Protein Purification System

The Rotofor system for protein purification fractionates complex samples in free solution through the use of preparative isoelectric focusing. The nondenaturing technique is routinely used to segregate specific proteins from the bulk proteins in complex biological samples. Thirty to 60 ml of starting sample containing micrograms to 4 g of protein can be rapidly separated into 20 discrete fractions. The Rotofor is also useful for the initial cleanup of crude samples and in a multistep purification scheme for eliminating specific contaminants that might be difficult to remove by any other means. The Rotofor cell provides up to 500-fold purification for a particular molecule in less than 4 hours. Because



electrofocusing is carried out in free solution, fractions from an initial run can be collected, pooled, and refractionated, resulting in 1000-fold enrichment for a particular molecule. **Bio-Rad Laboratories. Circle 141.**



Purification Kits The Immulan T cell and T cell

subpopulation immune column separation kits provide fast affinity chromatography separation and selection of rat, mouse, human, cat, dog, and monkey T cells derived from peripheral blood, lymph nodes, spleen, thymus, and other tissues. Through the process of selective chemical elimination, highly purified CD4+ and CD8+ T cells can be separated in high yield and purity. Purity of T cells isolated ranges from 90 to 99%, and that of subpopulations ranges from 93 to 98%, with virtually all B cells and macrophages removed. Biotecx Laboratories. Circle 142.

Monoclonal Antibody Purification

QUICKMab is a fast way to purify, desalt, and concentrate monoclonal antibodies from cell culture or ascitic fluid. It can purify any class or subclass of antibody including immunoglobulin G (IgG), IgM, IgA, and IgE to >98% pure in about an hour. QUICKMab purifies antibodies at neutral pH under protein stabilizing conditions and requires no dialysis or concentration steps. If serum supplements are used in the culture medium, the pure antibody will be free of bovine IgG contaminants. Sterogene Bioseparations. Circle 143.

One-Hour DNA Isolation Kits

 λ Quick! provides pure lambda DNA free from cellular DNA in 1 hour. No phenol or chloroform extractions are necessary. Phage is rapidly precipitated from plate or liquid lysates. The phage is lysed with guanidine isothiocyanate and the DNA is bound to a matrix. The contaminants are washed away and the resulting pure lambda DNA is eluted in water. Resulting pure lambda DNA is a ready substrate for all DNA modifying enzymes. The ssPhage DNA Isolation Kit isolates and purifies single-stranded DNA from M13 and other filamentous bacteriophages in 1 hour, without the use of enzymes, phenol, or chloroform. The resulting purified DNA can be used without further manipulation for sequencing, transformations, polymerase reactions, and other procedures. BIO 101. Circle 144.

Concentrator for Dilute Solutions

New Centriplus concentrators offer a fast and reproducible means to concentrate, desalt, or



purify samples of up to 15 ml initial volume by ultrafiltration. Due to its construction materials, low binding membrane, and inverted spin feature, Centriplus provides the highest available solute recoveries from dilute solutions, compared with other devices in this volume range. With starting concentrations above 1 µg/ml, recovery is typically up to 95%. Centriplus is especially suited for solutions at the ng/ml level. Recoveries of up to 50 to 60% can be obtained with solutions as dilute as 250 ng/ml, without the need to pretreat with other proteins or detergents. Amicon. Circle 145.

Plasmid DNA Sequencing

The Sequenase plasmid DNA sequencing kit allows templates to be sequenced in 30 min without lengthy protocols and ethanol precipitation steps. Sodium hydroxide is used first to denature the DNA; this solution is then neutralized in the same reaction

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tube by the addition of equimolar hydrochloric acid. Alternatively, denaturation can be achieved by the addition of a novel glycol reagent to the plasmid template and sequencing primer. With brief heating to 80° to 100°C, this reagent significantly reduces the melting temperature of DNA which, in turn, greatly increases denaturing efficiency of the DNA template. Amersham International. Circle 146.

Microplate Spectrophotometer

The SPECTRAmax 250 microplate spectrophotometer has a xenon flash lamp and grating monochromator that allows direct ultraviolet measurement of DNA, RNA, and protein in the microplate. Purity of DNA can be measured with A_{260}/A_{280} ratios. Spectral scans from 250 to 750 nm can be performed making qualitative analysis of numerous samples easier. Software is available for built-in spreadsheet capabilities. **Molecular Devices. Circle 147.**

Literature

Environmental Liquid Scintillation Counting describes a line of computer-controlled, low level, alpha/ beta scintillation analyzers for measuring low levels of radioactivity in environmental samples. Environmental sample preparation methods are also presented. Packard. Circle 148.

A Powerful New Detector for HPLC describes the Varex MKIII Evaporative Light Scattering Detector for all nonvolatile solutes. Applications include lipids, triglycerides, carbohydrates, and polymers. Alltech Associates. Circle 149.

1994 Polymer/Monomer Catalog features more than 1000 products, including catalysts, initiators, and cross-linking monomers. Polysciences. Circle 150.

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.

- Science

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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR VIROLOGY Morehouse School of Medicine

Scientists with research expertise in an area of contemporary virology with relevance to medicine are invited to apply for a regular faculty position in the Department of Microbiology and Immunology. Candidates for appointment as **ASSISTANT PROFESSOR** must have postdoctoral training and demonstrated ability to direct an independent research program and obtain extramural funding. Candidates for **ASSOCIATE PROFESSOR** must have a record of current research productivity and funding. Morehouse School of Medicine is a young institution, dedicated to the training of underrepresented minorities in medicine and graduate biomedical sciences, and to excellence in biomedical research. State-of-the-art research facilities plus individual start-up support will be available to the successful applicant. This position offers the opportunity for full and rewarding scholarly growth. Underrepresented minorities and women are particularly encouraged to apply. Applicants should submit by mail, Email or FAX curriculum vitae, statement of research background and plans, and names of three references to: **Gordon B. Bailey, Ph.D., Chair, Department of Microbiology and Immunology, Morehouse School of Medicine, Atlanta, GA 30310. Email: bailey@link.msm.edu.; FAX: (404) 756-8697.**

Virginia Commonwealth University's Department of Pharmacology and Toxicology seeks a non-tenurable **ASSOCIATE PROFESSOR**, with a Ph.D. or equivalent, predoctoral training in pharmacological and/or behavioral sciences, and four or more years of postdoctoral experience in drug abuse research. To complement an existing multidisciplinary group, preference will be given to those with ability to conduct collaborative research, a strong publication record, and experience in behavioral research with non-human primates. Send a curriculum vitae and names and addresses of three references, by August 29, 1994, to: Dr. Robert Balster, Box 980613, Richmond, VA 23298. Position description available. *Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.*

IMMUNOLOGIST

The Department of Microbiology, Immunology, and Parasitology at the College of Veterinary Medicine, Cornell University, seeks candidates for a tenure-track position as ASSISTANT PROFESSOR OF IMMU-NOLOGY. The successful applicant will be expected to develop an independent, competitively funded research program in molecular or cellular immunology and to teach graduate and professional students. We are particularly interested in candidates who will complement existing strengths in the Department which include immunoparasitology and mucosal immunology. Applicants must have a Ph.D. and training at the postdoctoral level; those who also have a D.V.M. degree are especially encouraged to apply. Applications, including a curriculum vitae and the names and addresses of three references, should be sent to: Dr. Alexander J. Winter, Chair of the Immunologist Search Committee, Department of Microbiology, Immunology, and Parasitology, College of Veterinary Medicine, 615 Veterinary Research Tower, Cornell University, Ithaca, NY 14853-6401, by October 1, 1994. Telephone inquiries will be welcomed: (607) 253-3273. Cornell University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH POSITION

A research position at the senior **POSTDOCTORAL** or **ASSISTANT PROFESSOR** level is available in an established program examining estrogen action in human breast cancer. Candidates will be involved in projects involving characterization of transcriptional activation mechanisms or growth factor expression and function. Appropriate experience through the postdoctoral level is required. Appointment at the Assistant Professor level will be considered for superior candidates and requires high potential for independent research. Send curriculum vitae and names of three references to: **Richard J. Santen**, **M.D.**, **Department of Internal Medicine**, **Wayne State University, Harper Hospital**, **1 Webber S**, **3990 John R.**, **Detroit, MI 48201**. *Wayne State University is an Affirmative Action/Equal Opportunity Employer*.

POSITIONS OPEN

ENDOWED CHAIR IN ICHTHYOLOGY

The Rosenstiel School of Marine and Atmospheric Science (RSMAS), University of Miami, seeks an ichthyologist to fill the Maytag Chair. The Maytag Chair, established in 1957, is a fully endowed position in the broad field of ichthyology. Candidates must have an established reputation in research and an excellent record of publications so as to meet the standard for appointment at full professorial rank. Candidates from all areas of specialization will be considered. Responsibilities include establishing a strong externally funded research program, directing graduate students, and teaching graduate courses. Southern Florida is a center of recreational fishing and it is desirable that the interaction of the Chair with this community will continue.

Applicants should forward curriculum vitae, a statement of research and teaching interests, and the names of references to: M. E. Clarke, Maytag Search Committee Chair, Division of Marine Biology and Fisheries, RSMAS, University of Miami, 4600 Rickenbacker Causeway, Miami, FL 33149-1098, by 1 November 1994.

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

DEPARTMENT HEAD AND PROFESSOR

OF ORAL BIOLOGY

The Harvard School of Dental Medicine, in conjunction with the Forsyth Dental Center, is seeking a professor to serve as head of the Harvard School of Dental Medicine's Department of Oral Biology. This individual will also be appointed as a tenured member of the Senior Staff of the Forsyth Dental Center.

The individual to be appointed should be a scientific leader with an excellent research record. Scientific interests should be broadly based, including such areas as infectious aspects of oral disease or biomineralization. Responsibilities of the position include the administration and leadership of the Department of Oral Biology. Applicants should have demonstrated expertise in teaching, research, and administrative capabilities.

Qualified individuals should send curriculum vitae, bibliography, and statement of research interests by September 15, 1994, to: Barnard M. Fields, M.D., Chairperson of the Committee to Search for a Professor and Department Head of Oral Biology, c/o Harvard School of Dental Medicine, 188 Longwood Avenue, Boston, MA 02115. The Harvard School of Dental Medicine and the Forsyth Dental Center are Affirmative Action/Equal Opportunity Employers. Women and minority candidates are invited to apply.

CLINICAL CHEMISTRY FACULTY

A full-time, tenure-track position is available immediately for DISCIPLINE DIRECTOR OF CLINICAL CHEMISTRY in the Department of Medical and Research Technology, School of Medicine, University of Maryland at Baltimore (UMAB). Ph.D. required; board certification in medical technology or clinical chemistry required. The successful candidate is expected to develop an independent research program. Research with a focus in protein biochemistry and experience in analysis of biotechnology products is preferred. Responsibilities include teaching at the undergraduate and graduate levels, research, and faculty practice in the Clinical Chemistry discipline. Review of completed applications will begin August 1, 1994, and will continue until the position is filled. Curriculum vitae, statement of research interests, statement of teaching philosophy, and at least three letters of reference should be forwarded to: Dr. Linda C. Gregory, Chair, Search Committee, Department of Medical and Research Technology, Allied Health Building, Room 440A, 100 Penn Street, Baltimore, MD 21201. Telephone: (410) 706-7663. UMAB is an Affirmative Action/ADA/Equal Opportunity Employer.

Technology policy, manufacturing, and green design are areas of teaching and research interest for which we currently seek faculty at any level in Carnegie Mellon's Department of Engineering and Public Policy. A 50:50 joint appointment with the Department of Mechanical Engineering is also available. Require excellent engineering skills and demonstrated research track record. Prefer economic and social science literacy. Résumé and best papers to: Granger Morgan, EPP, Carnegie Mellon, Pittsburgh, PA 15213.

DIRECTOR OF RESEARCH COMPUTING The Fox Chase Cancer Center is seeking SERVICES-Director for its Research Computing Services. This group provides computational support to 75 active research programs in biomedical and basic science including behavioral and biostatistical research as well as the library. The Director has a leading role in the development of the institutional computing infrastructure. The Fox Chase Cancer Center has state-of-the-art network and diverse research computing resources including workstations, microcomputers, scientific instru-ments and Internet connections. The successful candidate should have 1) experience in science or scientific computing, 2) a strong technical background in computing, computer networks, and evolving computing methods, and 3) experience in managing computing projects, preferably in an academic research environment. Excellent benefits and competitive salary offered. Interested candidates please send resume to: Dr. G. D. Markham, RCS Director Search Committee, c/o Human Resource Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. We are an Equal Opportunity Employer.

DIRECTOR MOLECULAR GENETICS DIAGNOSTIC LABORATORY

Childrens Hospital Los Angeles has an immediate opening for a Ph.D. Research Associate (non-faculty) to direct a Medical Genetics/Pathology laboratory. Director will supervise and interpret tests in a currently operational laboratory with well-trained technicians performing tests for muscular dystrophy, fragile X, myotonic dystro-phy, MCAD, mtDNA, etc., and will develop additional diagnostic tests. ABMG eligible or certified preferred but not required. For further information contact: Lawrence Sweetman, Ph.D., Biochemical Genetics Lab # 11, Childrens Hospital Los Angeles, 4650 Sunset Boule-vard, Los Angeles, CA 90027. Telephone: (213) 669-2271; FAX: (213) 660-7072.

CHEMIST—TECHNICAL SERVICES MANAGER

KIND AND KNOX GELATINE, INC. (K & K) is seeking a qualified individual to fill the position of **TECHNICAL SERVICES MANAGER** for Pharmaceutical and Edible Products in the Research and Devel-opment Department of their Sioux City, Iowa, manufacturing facility. The ideal candidate will possess a Ph.D. in Chemistry, a B.S./M.S. in Science or Engineering, plus five to ten years of relevant industrial experience. Expe-rience in product applications of gelatine is strongly preferred.

Candidates must have the capability to communicate effectively with staff and customers to provide technical support and analyze and solve problems related to K & K products. Other responsibilities include new product design, development of new analytical testing methods, and monitoring regulatory issues affecting products. We offer a competitive compensation package and an out-standing opportunity to grow in an exciting technical/ business environment. For confidential consideration, please send a résumé with salary requirements to:

Kind & Knox Gelatine, Inc. Attn: Human Resource Manager P.O. Box 927 Sioux City, IA 51102 K&K is an Equal Opportunity Employer. Male/Female.

FACULTY/RESEARCH POSITION **RADIATION BIOLOGY**

Mayo Foundation for Medical Education and Research invites applications for a full-time career scientist position at the level of ASSISTANT, ASSOCIATE or position at the level of ASSISTANT, ASSOCIATE or PROFESSOR with joint appointments in the Division of Radiation Oncology and the Department of Biochem-istry and Molecular Biology. Candidates should have an outstanding, independent research program in molecular and biochemical aspects of radiation biology/oncology. An attractive package of salary, benefits, and research support will be provided. Please send curriculum vitae and a strement of research interests and goale to. Paul I and a statement of research interests and goals to: Paul J. Leibson, M.D., Ph.D., 301 Guggenheim Building, Mayo Clinic, Rochester, MN 55905. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

POSITIONS OPEN

ANATOMY FACULTY POSITION CASE WESTERN RESERVE UNIVERSITY SCHOOL OF MEDICINE

Primary responsibility will be developing computerassisted teaching resources for Gross Anatomy, Histology, and other medical school courses. The successful candidate will be able to establish a research program in a field compatible with the current departmental interests, espe-cially in *in vitro* and *in vivo* optical imaging methods. Appointment will be at the **ASSISTANT PROFESSOR** level, non-tenure-track, starting immediately. Send creden-tials to: Dr. Joseph C. LaManna, Department of Anatomy, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4930. An Equal Oppor-tunity/Affirmative Action Employer.

FACULTY POSITIONS IN CHEMISTRY

The Chemistry Department at the University of California, Berkeley, solicits applications for positions as AS-SISTANT PROFESSOR OF CHEMISTRY, begin-ning in the fall of 1995. Creative and energetic candidates in organic and analytical/materials/inorganic chemistry in organic and analytica/materials/inorganic chemistry who show exceptional promise for research and teaching are specifically sought, though truly outstanding persons in any area of chemistry will be considered. Individuals selected for these positions will be expected to establish an outstanding research program. An appointment with ten-ure is possible as ASSOCIATE PROFESSOR or FULL PROFESSOR for a persona with suttending antifer **PROFESSOR** for persons with outstanding qualifica-tions and sufficient experience in analytical/materials/inorganic chemistry. Candidates should send curriculum vitae and a proposed research program, and should arrange to have three letters of recommendation sent to: Chairman, Faculty Recruiting Committee, Department of Charman, istry, University of California, Berkeley, CA 94720. The deadline for receipt of applications is December 1, 1994. The University of California is an Equal Opportunity/ Affirmative Action Employer.

RESEARCH INSTRUCTOR IN CELL BIOLOGY

Non-tenure-earning FACULTY POSITION. The applicant should have four to six years of experience with manipulation of recombinant adenovirus, as well as experience with other viral systems and/or utilization of experience with other viral systems and/or utilization of recombinant virus for gene transfer. The applicant must have a Ph.D. or equivalent, and a minimum of two years of postdoctoral experience. A strong background in biochemical virology is preferred. The position is intend-ed for development of an independent, externally funded research program for treatment of cystic fibrosis pulmo-nert discouncies in the treatment of cystic fibrosis pulmonary disease using viral vectors.

nary disease using viral vectors. Please send curriculum vitae and three letters of refer-ence to: Eric Sorscher, M.D., Director, Gregory Flem-ing James Cystic Fibrosis Center, University of Ala-bama at Birmingham, UAB Station, Birmingham, AL 35294-0005, before September 15, 1994. UAB is an Equal Opportunity/Affirmative Action

Employer.

FACULTY POSITION IN PHYSIOLOGY AND BIOPHYSICS

Applications are invited for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level in the Department of Physiology and Biophysics, University of Miami School of Medicine. The Department has strength in cellular and molecular approaches to the study of physiology and neuroscience, and we seek an investigator with a Ph.D. and/or M.D. degree whose interests and skills will complement this strength. The candidate will be expected to conduct an active, independent, funded research program, and to execute with excellence a limited teaching load in graduate and med-ical school neuroscience and physiology courses. Out-standing candidates in all relevant fields are invited to apply, especially those with molecular biological exper-tise. Send letter of application, curriculum vitae, statements of research interests and teaching experience, and three publications, preferably by September 1, 1994, and arrange to have three letters of recommendation sent to: Dr. Karl L. Magleby, Chairman, Department of Phys-iology and Biophysics (R-430), University of Miami School of Medicine, P.O. Box 016430, Miami, FL **33101-6430**. Previous applicants will remain under con-sideration and may update their curricula vitae if there have been substantial changes. *The University of Miami is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS

The Molecular and Cell Biology Program of the University of Texas at Dallas invites applications for two tenure-track positions at any rank beginning no later than 1 September 1995. The Program focuses on basic rea select group of undergraduate students. Appli-cants should have at least two years of postdoctoral experience and show evidence of a vigorous and inde-pendent research program capable of obtaining external support. Candidates with interests in any area of molec-ular on evidence will be received with the work. ular or cell biology will be considered, although prefer-ence for one position will be given to an individual who uses electron microscopy techniques. The preferred grad-uate teaching responsibilities are participation in courses in biochemistry or biophysical chemistry. We are seeking to broaden the range of topics offered in our undergradto broaden the range of topics offered in our undergrad-uate program. Examples of undergraduate teaching con-tributions could include participation in courses such as introductory biology, biochemistry, molecular and cell biology, cellular and molecular neurobiology, immunol-ogy, or virology. Send curriculum vitae, a short description of research plans, teaching interests, and the names and phone numbers of three references to: Academic Search 2014, The University of Texas at Dallas, P.O. Box 830688, Richardson, Texas 75083-0688. Review of applications will begin immediately and continue until the positions are filled. Indication of sex and ethnicity for affirmative action statistical purposes is requested as part of the application, but not required. The University of Texas at Dallas is an Affirmative Action/Equal Opportunity Employer.

NEW TENURE-TRACK FACULTY POSI-TIONS AVAILABLE in the Department of Biochem-istry during 1995–1996. Minimum qualifications in-clude a Ph.D. or M.D. degree, three to four years of accomplishments and the ability to attract extramural funding. Preference will be given to applicants who can interact with existing faculty at the University of Tennes-see, Memphis, especially in molecular biology, protein chemistry and enzymology or signal transduction. Appli-cants should send curriculum vitae and three letters of reference to: Dr. John N. Fain, Department of Biochemistry, University of Tennessee, Memphis, TN 38163. The University of Tennessee is an Equal Opportu-nity/Affirmative Action/Title IX/Section 504/ADA Employer. Women and minorities are encouraged to apply.

THE MIAMI PROJECT SEEKS THREE NEW FACULTY IN MOLECULAR BIOLOGY NEUROANATOMY, MOTOR PHYSIOLOGY

The Miami Project to Cure Paralysis, a multidis-ciplinary research effort at the University of Miami School of Medicine to develop strategies to improve function after spinal cord injury, invites applications for tenure-track ASSISTANT or ASSOCIATE PROFES-SOR positions in (1) Molecular Biology or Biochemistry, with research interests that encompass the role of neurotrophic factors in CNS development, plasticity or regeneration, (2) Neuroanatomy, with expertise in neuronal responses to injury, neuronal-tracing methods in vertebrates, and (3) Motor Physiology, emphasizing spinal and supraspinal control of vertebrate locomotor function, and/or neuronal mechanisms of injury-induced motor dysfunction. Primary appointments will be in appropriate clinical or basic science departments. Sucssful candidates will establish a successful independent research program. Excellent collaborative opportunities exist. Send curriculum vitae, statement of research interexist and three references by August 31, 1994, to: Dr. Richard P. Bunge, Scientific Director, The Miami Project to Cure Paralysis, 1600 NW 10th Avenue (R-48), Miami, FL 33136. The University of Miami is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study mechanisms of renal and vascular dysfuncately to study mechanisms of renal and vascular dystunc-tion in diabetes. Experience in molecular biology or cell biology is required. Position is on an NIH training grant and requires citizenship or permanent residency. Send curriculum vitae to: Dr. Ayad A. Jaffa, Department of Medicine/Endocrinology Division, Medical Universi-ty of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

POST-DOCTORATES

e can help you make breakthroughs. If you are innovative and versatile with accomplished communication skills and a proven record of scientific excellence, we can give you everything you need to capitalise on those qualities.

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RECEPTOR BIOLOGY

RESEARCH BIOLOGIST REF: A2 An expert in cell culture technology, you'll be qualified to at least BSc level with 4+ years' experience in gene expression, tissue culture and cell line creation.

SENIOR RESEARCH BIOLOGIST REF: A3 To create a research programme for a team of 4-6 people, you'll need to be an expert in G-protein linked receptor signal transduction with 3-4 years' post-doc experience.

ENZYMOLOGY

SENIOR RESEARCH BIOLOGIST REF: A4 An experienced post-doc, you'll have an impressive background in enzymological/ protein biochemistry.

GENE EXPRESSION

RESEARCH LEADER REF: A5 An expert in mammalian transcription factors and intracellular receptors, you'll also have extensive molecular biology expertise. Management experience would be an advantage.

VASCULAR

RESEARCH LEADER REF: A6 You must have significant post-doc experience in both the cell and molecular biology of the endothelium. SENIOR RESEARCH BIOLOGIST REF: A7 This support role calls for a talented post-doc molecular biologist preferably with cell biology experience.

COGNITION AND SENSORY BIOLOGY

SENIOR RESEARCH BIOLOGIST REF: A8

Ideally with 1-2 years' postdoc experience, you'll facilitate studies of the molecular basis for cognition. RESEARCH BIOLOGIST REF: A9

A post-doc molecular biologist, you'll have experience in any of the following: in situ, auto radiography, immunocytochemistry/ neurophysiology, neuroanatomy/ clinical genetics.

CARDIOPROTECTION

SENIOR RESEARCH BIOLOGIST REF: A10 Some 2-4 years' post-doc experience will have given you the molecular expertise to unravel the mechanism of observed protection. You should also ideally have expertise in signal transduction pathways and molecular mechanism.

SENIOR RESEARCH BIOLOGIST REF: A11

To identify the key gene products in the protected heart, you'll need 2-4 years' postdoc experience using state-of-the-art molecular biology skills.

You can expect rewards which will fully reflect your abilities including a generous relocation package, where appropriate. Plus, more importantly, a far greater chance of achieving the results you've been striving for.

initially based at Ware/Greenford, you'll relocate to our new Stevenage site early in 1995. As a major healthcare company, we are committed to a no smoking environment. Please write, enclosing your CV and quoting the appropriate reference number, to Kate Lawrey, Senior Human Resources Adviser, Glaxo HEALTH NOVATION HEALTH

POSTDOCTORAL POSITION CELLULAR IMMUNOLOGY/BIOPHYSICS

Position available for fluorescence and phosphorescence studies of lateral and rotational motions and spacial distributions of truncated and substituted MHC Class II molecules in transfected B cell membranes. Interested biophysicists or cellular immunologists should submit a resume and three letters of reference by August 19, 1994, to: Dr. George Barisas, Department of Chemistry, Colorado State University, Ft. Collins, CO 80523. Colorado State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS in bacterial pathogenesis. Two positions available to study the molecular pathogenesis of *Chlamydia trachomatis* for NIH-funded projects. Molecular genetic focus to investigate hostmicrobial interactions including attachment and invasion of mammalian cells and role of host immune response in immunity and disease. Recent Ph.D. or M.D. graduates with productive research background in microbiology, cell biology and/or immunology are encouraged to apply. Send curriculum vitae and names of references to: Dr. Richard S. Stephens, Box 0412, University of California–San Francisco, San Francisco, CA 94143.

POSTDOCTORAL POSITION

Position available in the laboratory of **Dr. John Krupinski** at the Weis Center for Research in Danville, Pennsylvania. The successful applicant will have a Ph.D. in biochemistry, cell biology, or pharmacology with experience in molecular biology. The project will involve the expression and characterization of novel forms of adenylyl cyclase (see *J. Biol. Chem.*, **267**: 24858–24862 and *J. Biol Chem.*, **269**: 12190–12195). Emphasis will be placed on determining those structural features of the adenylyl cyclases responsible for mediating unique physiological effects. The Weis Center is a well-equipped, modern research facility in a semi-rural environment. Competitive salary and fringe benefits are available. Please send curriculum vitae with the names and telephone numbers of three references to: Geisinger Human Resources (JK), 100 North Academy Avenue, Danville, PA 17822-1529. Equal Opportunity Employer. Male/Emale/Disabled/Veteran.

POSTDOCTORAL RESEARCH ASSOCIATE Two-year position is available to study the expression of a proposed oncogene suppressor in breast cancer cells and tissues at the Uniformed Services University of the Health Sciences in Bethesda, Maryland in the laboratory of **Dr. Sara Contente**. Candidates experienced with *in situ* hybridization and PCR protocols are desirable. Please send cover letter, curriculum vitae and the names of three references to the employer: **Human Resources Department**, **Position #940000178**, **Henry M. Jackson Foundation For the Advancement of Military Medicine**, **1401 Rockville Pike**, **Suite 600**, **Rockville**, **MD 20852**. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL MOLECULAR BIOLOGIST to work in collaboration with electrophysiologists on membrane receptors for taste. Must have experience with cloning strategies and screening libraries. Apply with names of three references by August 15, 1994, to: Dr. N. Chaudhari or Dr. S. Roper, Department of Physiology, Colorado State University, Fort Collins, CO 80523. FAX: (303) 491-7569. CSU is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. A postdoctoral research position is available immediately to investigate mechanisms underlying trophic regulation of neuronal differentiation. Experimental approaches include cell culture of primary neurons and neuronal cell lines, and molecular, neurochemical, and neuroanatomical techniques to examine trophic factor expression, signal transduction, regulation of neuronal cytoskeletal elements and phenotypic differentiation. A Ph.D. and/or M.D. and a neurobiology background is required; expertise in molecular and cellular biology is desirable. Applicants should send a letter stating research interests, curriculum vitae and names of three references to: Dr. Bruce H. Wainer, Professor and Chair, Department of Pathology, Albert Einstein College of Medicine of Yeshiva University, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. An Equal Opportunity Employer.

POSITIONS OPEN

A POSTDOCTORAL POSITION is available in structure-based inhibitor design. High-resolution X-ray structures are available for ricin A chain and for chitinase enzymes from barley and *Streptomyces*; these serve as the basis for identifying inhibitor compounds. The candidate should have experience in macromolecular crystallography, modeling and computing. Computer-aided search programs are used to identify inhibitor candidates which must be tested kinetically and examined crystallographically. The research group is a blend of crystallographers, biochemists and molecular biologists bringing a multidisciplinary approach to design problems. The University of Texas is in Austin; it is a major research institution in a very livable city. Send curriculum vitae and the names, addresses and telephone numbers of references to: Dr. Jon Robertus, Department of Chemistry and Biochemistry, University of Texas, Austin, TX 78712. Telephone: (512) 471-3175; FAX: (512) 471-8696; Internet: robertus @utbc01.cm.utexas.edu.

POSTDOCTORAL POSITION available immediately to study the molecular mechanisms of signal transduction in bacterial chemotaxis. Will use genetic, biochemical, and biophysical techniques to investigate the impact of phosphorylation on protein structure/function, and the mechanism of protein phosphorylation and dephosphorylation reactions. Send letter describing interests and experience, curriculum vitae, and the names and telephone numbers of three references to: Dr. Bob Bourret, CB Number 7290, Department of Microbiology & Immunology, University of North Carolina, Chapel Hill, NC 27599-7290. FAX: (919) 962-8103. UNC Chapel Hill is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION TRANSCRIPTION COMPLEX STRUCTURE/FUNCTION

Position available immediately to study *E. coli* or human transcription complexes using genetic or biochemical approaches. Well-suited for recent or established Ph.D. interested in the fundamental mechanism of transcription and its regulation. Possible projects include structural analysis of purified transcription complexes, genetic dissection of RNA polymerase, and mechanism of HIV Tat enhancement of RNA chain elongation. Send curriculum vitae and names of three references to: Robert Landick, Department of Biology-1137, Washington University, One Brookings Drive, St. Louis, MO 63130. Equal Opportunity Employer.

• POSTDOCTORAL AND RESEARCH ASSOCI-ATE POSITIONS in Microbiology and Immunology available immediately. Projects related to molecular biology and characterization of retroviral regulatory fragments. Emphasis will be on their interactions with the host immune system. Experience in molecular biology and cell culturing techniques required. Send curriculum vitae and reference list to: Dr. Terry McNearney, Division of Rheumatology, 405 Clinical Sciences Building, University of Texas Medical Branch, Galveston, TX 77555-0759.

POSTDOCTORAL POSITION, available immediately, to investigate molecular mechanisms for the processing and repair of DNA double-strand breaks induced by bleomycin and other antitumor drugs, and the role of repair in the production of deletion mutations and gene rearrangements by these agents in mammalian cells. Send curriculum vitae by September 1 to: Dr. Lawrence F. Povirk, Department of Pharmacology and Toxicology, Medical 'College of Virginia, P.O. Box 980230, Richmond, VA 23298-0230.

STANFORD UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITION

A postdoctoral position is available to work on mechanisms involved in the transcriptional control of estrogen receptors. Studies are aimed at understanding abnormal transcription of estrogen receptor in breast carcinoma. Particular emphasis is placed on understanding the role of abnormal transcriptional processes in oncogenesis of breast cancer. Applicants should hold an M.D. or Ph.D. degree. Send curriculum vitae and name, address and telephone number of three references to: Ronald J. Weigel, M.D., Ph.D., MSOB X330, Stanford University School of Medicine, Stanford, California 94305-5408. Stanford University is an Equal Opportunity Employer.

THE UNIVERSITY OF CHICAGO

A POSTDOCTORAL POSITION is available in the Department of Radiation and Cellular Oncology at the University of Chicago. The project is investigating novel methods of introducing constructs containing radiation-inducible promoters linked to cytotoxins into tumor cells in order to enhance the therapeutic effects of radiation. Lipofection and viruses (adeno and herpes) will be employed using *in vitro* and *in vivo* models with human clinical use being the ultimate goal. A Ph.D. or equivalent degree with a strong background in virology and/or molecular biology is required. Send curriculum vitae, a brief summary of research interests and experience, and names, addresses, and telephone numbers of three references to: Dr. Ralph Weichselbaum, Department of Radiation and Cellular Oncology, 5841 South Maryland Avenue, MC0085, Chicago, IL 60637. The University of Chicago is an Affirmative Action/ Equal Opportunity Employer.

TWO POSTDOCTORAL POSITIONS beginning September 1, 1994. Research in a Laboratory studying bacterial multidrug resistance pumps, stress response to uncoupling, and the isolation/mechanism of action of natural antimicrobial peptides. Research is being sponsored by grants from both Government and Corporate sources. One position requires experience in recombinant DNA techniques. The second requires experience in protein chemistry. Send curriculum vitae and three letters of reference to: Kim Lewis, Ph.D., Department of Maryland School of Medicine, 100 Penn Street, Room 440, Baltimore, MD 21201-1082. UMAB is an Affirmative Action/ADA/Equal Opportunity Employer.

POSTDOCTORAL POSITION Cardiac Physiology

A postdoctoral position is available immediately (November 1, 1994) for research in electrophysiology and excitation-contraction coupling of cardiac muscle. The research will involve the use of patch clamp techniques (whole cell and single channel) and fluorescent ion-indicators, including confocal microscopy, and flash photolysis of caged compounds in single voltage-clamped cardiac cells. Applicants should have a Ph.D. or M.D. and experience in electrophysiology.

Interested individuals should send curriculum vitae and names of three references to: Dr. W. Gil Wier or Dr. C. William Balke, Department of Physiology, University of Maryland at Baltimore, 655 West Redwood Street, Room 590, Howard Hall, Baltimore, MD 21201.

POSTDOCTORAL POSITION, M.D. OR PH.D. Harvard Medical School, Hematology-Oncology Division

A candidate is sought to explore the molecular mechanisms through which blood coagulation proteins bind to cell membranes and the physiological consequences of binding events. A working knowledge of biochemistry, physical biochemistry, or cell biology is required. Opportunity for development of independent laboratory program. Send curriculum vitae and three letters of recommendation to: Gary Gilbert, M.D., West Roxbury VA Medical Center, 1400 VWF Parkway, West Roxbury, MA 02132.

POSTDOCTORAL or **RESEARCH ASSOCI-ATE POSITION** available immediately to study the role of neuronal growth factors in Alzheimer's disease and neuronal plasticity. Ph.D. and experience with at least one of the following are required: neuronal tissue culture, ELISA, stereotaxic surgery, human neuroanatomy, immunohistochemistry or protein purification. Send curriculum vitae and description of research interests to: Dr. Keith A. Crutcher, Department of Neurosurgery, University of Cincinnati Medical Center, Cincinnati, OH 45267-0515.

POSTDOCTORAL POSITION available immediately in the Department of Pathology, University of Maryland School of Medicine, to conduct independent research evaluating the *in vitro* metabolism, transport, and toxicity of chemicals in kidney proximal tubules. Candidate should have Ph.D. or M.D. degree in cell biology, pharmacology, physiology or related field. Send curriculum vitae to: Dr. Charles E. Ruegg, 5202 Westland Boulevard, Baltimore, MD 21227. You are invited to attend...

"Forest Health and Fire Danger in Inland Western Forests"

September 8-9, 1994 • Spokane, Washington

... A conference to examine forest conditions in the Inland West and to explore the implications of those conditions for future forest health – especially the risks of catastrophic wildfires. Options for improving forest health, enhancing environmental quality, affecting local economic conditions, and reducing wildfire risk will be discussed. The public is invited.

Panel Topics Include:

Historical development of western forests Current forest health conditions Wildfire risks Community impacts Public policy perspectives Solutions to forest health problems

Panelists Include:

Federal and state officials U.S. Forest Service administrators Forest products industry representatives Fire protection officials University professors Natural resources managers

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BIOCHEMISTRY AND MOLECULAR BIOLOGY OF CYTOCHROME P450 University of California, Irvine

Two **POSTDOCTORAL POSITIONS** and an **ACADEMIC ASSISTANT RESEARCHER POSI-TION** are available in the UCI Department of Pathology for studies on cytochrome P450 system of lungs, liver and CNS supported by NIH grants.

and CNS supported by NIH grants. This ongoing research program seeks to characterize the molecular and genetic basis of P450 inducibility, free radical generation from p450 and their contribution to the development of bronchopulmonary dysplasia of the young. Another project involves elucidation of neuronal changes secondary to neonatal hyperoxic insults and induced changes of steroid metabolism in adults.

Send curriculum vitae, research experience and interests, and names of three references to: Yutaka Kikkawa, M.D., Professor & Chair, Department of Pathology, College of Medicine, University of California, Irvine, CA 92717. The University of California, Irvine is rooted in education and enriched by diversity.

POSTDOCTORAL POSITION in plant molecular biology. Characterize the role of a chimeric root specific protein in salt tolerance. Ph.D. with molecular biology experience required; expertise in transgenic methodology desirable. Send resume and three reference letters by September 1, 1994, to: Dr. Ilga Winicov, Biochemistry (330) University of Nevada, Reno, NV 89557-0014. Equal Opportunity Employer/Affirmative Action.

POSTDOCTORAL POSITION—Cell Cycle Research on Melanoma. To study the mechanisms by which phorbol esters inhibit the growth of human melanoma cell lines. Will examine regulation of the melanoma cell cycle at the transcription and protein levels. Experience in molecular biology and signal transduction pathways is desirable. Please send curriculum vitae and names of three references to: Employment Specialist, Winthrop University Hospital, 259 First Street, Mineola, NY 11501. Equal Opportunity Employer/Male/Female/Disabled/Veteran.

POSTDOCTORAL POSITION

Position available in the laboratory of **Dr. John Krupinski** at the Weis Center for Research in Danville, Pennsylvania. The successful applicant will have a Ph.D. in biochemistry, cell biology, or pharmacology with experience in molecular biology. The project will involve the expression and characterization of novel forms of adenylyl cyclase (see *J. Biol. Chem.*, **267**: 24858–24862 and *J. Biol. Chem.*, **269**: 12190–12195). Emphasis will be placed on determining those structural features of the adenylyl cyclases responsible for mediating unique physiological effects. The Weis Center is a well-equipped, modern research facility in a semi-rural environment. Competitive salary and fringe benefits are available. Please send curriculum vitae with the names and telephone numbers of three references to: Geisinger Human Resources (JK), 100 North Academy Avenue, Danville, PA 17822-1529. Equal Opportunity Employer. Minority, women, disabled and veteran candidates are encouraged to apply.

POSTDOCTORAL POSITIONS in Growth Factor Signal Transduction are available to identify receptor coupling proteins and second messengers involved in TGF β signaling in normal and transformed cells. Ph.D. and training in cell and molecular biology required. Send curriculum vitae and names of three references to: Dr. Kathleen M. Mulder, Department of Pharmacology, Penn State University College of Medicine, 500 University Drive, Hershey, PA 17033. FAX: (717) 531-5013. We are an Equal Opportunity/Affirmative Action Employer and encourage minority and female applicants to apply.

POSTDOCTORAL POSITION available immediately to study changes in membranes and in the metabolism of phospholipids and their precursors during aging and cataract formation in the ocular lens. Appropriate background in biochemistry or related area required. Send curriculum vitae and names of three references to: H. M. Jernigan, Ph.D., Professor, Departments of Biochemistry and Ophthalmology, University of Tennessee is an Equal Opportunity/Affirmative Action/Titles VII and IX/Section 504/ADA Employer.

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS are available to work on projects involving drug monitoring, removal and delivery. One position requires training in molecular biology or microbiology, with experience in recombinant DNA technology preferred. The second requires training in biochemistry or biochemical engineering, with experience in protein/enzyme chemistry and immunology preferred. Knowledge in blood coagulation or thrombolysis are desirable. Send résumé and names of three references to: Dr. Victor C. Yang, College of Pharmacy, The University of Michigan, Ann Arbor, Michigan 48109-1065. The University of Michigan is an Affirmative Action/Equal Opportunity Employer.

Harvard Medical School Joslin Diabetes Center POSTDOCTORAL POSITIONS

Two positions available immediately to study the immunological defects underlying the development of type I diabetes in a laboratory where state-of-theart transgenic mouse and gene targeting techniques are used. Current projects focus on the mechanisms of antigen-specific tolerance induction and the nature of immune recognition (*Science*, **259**: 1165, 1993) in NOD mice. Candidates should have a strong background in molecular biology and immunology. Please send curriculum vitae, a summary of research interests, and the names and addresses of three references to: Dr. Myra A. Lipes, Resarch Division, Joslin Diabetes Center, One Joslin Place, Boston, MA 02215.

NEUROBIOLOGY POSTDOCTORAL POSI-TION to study collateral sprouting by peptidergic neurons. Experience with electron microscopy and immunocytochemistry or *in situ* hybridization required. Salary range is \$20,000 to \$23,000 per annum for a two-year initial appointment. For complete position description and application instructions, contact: Dr. Charles Paden, Biology Department, Montana State University, Bozeman, MT 59717. FAX: (406) 994-4398. Screening begins August 31, 1994. ADA/Affirmative Action/ Equal Opportunity Employer/Veterans Preference.

POSTDOCTORAL POSITION available in an interactive laboratory to study the biology of apolipoproteins. Multiple approaches are used to study these important components of plasma lipoproteins, including protein biochemistry, immunochemistry and molecular biology, with emphasis on the role of apolipoproteins in atherogenesis and ovarian cell biology. Send curriculum vitae and names of three references to: Linda K. Curtiss, Ph.D., Department of Immunology, The Scripps Research Institute, La Jolla, CA 92126. The Scripps Research Institute is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION IN MOLECU-LAR GENETICS OF HYPERTENSION available for the identification of genes controlling blood pressure in genetically hypertensive rats. Techniques include library construction and screening, cloning, RFLP analysis, PCR, DNA sequencing, linkage analysis, positional cloning and construction of congenic strains. Applicants must have a Ph.D. Experience in molecular biology and/or genetics is desirable. Send curriculum vitae to: Dr. John Rapp, Chairman, Department of Physiology and Molecular Medicine, Medical College of Ohio, P.O. Box 10008, Toledo, OH 43699. An Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST/RESEARCH ASSISTANT PROFESSOR

The Division of Metabolism, Endocrinology, and Nutrition, Department of Medicine, University of Washington seeks a **RESEARCH ASSISTANT PROFESSOR** with experience in gene expression and regulation in cellular systems and animal models of lipid transport. The position requires a Ph.D. and at least two years of postdoctoral experience. Applicants must submit a curriculum vitae, statement of research interests, and names of three references by September 15, 1994, to: Dr. Edwin Bierman, Chair, Search Committee, Northwest Lipid Research Laboratories, 2121 North 35th Street, Seattle, WA 98103. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

A POSTDOCTORAL RESEARCH POSITION is available to study the regulation, role, and function of new proteins that are members of the tyrosine kinases and phosphotases in hematopoiesis. M.D. and/or Ph.D. with a background in cell biology/hematopoiesis/molecular biology and an interest in signal transduction via protein phosphorylation is preferred. Prior experience in *in situ* hybridization and transgenic mice is preferred. Please submit curriculum vitae and three references to: Hava Avraham, Ph.D., and Jerome Groopman, M.D., Division of Hematology/Oncology, Harvard Medical School, New England Deaconess Hospital, One Deaconess Road, Boston, MA 02215. FAX: (617) 424-6237.

Two RESEARCH ASSOCIATE/SENIOR POST-DOCTORAL FELLOW positions are available immediately to investigate mechanisms involved in the mucosal immune response to vaccine candidates. Research emphasis will be placed on Salmonella-based delivery systems and the impending cytokine (e.g., IL-12) and neuropeptide (e.g., substance P) mediated responses in the gut. Experience in cellular immunology, QC-RT-PCR, and recombinant DNA technology is desired. Send curriculum vitae to: Dr. Kenneth L. Bost or Dr. John D. Clements, Department of Microbiology and Immunology, 1430 Tulane Avenue, Tulane University Medical Center, New Orleans, LA 70112.

RESEARCH ASSOCIATE. M.D. or Ph.D. with experience in molecular biology. Two years of experience in the techniques of gene cloning, gene manipulation and analysis, eukaryotic expression analysis, transgenesis, PCR, DNA sequencing, gel-shift assays, peptide analysis, mutagenesis, and a knowledge of the current state of Alzheimer's disease and trinucleotide amplification diseases is required. Experience with murine and animal models of human disease a must. Salary \$28,500 per annum. 40 hours. 8:30 a.m. to 5:00 p.m. Apply to: Employment Security Commission, 516 N. Mangum Street, Durham, NC or your nearest Job Service Office. Refer to job order #NC 3033541 DOT Code 090:227-010. State Social Security Number and basis for work authorization in the United States.

RESEARCH ASSISTANT PROFESSOR

Research Assistant Professor Ph.D. (Biochemistry). Three years of postdoctoral research experience on GH insensitivity, involving evaluation of pharmacokinetics, efficacy and long-term replacement therapy. Basic research experience using rodents and non-human primates on pregnancy, fetal growth, and development of IGF axis, as well as transcriptional, post-translational and hormonal regulation of IGFBP. Publication of 20 research articles in peer-reviewed journals. Recruitment open for 30 days. Send curriculum vitae and letters from three references to: Dr. R. Rosenfeld, Department of Pediatrics, OHSU, 3181 SW Sam Jackson Park Road, Portland, OR 97201. Equal Opportunity/Affirmative Action Employer.

Baylor College of Medicine RESEARCH ASSIST-ANT position available immediately for a technician with prior experience in the care of immunodeficient mice and microsurgery on these animals. Requires Bachelor's degree plus four years of experience or Master's degree plus two years of experience. Salary will be competitive and is negotiable, dependent on experience. Reply to: Dr. Peter Hornsby, Huffington Center on Aging, Baylor College of Medicine, One Baylor Plaza-M320, Houston, TX 77030. Telephone: (713) 798-7334; FAX: (713) 798-6688; Email: phornsby @bcm.tmc.edu.

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

STAFF ASSOCIATE to work with renal group studying calcium ion transport and protein expression related to diabetic kidney disease and cystic fibrosis. Requires Master's degree and a minimum of four years of experience in fluorescent membrane potential measurement, biochemical and molecular biology techniques related to protein synthesis and expression, tissue culture and hybridoma development related to antibody production, and ability to maintain and repair small equipment. Send curriculum vitae and names of references to: Dr. Herbert Chase, Columbia University, Department of Medicine, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/ Affirmative Action Employer.

EXPLORATION OF THE UNIVERSE

a challenge for Europe and its best engineers

VLT PROGRAMME SCIENTIST (Ref.: EDG 109)

Profile: applicants should have a PhD in Astronomy or Physics and several years' experience in observational astronomy with a distinguished record of achievement in astronomical research suitable for appointment to a professorship in major universities. They should have a demonstrated ability in the use of modern telescopes and instrumentation techniques.

Responsibilities: the VLT Programme Scientist will be responsible to the Director General and work in co-operation with the VLT Programme Manager, the Associative Director for Science and the Head of the Instrumentation Division. He will provide overall scientific guidance to the VLT programme and ensure that its implementation The European Southern Observatory (ESO) is an intergovernmental organisation responsible for the most advanced astronomical research in the southern hemisphere. The eight Member States of the ESO are Belgium, Denmark, France, Germany, Italy, The Netherlands, Sweden and Switzerland.

As the prime European astronomical centre, ESO occupies a leading position in the world's scientific community. Its research work is of great value to many areas of science and industry. The Very Large Telescope (VLT) is a 400 MDM programme expected to be completed by the year 2000. It consists of four 8-metre telescopes to be built by European industry and installed in Chile. ESO is responsible for the conceptual design, engineering design and construction of some essential parts, as well as for the overall programme management.

These are exceptional opportunities for those seeking creative involments in an international scientific environment. Applications are invited for the following position, initially based at the ESO headquarters in Garching near Munich, Germany. Extended stays at the observatory in La Silla, Chile, will be required at a later stage.

is in accordance with the high level objectives set by the Scientific Community and the Director General. Moreover, he will provide scientific input to guide the scientific technical solutions from their definition to implementation and will participate in trade off studies taking into consideration the scientific priorities. He will be in charge of the scientific aspects of commissioning and testing the VLT. Part of his time will be spent to conduct a personal or collaborative research programme with particular emphasis on the use of the VLT.

Remuneration for this post will be commensurate with background, experience and family status. It will be compatible with the salaries paid by intergovernmental organisations.

Although preference will be given to nationals of ESO Member States, this should not discourage suitably qualified applicants from other countries from applying. Positions are open to both man and woman. It is essential that all candidates have an excellent command of English.

Applications with a brief c.v. (no supporting documentation unless requested) should specify the job reference and be submitted before August 26, 1994 to: Personnel Administration and General Services, European Southern Observatory, Karl-Schwarzschild-Strasse 2, D-85748 Garching near Munich, Germany. Tel: 49-89.320.06.438 or 49-89.320.06.219.

PHARMACOLOGIST

An experienced research pharmacologist is being sought to establish animal models for the discovery and evaluation of novel agents for the treatment of prostate cancer. This is an important, hands-on position in a dynamic research team focused on developing novel molecules for modulation of tyrosine kinase signaling and its application to oncology. The successful candidate will have at least four years post-doctoral experience in in vivo models of cancer cell growth. Prior experience in industry and in the management of research associates is preferred. The ability to identify, coordi-nate and manage animal models in other broad therapeutic areas will be an advantage.

Cephalon, Inc. is a biotechnology company dedicated to the discovery and development of therapeutic agents for the treatment of neurodegenerative diseases. Recent discoveries in the core technologies at Cephalon have provided for therapeutic opportunities outside of neuroscience, including oncology and cardiovascular diseases.

Cephalon offers a stimulating and exciting work environment. For consideration, please send your resume with salary requirements to:

Cephalon, Inc.

Cephalon, Inc. Attn: Patricia Vandenberg **Human Resources** (Position Code CD5) 145 Brandywine Parkway West Chester PA 19380-4245.

An equal opportunity employer.

ASSOCIATE SCIENTIST: Conducts numerical and theoretical studies of beam-beam effects, coherent instabilities and long-term stability problems in sub-atomic particle accelerators by application of non-linear dynamics and statistical physics methods. Collaborates with physicists conducting beam dynamics experiments to validate data and to propose/ develop empirical testing of beam problem resolutions.

As a minimum, applicants must have a Ph.D. in Theoretical accelerator Physics and either two years experience in the job described above or two years as a Research Associate in accelerator theory. Applicants must have completed one post doctoral appointment in accelerator theory with an emphasis on Synchrotrons. Must have extensive background both in development of analytical methods of non-linear dynamics and statistical physics and their application to beam fluctuation and diffusion phenomena; must have conducted theoretical studies of beam-beam effects, long term stability problems, developed advanced numerical techniques for beam lifetime and diffusion simulations and collaborated in beam dynamics experimentation. All aspects of required experience must be evidenced by publications in internationally recognized professional journals or published proceedings of international physics conferences.

The position is for 40 hours per week (8:30 a.m to 5:00 p.m.) at a salary of \$52,600 per year. Applicants must have proof of legal authority to work permanently in the U.S. and should submit two copies of their resume to: Illinois Department of Employment Security, 401 S. State St. - 3 South, Chicago, IL 60605. Attn: Mr. Dennis Jones, Ref: V-IL-11430-W. NO CALLS. An employer paid advertisement.

ENVIRONMENTAL CHEMIST

Chaired Position

Georgia Institute of Technology announces the opening of a search for an Eminent Scholar in Environmental Chemistry. The general area of interest involves the ability to develop chemical and biochemical sensors, although candidates in all areas of environmental chemistry will be considered.

Successful candidates will have achieved international recognition and demonstrated leadership in interdisciplinary re-search, with the home department being the School of Chemistry and Biochemistry Interested candidates should send a letter of application, current CV, and the names of at least three references to: **Professor Richard Browner, Environ**mental Scholar Search Committee, School of Chemistry and Biochemis-try, Georgia Institute of Technology, Atlanta, GA 30332-0400.

Nominations of potential candidates are also solicited. Applications will be evaluated as they are received, and the search will remain open until the position is filled. Applications from under-represented groups are particularly encouraged.

AN EQUAL EDUCATION/EMPLOYMENT OPPORTUNITY INSTITUTION



POSTDOCTORAL SCIENTIST

Cell Biology Bone

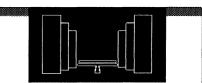
SmithKline Beecham, a world leader in pharmaceutical research, has an opportunity available for a Postdoctoral Scientist in Bone Biology. As part of a developing research group, the selected individual will study molecules involved in osteoblast proliferation, differentiation and function. The research will involve a multi-disciplinary approach using both cellular and molecular techniques and in vitro and in vivo models of bone cell function.

Qualified candidates will have a Ph.D. in Cell Biology or a related discipline and a working knowledge of bone biology with experience in molecular biology techniques. Good communication skills and publications in peerreviewed journals are highly desirable.

Our state-of-the-art research facility is located in suburban Philadelphia. We offer a competitive compensation/benefits package and a stimulating team environment. For confidential consideration, send your resume to: SmithKline Beecham Pharmaceuticals, Employment Administrator, Dept. H0233, P.O. Box 799, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



Challenging the natural limits.



The Salk Institute Dedicated to helping mankind.

POSTDOCTORAL POSITION IN MOLECULAR NEURAL DEVELOPMENT

A position is available to study neural development by various approaches including gene-targeting technology. One current area of interest is to study the roles of neurotrophins and their receptors in neural development, programmed cell death and regeneration (CELL 69, 737-749; SCI-ENCE 263, 1447-1449; NATURE 368, 147-150). Preferred candidates will possess a strong background in molecular biology and/or neurobiology

Applicants should send curriculum vitae, statement of research interests and experience, and the names of three references to: Dr. Kuo-Fen Lee, The Clayton Foundation Laboratories for Peptide Biology, The Salk Institute, 10010 N. Torrey Pines Road, La Jolla, CA 92037; Fax 619/552-1546. The Salk Institute is an Affirmative Action Employer.

XOMA POSTDOCTORAL RESEARCH FELLOWSHIP-PHARMACOLOGY

XOMA Corporation is a biotechnology company based in Berkeley and is engaged in the development of pharmaceutical products based on recombinant DNA and other technologies for the targeted treatment of infectious and immune system diseases and other serious disorders.

We invite candidates to apply for a fellowship to pursue fundamental research designed to understand the effectiveness of new therapeutic agents in in vivo models of gram-negative and gram-positive bacterial sepsis and to determine the mechanisms involved. A variety of experimental approaches are used to simulate disease states and particular emphasis is placed on analysis of the cardiovascular and pulmonary consequences of bacteria or their toxic products. In addition, the effect of bacterial challenge on cytokines, metabolism and coagulation parameters is also studied.

Postdoctoral Fellows will be encouraged to exploit unique research and training resources available in the company. They will have open communication within the company and will be encouraged to publish and present their work at scientific meetings.

XOMA also welcomes applications from outstanding candidates with a strong interest in:

- Molecular Modeling/
- **Computational Chemistry**
- Molecular Biology
- Cell Biology

Candidates for Postdoctoral Fellowships should mail a resume, a list of publications, names of three references, and a brief statement of research interests and career objectives to: XOMA Corporation, Attn: Sr. Technical Recruiter, 2910 7th Street, Berkeley, CA 94710. EOE.



Position Available DIRECTOR, NATIONAL INSTITUTE OF MENTAL HEALTH NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE

DEPARTMENT OF HEALTH AND HUMAN SERVICES

The National Institutes of Health (NIH) invites nominations and applications for the position of Director, National Institute of Mental Health (NIMH).

The National Institute of Mental Health provides leadership for a national program to increase knowledge and advance effective strategies to deal with problems and issues in the promotion of mental health and the prevention and treatment of mental illness. The institute conducts and supports research and research training on the biological, psychological, behavioral, epidemiological, legal, and social science aspects of mental health and illnesses. The Director, NIMH, has full responsibility for the implementation of all NIMH activities which include a grant, contract, and cooperative agreement program with significant impact upon the nation's mental health and manpower development. Responsibilities include the management of a staff of over 900 employees in various scientific, technical and administrative occupations and a FY 1994 budget in excess of \$613 million.

Applicants must have demonstrated progressively responsible experience in the development, administration, and evaluation of scientific mental health programs. Applicants must also demonstrate competence to assume leadership in planning, staffing, directing, coordinating, and allocating resources, and other responsibilities associated with executive leadership of a major national program. Minimum qualification requirements include a degree of Doctor of Medicine, Doctor of Philosophy, Doctor of Osteopathy, or a bachelor's or higher degree in an academic field related to the health sciences. Applicants must further meet established mandatory professional/technical and executive core requirements and additional desirable qualifications.

The individual selected for the position will receive a career appointment in the Senior Executive Service (SES) with an annual salary range of \$96,830 to \$120,594. Physicians may be eligible for a Physician's Comparability Allowance up to \$20,000 per annum. A relocation bonus of up to 25% of base pay may be available to Federal employees. Alternately, this position may be filled through an appointment in the Public Health Service Commissioned Corps

Further information about the position and qualification requirements may be obtained by contacting Ms. Pat Middleton at (301) 443-9094. An Application for Federal Employment (SF 171), accompanied by a current curriculum vitae, bibliography, and three letters of reference should be submitted to Ms. Middleton at the Personnel Management Branch, National Institute of Mental Health, Parklawn (including the SF 171) must be postmarked by the closing date of the vacancy announcement, September 30, 1994.

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, sexual orientation, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.

NIH is an Equal Opportunity Employer



| DEAN COLLEGE OF PHARMACY LIE UNIVERSITY OF MICHIGAN The University of Michigan invites nominations and applications for the position of Dean of the College of Pharmacy. The College of Pharmacy is a research intervision committed to excellence in professional and graduate education. The College of effers programs leading to the Pharma D, degree in the professional curriculum and the Ph.D. degree in the professional curriculum and the following attributes: an earned doctorate or equivalent experience in a discipline related to the overall mission of the College; a destinguished scholarly record in research and education appropriate for a function in the University at the rank of Professor; demonstrated leadership and administrative abilities and an understanding of current in the University at the rank of Professor; demonstrated leadership and administrative abilities and an understanding of current in the University at the rank of Professor; demonstrated leadership and administrative abilities and an understanding of current insues in phramacy and health care; a dedication to the goals of affirmative action and to the development of a fully diverse faculty and student community; and a commitment to resource development. Applications; including a curriculum vitae and the names of three ereferences, or nominations should be sent to: The University of Michigan An actor, MI 48104-2210 The University of Michigan An actor, MI 48104-2210 The committe will begin reviewing candidate files after Cocher 1, 1994. The Diversity of Michigan An actor, MI 48104-2210 The one reviewing candidate files after Cocher 1, 1994. The Dive | | |
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| he position of Dean of the College of Pharmacy. The College of Pharmacy is a research-intensive unit committed to excellence in professional and graduate education. The College offers programs leading to the Pharm.D. degree in the professional curriculum and the Ph.D. degree in medicinal chemistry, pharmaceutics, pharmaceutos, pharmacognosy, and pharmacy administration. The Dean is responsible for providing academic, administrative, and fiscal leadership to the College. In order to continue the overall excellence of the College, we are seeking candidates with the following attributes: an earned doctorate or equivalent experience in a discipline related to the overall mission of the College: a distinguished scholarly record in research and education appropriate for a tenued appointment in the University at the rank of Professor; demonstrated leadership and administrative abilities and an understanding of curriculum vitae and the names of three references, or nominations should be sent to: Sole East Liberty Street The University of Michigan An Arbor, MI 48104-2210 The committee will begin reviewing candidate files after October 1, 1994. A non-discriminatory, affirmative action employer | | 研究員/研究補助員 |
| fiscal leadership to the College. In order to continue the overall excellence of the College, we are seeking candidates with the following attributes: an earned doctorate or equivalent experience in a discipline related to the overall mission of the College; a discipline related to the overall mission of the College of the college of Pharmacy Dean's Search Advisory Committee 520 East Liberty Street The University of Michigan Ann Arbor, MI 48104-2210 The committee will begin reviewing candidate files after October 1, 1994. A non-discriminatory, affirmative action employer | the position of Dean of the College of Pharmacy. The College of Pharmacy is a research-intensive unit committed to excellence in professional and graduate education. The College offers programs leading to the Pharm.D. degree in the professional curriculum and the Ph.D. degree in medicinal chemistry, pharmaceutics, pharmacognosy, | 遺伝子診断、 |
| Ine University of Milchigan Professor Michael A. Marletta Chair, College of Pharmacy Dean's Search Advisory Committee 520 East Liberty Street The University of Michigan Ann Arbor, MI 48104-2210資格:日本の生活に順応できる方。 国籍は問いません。The committee will begin reviewing candidate files after October 1, 1994.アメーン A non-discriminatory, affirmative action employer資格:日本の生活に順応できる方。 国籍は問いません。下書類送付先:所長あて郵送またはFAXで。 | fiscal leadership to the College. In order to continue the overall excellence of the College, we are seeking candidates with the following attributes: an earned doctorate or equivalent experience in a discipline related to the overall mission of the College; a distinguished scholarly record in research and education appropriate for a tenured appointment in the University at the rank of Professor; demonstrated leadership and administrative abilities and an understanding of current issues in pharmacy and health care; a dedication to the goals of affirmative action and to the development of a fully diverse faculty and student community; and a commitment to resource development. Applications, including a curriculum vitae and the names of three | 〒289-05、栃木県下都賀郡石橋町下石橋花林519 (株) ワイエスニューテクノロジー研究所 Tel. Japan (81) 285-52-2821 Fax. Japan (81) 285-52-2824 募集人員:研究員/主任研究員 3名。 研究補助員 2名。 |
| | Professor Michael A. Marletta Chair, College of Pharmacy Dean's Search Advisory Committee 520 East Liberty Street The University of Michigan Ann Arbor, MI 48104-2210 The committee will begin reviewing candidate files after October 1, 1994. | 資格:日本の生活に順応できる方。 国籍は問いません。 応募書類:履歴書。学業成績ないしは研究業績 リスト。応募理由(A4サイズ1枚)。 推薦者2名とその連絡先。 |

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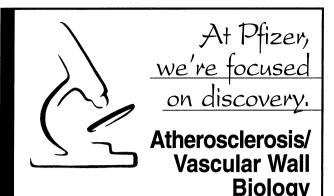
COMPUTATIONAL SCIENTIST • Individual will develop a comprehensive package aimed at automating DNA sequence acquisition and analysis using database management approaches. Position is also responsible for company-wide systems management. Candidates will have a MS or Ph.D. in the sciences or mathematics and an expertise in UNIX and Macintosh based systems with demonstrated programming skills. (Job# S0729-CS)

SCIENTIST • Innovative scientist proficient in the field of genetic analysis, gene prediction and protein sequence analysis, will develop DNA sequence analysis algorithms and software program prototypes. Requires a Ph.D. in genetics, biochemistry or moleculer biology.(Job# S0729-S)

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Central Research We are an equal opportunity employer M/F/D/V



PATHOLOGY FACULTY

The Division of Anatomic Pathology of the Department of Pathology and Laboratory Medicine of the University of Pennsylvania is recruiting an Assistant Professor (tenure track) within the Section of Medical Pathology/Center for Neurodegenerative Disease Research. Candidates must have an M.D. or M.D./Ph.D. with expertise in molecular biology and a strong commitment to research. An interest in aging/neurodegenerative disease research is highly desirable, and preference will be given to candidates with Board Certification in Pathology.

Interested individuals should send a Curriculum Vitae along with the names and addresses of three references to: Dr. John Q. Trojanowski, Director of Medical Pathology and the Center for Neurodegenerative Disease Research, Department of Pathology and Laboratory Medicine.



Hospital of the University of Pennsylvania Maloney Bldg. Basement Room A009 Phila., PA 19104-4283.

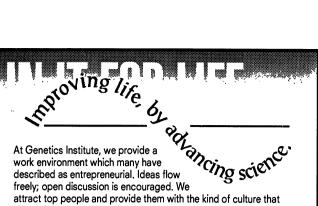
The University of Pennsylvania is an Equal Opportunity Employer/Affirmative Action Employer; women and minority candidates are encouraged to apply.

Watershed Hydrologist University of California, Davis

The Hydrologic Science Program of the Department of Land, Air and Water Resources seeks applicants for a nine-month tenure-track position, with a probability of extension to eleven-month employment, at the Assistant Professor level. The appointee will develop a quantitative fieldexperimental research program in Watershed Hydrology emphasizing processes that may include land-atmosphere interactions, precipitation and runoff, surface water and groundwater interaction, surface water detention, wetlands hydrology, snow hydrology, and chemical cycling in watersheds. The appointee is required to teach an undergraduate general education course in watershed management. We seek a strong scientist with a Ph.D. in hydrology engineering, earth science or closely related field with demonstrated experience in experimental watershed hydrology including the ability to conduct measurements of surface and subsurface flows as well as surface energy budgets. A quantitative background in mathematical modeling and teaching experience are desirable. The position is available July 1, 1995. Applicants should submit resume, transcripts, research and teaching statements with background in each, copies of relevant publications and manuscripts and the names and addresses of at least four references to: Professor Wesley W. Wallender, Watershed Hydrology Search Committee Chair, Hydrologic Science, University of California, Davis, CA 95616; telephone : (916)752-0688/1719; e-mail: wwwallender@ucdavis.edu. Applications should be postmarked by 10/31/94. A more detailed job description can be obtained from the above address or via ftp at enthusiasm.ucdavis.edu.

THE UNIVERSITY OF CALIFORNIA, DAVIS IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.

THE AUSTRALIAN NATIONAL UNIVERSITY CEN-TRE FOR VISUAL SCIENCE Postdoctoral Fellow/ Research Fellow/Fellow Level A/B/C (Four positions) The Centre for Visual Science is embarking on a major new initiative to understand the processes of visual perception in humans and higher vertebrates. Applications are sought from highly imaginative individuals with a strong interest in comparative biology, to pursue novel approaches to understanding the ways in which scenes are represented and analysed by the eyes and brain. The goal is to unravel the tokens and mechanisms by which the visual system represents and recognises objects, and distinguishes them from backgrounds. Of interest are approaches that embody psychophysical, behavioural, electrophysicolgical and computational methods, as well as techniques of imaging neural activity. Four positions are available. The appointees will work in the University-wide Centre for Visual Science, with laboratories engaged in studying vision at the retinal, cortical, oculomotor, developmental, pharmacological and computational levels in a variety of organisms ranging from insects through pigeons, cats and monkeys to humans. Excellent opportunities exist for interaction in all of these areas. Facilities are available for visual stimulation, on-line data collection and analysis, and computational modelling. Two positions, at Level AB, will be in the areas of visual behaviour and electrophysiology with the Visual Sciences Group (headed by Professor M, V. Srinivasan, Research School of Biological Sciences. Two further positions, at Level AB, will be in the areas of human psychophysics and computational vision with the Optical Sciences Centre (headed by Professor A. W. Snyder, FRS) in the Research School of Physical Sciences and Engineering. Enquiries about the positions can be obtained from professor Srinivasan, Research School of Biological Sciences, telephone 61 6 249 2409 and Professor Sryder, Research School of Physical Sciences and Engineering, telephone 61 6 249



At Genetics Institute, we provide a work environment which many have described as entrepreneurial. Ideas flow freely; open discussion is encouraged. We

attract top people and provide them with the kind of culture that keeps them here. All this we do, because good science leads to good products. And when we give our people the room to advance science, we can truly improve lives.

GASTRIC & EPITHELIAL CELL BIOLOGY Staff Scientist/Principal Scientist

We are seeking a cell biologist with excellent communications skills, capable of hands-on research and lab supervision. This individual will develop and execute research strategies focused on understanding the molecular basis of gastrointestinal cell growth and differentiation. The ideal candidate should have experience with some of the following: intestinal cell biology and physiology, in vitro cell culture, growth factor gene families (e.g., EGF), the molecular biology and biochemistry of TGF α s or *in vitro* culture of primary gastrointestinal tissue. A PhD/MD and 3-5 years' postdoctoral experience with relevant publications also required. **Job code: 94-C500.**

BIOANALYTICAL SCIENCES/IMMUNOLOGY Staff Scientist/Principal Scientist

We are seeking an individual with 2+ years' postdoctoral experience in Cell Biology or a related field, to develop *in vitro* assays to help follow the pharmacodynamic parameters of our products. Initially the focus will be on the assessment of the immunomodulatory effects of certain products, and the development of novel assays, or adaptation of existing assays, for select primate and murine cytokines. Longer term goals will focus on the development of sensitive methods for following product activity in biological matrices to facilitate pharmacodynamic monitoring. A PhD in Cellular Biology, Immunology or a related field is required. Experience with cellular proliferation assays is essential, and familiarity with FACS and PCR is desirable. Job code: 94-C572.

SMALL MOLECULE DRUG DISCOVERY Protein Crystallographer

We are strengthening our drug discovery efforts with the addition of a Macromolecular Crystallography laboratory. We have an opportunity for a candidate with a strong background in protein crystallography to join our Small Molecule Drug Discovery Team in the search for novel anti-inflammatory compounds. We are seeking individuals who thrive on interactions with a multidisciplinary team of Cell/Molecular Biologists, Biochemists, High throughput robotized screening, Medicinal Chemists, NMR and Molecular Modeling Groups. We have state-of-the-art facilities including a 600MHz NMR spectrometer and molecular modeling capabilities comprising computer hardware and a full range of software for computational chemistry. The Macromolecular Crystallography laboratory will house an X-Ray generator, Rigaku R-Axis II imaging plate, diffractometer and a full range of supporting facilities. Job code: 94-C636. Internet (for this position only): JSeehra @helios.Genetics.com

For consideration, please send resume, indicating appropriate Job code, to: Human Resources Department, Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140. Fax: (617) 876-8847.

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Preparing for the future



POSTDOCTORAL ASSOCIATES

Ciba's Agricultural Biotechnology Research Unit in Research Triangle Park, NC is world renowned for innovative research and development which promotes more bountiful and resilient crops.

We are seeking four (4) recent Ph.D. Scientists, each with a specific area of expertise as described below:

Position #1 - A background in Microbial Genetics and Molecular Biology. Experience in bio-chemistry, genetics, microbiology, or molecular biology is required. The selected candidate will be part of a collaborative effort researching aspects of bacterial signal transduction an gene expression in plant-associated bacteria. Position #2 - Experience in Arabidopsis genetics. A background in plant pathology, prior work in map-based cloning, and strong molecular biology or biochemistry are also desirable. The successful candidate will be involved in projects to genetically dissect the signal transduction pathway leading to systemic acquired resistance in Arabidopsis.

Position #3 - A background in Microbial Genetics', Biochemistry, and/or Molecular Biology. The successful candidate will investigate agronomic and industrial uses of a novel system for regulating gene expression in plants.

Position #4 - Experience in protein biochemistry, antibody production, and manipulation of nucleic acids are a plus. The successful candidate will study plant disease resistance genes and their products, and identify additional host factors with which they interact in the expression of disease resistance.

We offer competitive salaries and a generous benefits package. Please send resume, and three letters of professional reference to: Y. McCoy, Human Resources, Ciba-Geigy Corporation, P.O. Box 12257, Research Triangle Park, NC 27709-2257. WE ARE AN EQUAL OPPORTUNITY EMPLOYER M/F/D/V.

The National Research Council announces Postdoctoral & Senior Research Associateship Awards to be offered in the field of Contaminant Fate and Transport in the Subsurface Environment at the

EPA ROBERT S. KERR ENVIRONMENTAL **RESEARCH LABORATORY** in Ada, Oklahoma

The National Research Council (NRC) is accepting applications for award competitions for Research Associateships at the Environmental Protection Agency's Robert S. Kerr Environmental Research Laboratory in Ada, OK.

Research opportunities, for both recent Ph.D. recipients and senior researchers, exist in the areas of:

- * Multiphase Flow and Contaminant Transport in Porous Media
- * Flow and Transport in Heterogenous Media
- * Subsurface Biotransformation Processes
- * Multispectral Identification of Biodegradation Products * Subsurface Model Development and Evaluation

Awards include a competitive stipend, support for relocation and travel to professional meetings, and a health insurance program. Duration of each award is one year renewable to a maximum of three.

Applications must be submitted directly to the NRC, and are accepted on a continuous basis throughout the year. Those postmarked: by August 15, 1994 will be reviewed in the October competition; by January 15, 1995, in February; and by April 15, 1995, in June.



For Further Information Contact: The National Research Council ASSOCIATESHIP PROGRAMS (TJ 2094/EK) 2101 Constitution Avenue Washington, DC 20418 FAX: (202) 334-2759

PROTEIN ENGINEERING POSTDOCTORAL SCIENTIST

HELPING PEOPLE LIVE BETTER LIVES

We are seeking a Postdoctoral Scientist to work in an aggressive program involving protein engineering. The goal of this program is the generation of unique proteins that serve the specific needs of diagnostic laboratory medicine without changes to the lab's current diagnostic instrumentation. The candidate should have a Ph.D. in a field which provided 1-3 years experience with various aspects of molecular biology. This background should include purification of mRNA, cDNA cloning , PCR-assembly, site-specific and cassette mutagenesis, expression of recombinant genes and M13 based sequencing. Knowledge of protein analysis methods and purification would be helpful. This individual will help solve protein structure/ activity problems by working in an exciting multidisciplinary environment with on-going world-class collaborations.



The appointment is for 1 year, renewable for a second year and available now. Competitive salary, benefits and relocation allowance provided.

For consideration please forward your CV to the Human Resources Department at Boehringer Mannheim Corporation, 9115 Hague Road, Indianapolis, IN 46250. Please reference POSTDOC. Principals only please. An Equal Opportunity Employer.

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Research Technician Laboratory Coordination SKIRBALL INSTITUTE OF BIOMOLECULAR MEDICINE

A senior research technician position is immediately available in the laboratory of Dr. Dan Littman, which is currently moving to the newly built Skirball Institute of Biomolecular Medicine at New York University. Candidate will perform research in the areas of lymphocyte signaling and development, regulation to T cell gene expression, and mechanisms of retroviral pathogenesis.

A BS degree is required and a minimum of two years experience in molecular biology and tissue culture, as well as experience with data base systems is desired. Responsibilities include research, organization and laboratory maintenance.

We offer an excellent benefits package, including medical/dental/prescription drug plans, four weeks paid vacation and NYU tuition. Please send C.V. and names of two references to William Kelly, Professional Recruiter, Human Resources Dept., 550 First Ave., New York, N.Y. 10016. Resumes must be received by August 22. EOE, M/F.

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The Bristol-Myers Squibb Co. in Syracuse, New York is seeking a Ph.D. scientist for monoclonal antibody production. The individual will be responsible for performing in vivo and in vitro immunization procedures, fusions, maintenance, screening, subcloning, and characterization of antibody secreting hybridoma cell lines.

This position requires an individual with hands on experience in the production and purification of monoclonal antibodies from cell culture supernates and/or bioreactors. The qualified candidate should possess a Ph.D. in Biochemistry, Immunology or related discipline. Extensive experience in hybridoma technology, cell culture techniques and immunoassays is required. Experience with robotics and bioreactors is desirable.

We offer an excellent salary and comprehensive benefits. For consideration, forward your resume with salary requirements to: Manager Human Resources, Bristol-Myers Squibb, Job #SY-940112, P.O. Box 4755, Syracuse, NY, 13221-4755. Equal Opportunity Employer.

Bristol-Myers Squibb Company

VICE CHANCELLOR for RESEARCH DEAN of the GRADUATE COLLEGE UNIVERSITY of ILLINOIS at CHICAGO

The University of Illinois at Chicago seeks highly qualified applicants for the joint position of Vice Chancellor for Research and Dean of the Graduate College. The incumbent reports directly to the Chancellor and joins his policy and management group and is responsible for the enhancement of excellence in research and graduate education throughout the campus. Areas of responsibility include: development of public and private sources of support for research and educational programs; administration of the Graduate College and development of new graduate program initiatives; management of the Campus Research Board and various research support units and research centers; and development of cross disciplinary research interaction. Required qualifications include: an academic/scientific background in research and/or research management; background and achievements to justify appointment as tenured professor; strong management capabilities and interpersonal skills; and demonstrated experience in fostering research between a university and extramural entities including industry. Preference will be given to applicants with administrative experience at the department head level or higher and also experience in facilitation of graduate education.

The University of Illinois is an Affirmative Action /Equal Opportunity Employer. Applications from women, minorities, and people with disabilities are strongly encouraged.

The search will remain open until the position is filled. However, review of applications will begin November 1, 1994. Applications and nominations should include a curriculum vitae and should be sent to:

Richard L Davidson, Ph.D., Chair, Search Committee, Dept. of Genetics (M/C 669) University of Illinois College of Medicine, 808 S. Wood Street, Chicago, Illinois 60612

EXECUTIVE POSITION

U.S. FOOD AND DRUG ADMINISTRATION

The U.S. Food and Drug Administration is seeking an experienced executive to serve a the Director of an experienced executive to serve a the Director of the Office of Surveillance and Biometrics within the Center for Devices and Radiological Health, located in Rockville, Maryland. As a key member of the Center's senior staff, the Director of the Office of Surveillance and Biometrics develops and directs programs for monitoring the safety and effectiveness of marketed medical devices and industry adherence to applicable laws and regulations of 1976 and the postmarket surveillance requirements of the Safe Medical Devices Act of 1990. The Office Director plays a major role in the planning and development of Center policy as it applies to postmarket surveillance activities, and provides overall scientific direction and leadership in the implementation of this policy. The person selected for the position will direct the work of approximately 100 scientific, medical, engineering, and support employees and manage an operating budget of approximately 1.1 million dollars. This is a highly visible position requiring an individual who possesses exceptional interpersonal skills and the ability to deal effectively with the regulated industry, members of the medical community and health care facilities, consumer groups, and the United States Congress. Candidates should have an M.D., a Ph.D.-equivalent experience in science or engineering. Extensive experience in the area of epidemiology and/or biometrics is desirable. The Director is a member of the Federal Senior Executive Service with a salary range of \$92,900 to \$107,300; all SES members currently receive an additional 4.23 percent locality pay adjustment and physicians may also be eligible for a comparability allowance of up to \$20,000 per year. A recruitment bonus an relocation expenses may be paid. If you wish further information regarding this position and how to apply, please call John Anderson at (301)443-1755. This position may also be filled by current or former Commissioned Officers of the U.S. Public Health Service.

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Buennemeyer, The Charlotte-Mecklenburg Hospital Authority, P.O. Box 32861, Charlotte, NC 28232. Tele-phone: (800) 942-6898. Equal Opportunity Employer.

WILDLIFE BIOLOGIST/ECOLOGIST. The National Biological Survey (NBS) is recruiting for the Assistant Unit Leader–Wildlife position at the South Carolina Cooperative Fish and Wildlife Research Unit at Clemson University. Candidates will be evaluated on the basis of past and potential research performance, gradu-ate teaching skills, and ability to convert research results into management recommendations. Preference will be given to candidates with expertise in evaluation of effects of landscape level processes on wildlife communities in important Southeastern habitats. Federal advertisement of the GS-11/12 position will appear on the OPM register and NBS vacancy announcement. Inquiries about the application process can be directed to: Dr. David Otis, Telephone: (803) 656-0168, Email: DAVEO@CLEMSON.EDU. Affirmative Action/Equal Opportunity Employer.

MOLECULAR GENETICIST-CYTOGENETI-CIST. The Applied Genetics group of companies is searching for a Director for its DNA laboratory. Candidates must be Board eligible or certified in molecular genetics; cross certification in cytogenetics is desirable. The Applied Genetics group provides comprehensive services in Austin, San Antonio and surrounding areas. The DNA laboratory, located in Austin (population 450,000) offers many advantages of private practice and a comprehensive package of benefits. Contact:

Ronald J. Jorgenson, DDS, Ph.D., FACMG Lingnostic Network of America 4201 Marathon Boulevard, Suite 206 Austin, TX 78756 Telephone: (512) 451-5173; FAX: (512) 451-5175

FIELD BOTANIST THE NEW YORK BOTANICAL GARDEN

The Institute of Economic Botany of The New York Botanical Garden (NYBG) announces a position for FIELD BOTANIST (Ph.D. or M.S. level) with back-ground in plant taxonomy and field experience within the United States. Duties are to collect, identify and voucher a broad range of plant taxa from the United States and its territories and possessions. Extensive travel is required. Successful applicant will participate in a study that assesses the potential utility of plant extracts in pharmaceutical products, as a part of a collaborative project with scien-tists from Pfizer Inc. The NYBG Institute of Economic Botany carries out basic and applied research on the relationship between people and plants. Please send curriculum vitae and names of three references to: Per-sonnel Department-FB, The New York Botanical Garden, Bronx, NY 10458-5126, FAX: (718) 220-**6504.** Affirmative Action/Equal Opportunity/Male/Fe-male/Disabled/Veteran.

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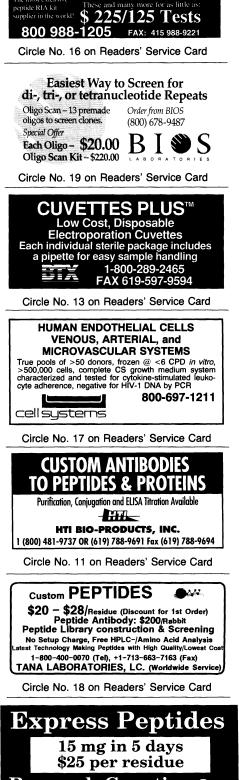


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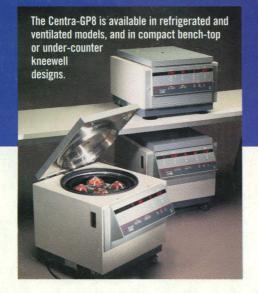
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