESTHESIOLOGY

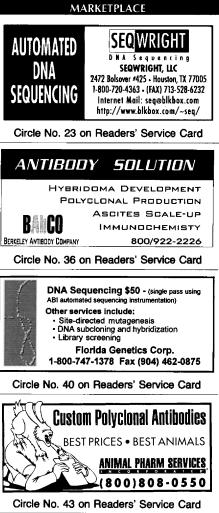
Full-time RESEARCH POSITION available July 1, 1996. Applicants should have Ph.D. with a strong background in molecular biology. The candidate will work with a multidisciplinary team headed by Michael Freeman, Ph.D., and Jayant K. Deshpande, M.D., that includes physicians, chemists, and pharmacologists. The focus of the research efforts will be concerned with the mechanisms of cerebral ischemia and will utilize animal models and basic molecular techniques. Send curriculum vitae, references, and interests to: Michael L. Freeman, Ph.D., Associate Professor, Radiology and Radiological Sciences, Radiation Oncology, B 902, The Vanderbilt Clinic, Vanderbilt University Medical Center, Nashville, TN 37232-2670. FAX: 615-343-0161.

POSTDOCTORAL POSITION, natural products synthesis, available November 1, 1996; applications accepted until position is filled. Applicant must have experience in design and execution of complex, multistep syntheses, and separation and structure determination methods. Natural products isolation and identification experience an asset. Target molecules include bioactive tricyclic sesquiterpenoids and multiply unsaturated hydrocarbons. Send curriculum vitae and names, addresses, and fax/ telephone numbers of three references to: J. G. Millar, **Department of Entomology, University of California**, **Riverside**, CA 92521. The University of California is an Affimative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION at Johns Hopkins University. Position available immediately for recent Ph.D. to work on the structure and function of cytoskeletal proteins involved in actin-membrane association and signal transduction. Project involves biophysical and cell and molecular biological approaches. Send applications to: Dr. Shin Lin, Chairman, Department of Biophysics, Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218.

POSTDOCTORAL POSITION is currently available to study the molecular basis of leukocyte interactions with polarized epithelial cells. Background in molecular biology necessary (site directed mutagenesis preferred, and U.S. *citizenship or green card required*). Interested individuals should send or fax résumé to: Dr. Charles A. Parkos, Department of Pathology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. FAX: 617-732-6796; Email: Cparkos@bustoff. bwh.harvard.edu. COMPUTER MARKET

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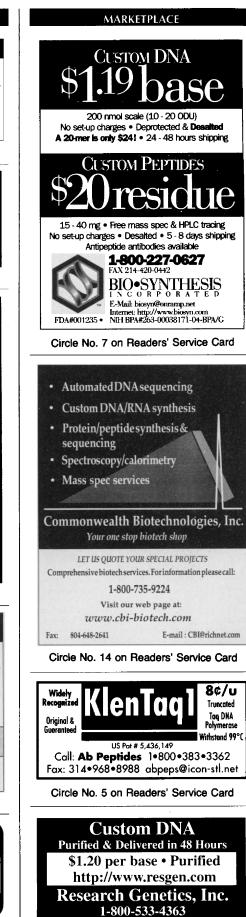


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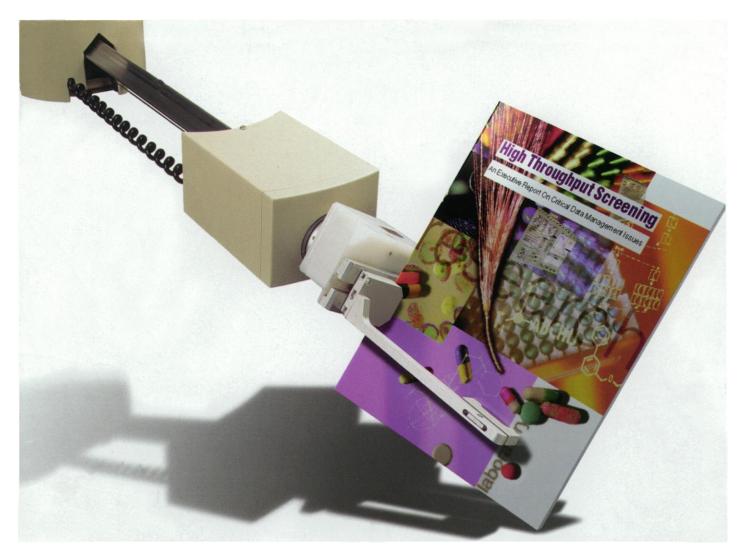




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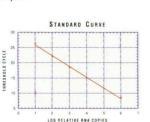
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1.734

1.454

1.175

0.616

0.333

3 5 7

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