1992 AAAS AWARD FOR PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

Nominations Invited

- An annual Award for working scientists and engineers from all disciplines who make outstanding contributions to public understanding of science and technology but are *not* members of the media.
- Contributions should have a significant impact on the public; be accurate, timely, and innovative; and convey the meaning, excitement, and significance of scientific activity.
- The Award will be presented during the AAAS Annual Meeting in Boston, Massachusetts, February 11–16, 1993.
- The Award carries a \$5,000 prize.

1991 Award Winner: Stephen H. Schneider National Center for Atmospheric Research

For additional information, contact: Patricia S. Curlin, AAAS Committee on Public Understanding of Science and Technology, 1333 H Street, NW, Washington, DC 20005, telephone 202/326-6605 or fax 202/371-9849.

Deadline for nominations is 1 August 1992.

The FASTEST oxygen electrode

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Bio-Rad offers two mixing chambers for high-performance liquid chromatography. The low-cost



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Protein Prediction Software

Protein Predictor v-2.0 is a program for the Macintosh for analyzing and predicting the secondary structures of natural and artificial protein molecules. The program makes use of the latest neural net method and the traditional moving average based on statistical analysis to identify and predict domains of possible helical- and pleated-sheet structure in any protein molecule. Atlantic Software. Circle 89.

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Antitumor necrosis factor receptor (anti-TNF-R), a mouse monoclonal antibody against the receptor to human cachetin (TNF- α) and lymphotoxin (TNF- β), is provided in 100 µg/ ml concentrations. BioSource International. Circle 90.

Monoclonal antibodies (MAbs) recognizing rat CD3,

CD11a (LFA-1), CD54 (ICAM-1), and CD18 are now available. The anti-CD3 MAb provides a marker for cells expressing the T cell antigen receptor. CD11a is an integrin involved in the interaction of lymphocytes and other cell types. The CD54 molecule is a ligand for LFA-1. The antibody that reacts with the CD18 integrin β chain recognizes the three integrins that it forms by association with specific α chains CD11a, CD11b (Mac 1), and p150. Serotec. Circle 91.

Technical Presentation Software

Slidewrite Plus for Windows is technical presentation software for use with Microsoft Windows 3.0. The program combines sophisticated drawing and text capabilities with advanced scientific graphing, curve fitting, data transformation, and statistical analysis capabilities. It has a what-yousee-is-what-you-get user interface and pull-down menus and permits on-screen drawing, sizing, and text formating. It will accept data from Lotus files, ASCII files, and any application using dynamic data exchange, such as Excel or Quatropro. Advanced Graphics Software. Circle 92.

Nucleic Acid

Purification System NUCLEOBOND AX cartridges are for fast purification of plasmid DNA, phage lambda DNA, genomic DNA (up to 200 kb), single-stranded DNA, and different types of RNA. The charged groups of the anion exchanger NUCLEOBOND AX are covalently bonded to a silica matrix. The hydrophilic surface guarantees high-mass recovery by minimizing nonspecific adsorption effects. Handling of the cartridges is simple, with only pipettes, syringes, and buffers used instead of ultracentrifuges and high-performance liquid chromatography. Macherey-Nagel GmbH & Co. Circle 93.

Spherical Silica Powder

Micrometer-sized, spherical silica powders are available as particlesize standards for the calibration and standardization of particle measurement systems. The standards are uniform, pure, amorphous silica made via a proprietary sol-gel process. They are available in diameters of 0.5, 1.0, and 1.5 μ m at densities of 1.7 g/ cm³ and 2.2 g/cm³. GELTECH. Circle 94.

Conductivity Monitor for Chromatography

Model ICM-180 is a flow-through monitor for high-performance liquid chromatography (HPLC) and ion chromatography. It features a cell with less than 20-µl dead volume, microbore Teflon tubing,



and standard fittings for attachment to all common HPLC systems. The conductivity monitor is particularly useful in optimizing the separation of proteins using both classical column and HPLC apparatus. It is also useful for converting a standard HPLC system for doing ion chromatography. The instrument's broad conductivity ranges can accommodate most salt gradient separations of proteins and ion chromatography applications. The monitor attaches directly to any strip chart recorder and offers fully adjustable zero suppression, a feature usually found on much more expensive monitors. Lazar Research Laboratories. Circle 95.

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MEGAscript transcription kits are for large-scale synthesis of RNA. With these kits, ten times the amount of RNA can be synthesized as in conventional in vitro transcription reactions. They are designed for synthesizing RNA for in vitro translation, microinjection, isolation of RNA binding proteins, subtractive complementary DNA library construction, ribozyme studies, and other applications. Ambion. Circle 96.

Literature

Special Furnace Systems describes systems custom-built to meet specific requirements. Lindberg/Blue M, A General Signal Company. Circle 97.

The Binding Site Catalog includes more than 2000 immunology-related products, with more than 200 new products. The Binding Site. Circle 98.

Personnel & Product Protection: A Guide to Biosafety Enclosures is a 16-page booklet that provides an overview of the types of laboratory enclosures available, then gives details on such subjects as biohazards and biosafety levels, high-efficiency particulate air filters, and classes of safety cabinets. Labconco. Circle 99.

Temperature Measurement Handbook contains technical specifications and pricing on more than 10,000 temperature measurement and control products. NANMAC Corp. Circle 100.

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

FACULTY POSITIONS IN BIOLOGICAL SCI-ENCES. UNIVERSITY OF DELAWARE. Applications are invited for two tenure-track appointments at the ASSISTANT PROFESSOR level to be filled as early as 1 September 1992. The positions are to be filled by broadly trained organismic biologists with primary research interests in (1) evolutionary biology, and (2) membrane signal transduction. We seek talented individuals who are addressing significant issues in their chosen disciplines using molecular techniques. Instructional responsibilities for (1) will be participation in our introductory biology series and for (2) will be teaching molecular biology; both individuals will be expected to make creative contributions to our upper division/graduate curricula in their respective disciplines. The successful candidates will be expected to establish and maintain independent fundable research programs and to interact with current faculty with related interests. Applicants must hold the Ph. D. or equivalent and have

Applicants must hold the Ph.D. or equivalent and have two or more years of postdoctoral experience. They should submit, by 1 May 1992, their curriculum vitae, a statement of present and future research interests and three letters of evaluation to: Milton H. Stetson, Ph.D., Professor and Director, School of Life and Health Sciences, UNIVERSITY OF DELAWARE, Newark, DE 19716. Telephone: 302-831-6977, FAX: 302-831-2281. The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from qualified minority group members and women.

RESEARCH ASSISTANT PROFESSOR

The Neonatology Section of the Department of Pediatrics at East Carolina University School of Medicine invites applications for a 2-year term nontenure-track position to continue development of a research program in hypoxicischemic brain damage in the newborn. Candidates should be actively engaged in some aspects of this field. Ph.D. or M.D. required, postdoctoral experience preferred. There is a possibility of a tenure-track position in the future if candidate is successful in gaining outside funding. Applicants should send curriculum vitae, summary of research experience, and names of three references to: Arthur E. Kopelman, M.D., Neonatology Section Head, Department of Pediatrics, East Carolina University School of Medicine, Greenville, NC 27858–4354. Affirmative Action/Equal Employment Opportunity. Applicants must comply with the Immigration Reform and Control Act.

QUEEN'S UNIVERSITY DEPARTMENT OF ANATOMY

Applications are invited for two special appointments at the rank of ASSISTANT PROFESSOR contingent on the applicant obtaining a Medical Research Council, Heart and Stroke Foundation or equivalent scholarship. A Ph.D. and/or M.D. or D.D.S. degree and a minimum of 2 years of postdoctoral experience are essential. Outstanding candidates with strong interdisciplinary research programs in cell biology, neuroscience, human kinetics or physical anthropology will be considered. Ability to teach in two of the three areas: human gross anatomy, neuroscience, or embryology, in an integrated medical curriculum will be an asset. Candidates should arrange to have a copy of their curriculum vitae and three letters of recommendation sent to: Dr. M. G. Joneja, Professor and Head, Department of Anatomy, Faculty of Medicine, Queen's University, Kingston, Ontario Canada K7L 3N6. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Queen's University has an Employment Equity Programme and encourages applications from all qualified candidates, including women, aboriginal peoples, people with disabilities and visible minorities. Applications and letters of recommendation should be forwarded as soon as possible and no later than 8 June 1992.

The University of Texas Southwest Medical Center in Dallas is seeking a MOLECULAR NEUROBIOLO-GIST with doctorate whose research interests focus on neuronal plasticity and the molecular interactions of trophic factors that influence neuronal transmitter gene expression. Will have faculty rank at ASSISTANT PROFESSOR LEVEL. Send curriculum vitae to: Cheryl Craft, Ph.D., University of Texas Southwest Medical Center, 5323 Harry Hines, Dallas, TX 75235–9070. Equal Opportunity/Affirmative Action Employer. We offer a non-smoking work environment.

POSITIONS OPEN

ASSISTANT PROFESSOR—TENURE TRACK. A new position is open in the Department of Anatomy and Cell Biology at the University of Kansas Medical Center (KUMC). Applicants should have a Ph.D. and/or M.D. and a minimum of 2 years of postdoctoral research experience. Candidates are expected to develop an externally funded, innovative research program. All qualified applicants with interest and experience in employing cellular and molecular techniques in fundamental problems of neuroscience are encouraged to apply. Teaching will be in one of the basic medical courses offered by the department and in the graduate program. The earliest start date is 1 January 1993. Applicants should provide curriculum vitae, including a summary of present and future research interests and three references to: Dr. Nancy E. J. Berman, Search Committee Chair, Department of Anatomy and Cell Biology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160–7400. KUMC is an Equal Opportunity Employer.

NSERC AWARD FOR WOMEN

The Department of Zoology at the University of Manitoba wishes to nominate a candidate for an NSERC Woman's Faculty Award in the 1993 competition. We seek a cell biologist who has demonstrated a capacity for independent research to fill the position of **ASSIS-TANT PROFESSOR**. The successful applicant may be considered for any future tenure-track position. The Department of Zoology encourages research with startup funds, suitable space and initially a reduced teaching load. *Applicants must be Canadian citizens or permanent residents*, have obtained the doctoral degree within the last 5 years, and have demonstrated a potential for developing an internationally respected program of research. Salary will be commensurate with experience. *The university offers a smoke-free environment, save for specially designated areas*. Curriculum vitae, a statement of research interests, a selection of recent reprints and three letters of reference should be sent by 15 July 1992 to: **Dr. J. H. Gee, Head, Department of Zoology, University off Manitoba, Winnipeg, MB, R3T 2N2. Telephone: 204-474-9245; FAX: 204-275-6352.**

ASSISTANT PROFESSOR DEVELOPMENTAL NEUROBIOLOGY

The Department of Neurobiology and Anatomy at the University of Rochester Medical School invites applications for a tenure-track position at the assistant professor level. Applicants must have a Ph.D. and/or M.D. degree, at least 2 years of postdoctoral experience, outstanding potential to develop and maintain an independent research program, and a commitment to participate in medical and graduate education. We seek candidates who will establish an extramurally funded research program that uses cellular and molecular approaches to study developmental neurobiology. Research that focuses on the relationship of developmental mechanisms to processes relevant to plasticity, regeneration, and aging of the nervous system is preferred. An active community of more than 80 neuroscience research labs offers unique opportunities for productive, collegial interactions. Candidates should send their curriculum vitae, a description of current and future research interests, and the names of three references to: Dr. John T. Hansen, Chair, Department of Neurobiology and Anatomy, Box 603, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, NY 14642. The University of Rochester is an Affirmative Action/Equal Opportunity Employer committed to a smoke-free environment.

SALMONELLA GENETICIST. The Center for Vaccine Development, Department of Medicine, University of Maryland School of Medicine, seeks a Ph.D. or M.D./Ph.D. molecular biologist experienced in Salmonella genetics. The RESEARCH ASSISTANT PROFES-SOR position involves research on attenuating and expressing foreign antigens in S. typhi. Applicant must demonstrate experience in Salmonella genetics; techniques for chromosomal integration of foreign genes and expression of foreign antigens in Salmonella are highly desirable. Salary: \$40,000 to \$45,000, depending on qualifications. Send curriculum vitae and names of at least three referees to: Dr. M. Levine, Center for Vaccine Development, University of Maryland School of Medicine, 10 South Pine Street, Baltimore, MD 21201. An Affirmative Action/Equal Opportunity Employer. Sandoz Pharma Ltd. is looking to recruit

Yeast biologists

for a permanent position at laboratory head level or fixed term appointment on a postdoctoral basis in a research group studying signal transduction and protein transport in *Saccharomyces cerevisiae*.

Applicants should be PhDs with research experience in molecular biology and genetics and a keen interest in interdisciplinary work.

Applications, giving a brief account of previous experience and including a curriculum vitae and the names of two referees, should be addressed to:

Sandoz Pharma Ltd.

Personnel Department, Ref. 2416 Mrs. V. Luginbühl CH-4002 Basel Switzerland



The University of British Columbia Search Extended Department of Microbiology

Applications are invited for a tenure-track Assistant Professor position in the Department of Microbiology, at U.B.C. This position is one of three funded by an award for a NSERC/COFI Chair in Forest Products Waste Management. Applicants should have a Ph.D., postdoctoral experience and a strong research record.

The preferred candidate would have a background in microbial physiology, metabolism, genetics, or environmental microbiology. It is expected that the candidate will have the potential to develop a world class research program and that this research will impact on forest industry waste products and will complement existing programs in Microbiology and other related departments. There will be significant opportunities to interact with existing and developing programs in waste management and in designing approaches to the sustainable development of natural resources. The individual will participate in undergraduate teaching and in the active Ph.D. program in the Microbiology Department.

Deadline for applications is **June 1**, **1992**, with an appointment to be effective **January 1**, **1993 or earlier if appropriate**. Salary will be commensurate with qualifications and experience. The University of British Columbia encourages qualified women and minority candidates.

In accordance with Canadian immigration requirements priority will be given to Canadian citizens and permanent residents. The position is subject to final budgetary approval. Please submit application, together with the names of three referees to:



Dr. Julian E. Davies, Head Department of Microbiology University of British Columbia #300 - 6174 University Boulevard Vancouver, B.C., CANADA V6T 1Z3

PHARMACOLOGY

Postdoctoral Scientist

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, has an opportunity for a Postdoctoral Scientist to join its Pharmacology department. In collaboration with the department of Gene Expression Sciences, the selected candidate will investigate the effects of specific changes in protein structure on enzyme activity and drug-protein interactions.

Qualified candidates will have a Ph.D. in Biochemistry, Pharmacology, Molecular Biology or related discipline with 0-2 years postdoctoral experience. Knowledge of standard techniques in protein biochemistry, enzymology or radioligand binding, as well as demonstrated productivity as evidenced by publication in the scientific literature is required. Experience with recombinant DNA technology and a desire to use molecular biology to examine drug-protein interactions is preferred.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, as well as opportunities for personal and professional growth. For confidential consideration, please send your C.V. and the names of three references to Marilyn Leggieri, Associate Employment Administrator, #L0117, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

> SB SmithKline Beecham Pharmaceuticals



UCLA SCHOOL OF MEDICINE

TENURE TRACK FACULTY POSITION IN NEUROBIOLOGY

The Department of Physiology of the UCLA School of Medicine invites applications for a tenure-track faculty position in neurobiology, with emphasis on cellular or molecular approaches to development, especially in the central nervous system. While the search is aimed at the Assistant Professor level, more senior appointments may be considered. The successful candidate will be expected to develop a vigorous, independently-funded research program and contribute to teaching of graduate and medical students. Applicants should send a c.v. with a list of publications, and statement of future research plans to:

> Dr. A. D. Grinnell, Chair Neurobiology Search Committee Department of Physiology UCLA School of Medicine Los Angeles, CA 90024

Women and minority applicants are especially encouraged to apply. The deadline for applications is **June 1, 1992**. The University of California is an affirmative action/equal opportunity employer.



EMBL

The European Molecular Biology Laboratory, an international research institute situated in Heidelberg, Germany, has the following vacancy:

GROUP LEADER

The successful applicant will set up an independent research group within the Differentiation Programme, which is engaged in the following areas of research:

Mechanisms of action of transcription factors in eukaryotes (Dirk Bohmann); study of tyrosine phosphorlation and the control of cell proliferation (Sara Courtneidge); control of the eukaryotic cell cycle (Giulio Draetta); function of homeobox genes during vertebrate development (Denis Duboule); mechanisms of germ line determination in Drosophila (Anne Ephrussi); cellular and molecular studies of haematopoietic cell differentiation and leukaemogenesis (Thomas Graf); genes determining the differentiation of cells in the Drosophila eye (Marek Mlodzik); and the molecular basis of limb pattern formation (Rolf Zeller). Scientists using transgenic mice and ES cell technology to investigate aspects of differentiation, development and/or growth control are particularly encouraged to apply, although applicants working in other disciplines

and/or growth control are particularly encouraged to apply, although applicants working in other discipline complementary to the research of the programme will also be considered. Applications, comprising a curriculum vitae, a short description of research interests, and the names,

addresses and telephone numbers of three referees, should be sent to the Personnel Section, quoting reference number 92/08.

EMBL Personnel Section, Postfach 10 22 09 D-6900 Heidelberg Germany

Informal enquiries may be directed to Thomas Graf, Programme Coordinator telephone (+49) 6221 387 410. The closing date for receipt of applications is 1st June 1992. Women are especially encouraged to apply.

POSITION AVAILABLE

DIRECTOR, NATIONAL INSTITUTE ON DRUG ABUSE

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION PUBLIC HEALTH SERVICE DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Alcohol, Drug Abuse, and Mental Health Administration invites nominations and applications for the position of Director, National Institute on Drug Abuse (NIDA).

The person selected for this position (located in Rockville, Maryland) will receive a career appointment to the Senior Executive Service (SES). The 1992 salary range for this position is \$90,000 to \$112,100 (or \$132,100 for physicians including the maximum \$20,000 Physicians Allowance). A recruitment bonus of up to 25 percent of base pay may be available to a nonfederal candidate selected for this position, subject to individual approval. A relocation allowance of 25 percent may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. SES members are also eligible for performance awards of 5 to 20 percent of base salary. Alternatively, this position may also be filled through an appointment in the Public Health Service Commissioned Corps.

The National Institute on Drug Abuse provides national leadership and direction in the development of goals, priorities, policies, and program activities designed to increase the knowledge base for developing effective strategies to deal with the health problems and issues associated with drug abuse. The Institute's program includes basic and clinical extramural and intramural drug abuse research and training programs for scientists interested in research careers in the biomedical and behavioral sciences with a special interest in drug abuse. The Director manages a staff of 450 and a budget of \$420 million. The Director is also the chief advisor to the Administrator, ADAMHA, and the Assistant Secretary for Health on drug abuse research and scientific policy.

Candidates must have progressively responsible research experience in one or more scientific areas related to addiction or mental health disorders. Professional background and/or experience must include an extensive knowledge of research methodology and an understanding of biomedical and behavioral sciences as they relate to addiction or mental health disorders. Candidates should also have managerial/executive experience in a basic or clinical research program which demonstrates competence to assume leadership in developing and accomplishing basic program goals; obtaining and allocating fiscal and personnel resources; and establishing relationships with contacts outside the organization. Minimum education requirements include a degree of Doctor of Medicine, Doctor of Osteopathy, or a bachelor's degree in an academic field relating to the health sciences, although an advanced degree is desired.

Further information about the position and qualification requirements may be obtained by contacting Ms. Lynn E. Brooks-Smith on (301) 443-5030. Dr. Enoch Gordis, the Search Committee Chairperson, would also be glad to discuss this opportunity with you. Dr. Gordis may be reached on (301) 443-3885. An Application for Federal Employment, SF 171, accompanied by a current curriculum vitae and bibliography are to be submitted to Ms. Brooks-Smith at the Division of Personnel Management, Alcohol, Drug Abuse, and Mental Health Administration, 5600 Fishers Lane, Room 15C-26, Rockville, Maryland 20857. Applications will be accepted without the SF 171 provided that the SF 171 is submitted upon request. Complete applications (including the SF 171) must be postmarked by the closing date of the vacancy announcement, July 2, 1992. Late applications will not be accepted.

Applications from women and minority group members are especially solicited.

THE ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION IS AN EQUAL OPPORTUNITY EMPLOYER

Environment Modeller

Aus \$42 K to \$56 K + superannuation

Division of Fisheries, Perth Western Australia.

We are seeking an innovative scientist to initiate and conduct research into modelling of environmental impacts in marine and estuarine systems. The position is part of a team in the new Marine Environmental Research Program.

You will need a PhD in quantitative ecology, applied mathematics or a similar field and a strong background in the development of mathematical and computer models for biological systems. You should demonstrate significant research achievement and a capacity to communicate findings to a variety of audiences.

For more information, contact Dr T Ward (Program Manager) or Dr C Jacoby (Project Leader) [Ph Aus (044) 421 155, fax (044) 421 164]. The position commences in 1992 and has a indefinite (tenured) status. Assistance with relocation costs is provided.

Applications should reach: The Chief, CSIRO Division of Fisheries, GPO Box 1538, Hobart, Tas. 7001, Australia by 31 May 1992. Please quote Reference Number FC91/13.



27031

CSIRO IS AN EQUAL OPPORTUNITY EMPLOYER



Agricultural United States Research Department o Service Agriculture Department of Agriculture

RESEARCH LEADER Appalachian Fruit Research Station Kearneysville, West Virginia

The Agricultural Research Service (ARS), U.S. Department of Agriculture, has an opening for a Research Leader (Plant Geneticist or Plant Phys-iologist) in its Station located in the eastern pan-handle of West Virginia (near Harpers Ferry). The Station has over \$4M in programs aimed at im-proving fruit production, protection, harvesting, sorting, and maintenance of fruit quality in the Eastern U.S. It is housed in a modern building on 500 acres of land devoted to fruit crops. About 20 full-time researchers and 45 support personnel work at the Station. Approaches used include classical and molecular genetics, soil and weed science, horticulture, entomology, plant pathology, plant physiology, biochemistry, and agricultural en-gineering. The Agricultural Research Service (ARS), U.S. aineering.

gineering. The Research Leader is expected to carry out a program in the area of tree fruit improvement through molecular techniques and lead a multidis-ciplinary group of scientists involved in research areas including biocontrol; breeding; gene isolation and transformation; and stress adaptation. Candi-dates must have research experience in plant physiology, biochemistry or genetics and molecu-lar biology as well as a demonstrated ability to work with research personnel and manage resources. arch personnel and manage resources

With research personnel and manage resources. Must be a U.S. citizen, Ph.D. degree is highly desirable. Salary is commensurate with experi-ence. GM-13-Gm-15 (\$46K to \$64K). For infor-mation on application procedures/forms, con-tact Alice MacNamara at (301) 344-1920. Applications in response to this advertisement should be marked 2N029 and sent to USDA, ARS, Personnel Division, 6305 Ivy Lane, Room 322, Greenbett, MD 20770-1435, Attention: A. MacNamara, Apolications must be received by MacNamara. Applications must be received by June 1, 1992. Information regarding the re-search program may be obtained from Dr. Ralph Scorza (304) 725-3451.

ARS is an equal opportunity employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR, DEPARTMENT OF PATHOLOGY, WAYNE STATE UNIVERSITY (WSU). Tenure-track position(s) for M.D. and/or Ph.D. to develop programs in endothelial cell biology and carbohydrate biochemistry relating to cell-cell recogni-tion. Applicants are expected to develop independent tion. Applicants are expected to develop independent programs and collaborative effects with cancer biologists. Strong backgrounds in cell biology and/or carbohydrate biochemistry and modern molecular biologic techniques. Send résumé to: Kenneth Honn, Ph.D., Wayne State University, Department of Radiation/Oncology, 431 Chemistry Building, 5101 Cass Avenue, Detroit, MI 48202. WSU is an Equal Opportunity/Affirmative Action Evanlong M/E Employer M/F.

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOLOGY

The College of Saint Rose invites applications for full-time (9 months) tenure-track position. Instruction of molecular biology and introductory level biology cours-es, participation and leadership in advancing education in es, participation and readership in advancing education in the sciences, student advisement and committee work. Ph.D. required, as well as background in molecular biology, with emphasis on cell biology and ability to provide leadership in instruction of the physical/biolog-ical sciences. Position to begin fall 1992. Review of applications begins 20 April 1992. Send letter of appli-cation résumé transcrints and names of three references cation, résumé, transcripts and names of three references to: Dr. James Mancuso, Dean of Math & Science, The College of Saint Rose, 432 Western Avenue, Albany, NY 12203. Equal Opportunity, M/F/H/V.

ASSISTANT/ASSOCIATE PROFESSOR: SUNY Health Science Center at Brooklyn seeks a candidate to perform independent research and to supervise laboratory facilities which operate in support of molecular genetics. The applicant should have 2 to 3 years of postdoctoral experience. Attractive start-up funding is available. The candidate is expected to develop an externally funded research program and to become involved in graduate education. This is a nontenure-track position with the opportunity to advance to tenure-track position with the opportunity to advance to tenure-track status. Please re-spond to: Dr. William T. McAllister, Chairman, De-partment of Microbiology and Immunology, SUNY Health Science Center at Brooklyn, 450 Clarkson Avenue, Box 44, Brooklyn, NY 11203–2098. Equal Opportunity/Affirmative Action Employer. DMC#C0386.

NEUROSCIENTIST. Applications are invited for up to two tenure-track positions at the ASSISTANT/ ASSOCIATE PROFESSOR ranks for neuroscientists with strong interests in studying vertebrate neural development, regeneration, or synaptic plasticity. The candi-date should have demonstrated experience in modern cell or molecular biological methods and should be interested in collaborating with other members of an interactive group studying mechanisms of neural plasticity, includ-ing growth and recovery of function after spinal cord

Curriculum vitae and three names of references should be sent to: D. S. Faber, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, PA 19129. We are an Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR. JOB ORDER NUM-BER 6521727. Plan and conduct experiments in the field of gut hormone physiology. Prepare surgical models for research in large and small animals, including collect-ing and processing tissue and blood samples. Conducts radioimmunoassays and in vitro bioassays (dispersed pancreatic acini) for gut peptides. Performs biochemical measurements of proteins and nucleic acids. Execute experiments in vitro using tissue culture. Extract DNA/ RNA using recombinant DNA methods and hybridiza-tion. Teach and supervise several students and technicians. Prepare and revise scientific manuscripts for publication in peer-reviewed journals. Requires an M.D. and 3 years of experience in gastrointestinal physiology to include gut hormones in vivo and in vitro models for study, radio immunoassays, general laboratory equip-ment and biometry. Salary is \$5000 per month. Apply at the Texas Employment Commission, Galveston, Texas; or send résumé to the **Texas Employment Commis-sion, TEC Building, Austin, TX 78778.** Ad is paid by an Equal Opportunity/Affirmative Action Employer, M/F/ H/V. Employer hires only individuals authorized to work in the United States.

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POSITIONS OPEN

FACULTY POSITIONS CORNELL UNIVERSITY MEDICAL COLLEGE DEPARTMENT OF PHARMACOLOGY

Candidates are sought for three tenure-track positions at the level of ASSISTANT or ASSOCIATE PRO-FESSOR. Candidates with interests in a wide range of areas will be considered, including molecular pharmacology, neuropharmacology, drug metabolism, drug/recep-tor interactions, and signal transduction mechanisms. The responsibilities of this position include development of an active, independent research program and partici-pation in both medical and graduate student teaching programs in the department. Applicants should send curriculum vitae, a summary of proposed research, and should arrange to have letters sent from at least three scientists who can evaluate the candidate's accomplishments. Cornell University Medical College is a part of the New York Hospital-Cornell Medical Center and adjacent to Memorial Sloan Kettering Cancer Center and Rockefeller University. Applications should be sent to: Chair, Pharmacology Search Committee, c/o Room E-409, Pharmacology Department, Cornell University Medi-cal College, 1300 York Avenue, New York, NY 10021. Equal Employment Opportunity/Affirmative Action, M/F/V.

DEPARTMENT OF PHYSIOLOGY

The University of California, San Francisco, seeks applicants for a position of **ASSISTANT** or **ASSOCI-ATE PROFESSOR** in residence in the Department of Physiology. The person we seek will have as their major responsibility the supervision and teaching of a course in mammalian physiology. The candidate will also carry out an active independent research program in physiology, and active independent research program in physiology, and will participate in the training of graduate students. Evidence of highly successful teaching experience in mammalian physiology will be essential. Applications should include curriculum vitae statements of teaching experience and research interests, reprints of selected publications, and the names of three individuals who have been asked to submit reference letters. Women and minorities are encouraged to apply. Applications should be submitted by 30 June 1992. Applications should be sent to: Dr. Mary Dallman, Chair, Search Committee, Department of Physiology, Box 0444, University of California, San Francisco, CA 94143–0444. University ty of California, San Francisco, is an Equal Opportunity/ Affirmative Action Employer.

SPINAL CORD NEUROPLASTICITY. ASSOCI-ATE OR FULL PROFESSOR. Department of Anatomy and Neurobiology, Medical College of Pennsylvania. Applicants are sought for a tenure-track position. The department seeks an individual with a proven record of research into mechanisms of recovery of function after spinal cord injury, with an emphasis on behavioral meth-ods. The candidate should be interested in collaborating with other members of an acting around hot uses transplan with other members of an active group that uses transplan-tation, cell culture, and molecular approaches to improve methods for obtaining recovery of function.

Curriculum vitae and three names of reference should be sent to: Marion Murray, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, PA 19129. We are an Equal Opportunity/Affirmative Action Employer.

ENDOWED CHAIR IN WATER QUALITY THE UNIVERSITY OF GEORGIA

The University of Georgia seeks an internationally recognized distinguished scholar to provide leadership to further the development of water quality research and education programs related to sustainable economic development in Georgia. This eminent scholar will be responsible for leadership in the development of interdisciplinary teams and programs as part of the Georgia Research Alliance to address water quality technology associated with principal economic sectors and large associated with principal economic sectors and large water-use industries of Georgia. Confidential nomina-tions and applications, curriculum vitae, publications, and names of five references should be submitted to: Dr. Arnett C. Mace, Jr., Dean and Chair, Search and Screening Committee, Warnell School of Forest Re-sources, The University of Georgia, Athens, GA 30602, by 1 July 1992. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

TOXICOLOGY REGULATORY SPECIALIST

FMC Corporation, a Fortune 150 international machinery and chemical corporation, has an opening for a Mammalian Toxicologist at our Chemical Research and Development Center located in Princeton, NJ.

Responsibilities will include evaluating and interpreting data from mammalian toxicology programs; summarizing toxicology data for regulatory agencies; meeting FDA/EPA FIFRA & TSCA/EEC and other international regulatory requirements for new and existing products; preparing risk assessments; assisting in the compilation and dissemination of technical information; acting as study monitor for mammalian toxicology studies for industrial and agricultural chemicals. Position requires at least a MS in Toxicology or related field with industrial experience preferred; familiarity with international toxicology regulations and GLPs a plus.

FMC offers excellent salary and benefits package. Please send resume with salary requirements to: FMC CORPORATION, Dept. 92-16, P.O. Box 8, Princeton, NJ 08543. ATTN: Personnel Manager. Equal Opportunity Employer, M/F.

FMC®

ROCHE

POSTDOCTORAL POSITIONS

Fellowships are available for postdoctoral study in the newly established Department of Gene Regulation. The Roche Institute is an independent academic research institute located in a suburban setting 10 miles west of New York City. Positions are available in the following laboratories:

Stephen Dalton, PhD: Regulation of yeast cell cycle transcription, analysis of protein-protein interactions in cell cycle control.

Paul Lieberman, PhD: Mechanisms of transcriptional activation, interactions between activation domains and basal initiation factors, functional analysis of the TFIID complex, disruption of latency in Epstein-Barr Virus.

Craig Rosen, PhD: Regulation of human retrovirus gene expression, analysis of protein-protein interactions between viral transactivators and cellular factors, study of signal transduction pathways in yeast and higher eukaryotes.

Nancy Woychik, PhD: Regulation of mRNA transcription by RNA polymerase II and general transcription factors in *Sac charomyces cerevisiae*, genetic and biochemical analysis of RNA polymerase II subunit function.

Interested candidates should send curriculum vitae and a summary of research interests to the attention of one of the members listed above at the Department of Gene Regulation, Roche Institute of Molecular Biology, 340 Kingsland St., Nutley, NJ 07110. We are an equal opportunity employer.



Roche Institute of Molecular Biology Holfmann-La Roche Inc.

PROKARYOTIC EXPRESSION SCIENTIST

Cangene Corporation, a publicly-listed genetic engineering company whose principal activities are the development of biopharmaceutical therapeutics and nucleic acid-based diagnostics, seeks an outstanding individual to fill a challenging position within our research group.

The selected candidate, joining a team involved with optimization of Cangene's NASBA™ process through the genetic engineering of enzymes, will have:

- A Ph.D. (Biochemistry preferred) with post-graduate background in molecular biology, biochemistry or microbiology.
- At least three years experience with gene expression in bacteria, construction of expression vectors and techniques of *in vitro* mutagenesis for the production of thermostable enzymes.
- Sound written and verbal communication skills.

A background with heterologous expression in thermophilic bacteria and nucleic acid enzymology would be advantageous.

Located near Toronto, Cangene offers an attractive remuneration package, including a fully-paid healthcare program, and moving expenses.

Candidates are required to submit, in strictest confidence, quoting file #0310, their curriculum vitae and the names of three referees to: Manager, Human Resources, Cangene Corporation, 3403 American Drive, Mississauga, Ontario, Canada L4V 1T4.



ASSISTANT DIRECTOR

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, has an opportunity for an experienced Toxicologist to lead its General Toxicology Unit

in the Department of Toxicology, U.S. The successful candidate will be responsible for planning, organizing and directing the activities of the General Toxicology Unit; supervisor technical staff; develop strategies for defining the toxicity profile of new compounds; and serve as study director on development compounds.

Requirements include a D.V.M./Ph.D. in Toxicology or related field and a minimum of three years of relevant experience; excellent managerial, interpersonal and communication skills; a background in toxicology research and knowledge of GLP required.

SmithKline Beecham offers a competitive compensation and benefits package and a stimulating team environment. For confidential consideration, send your resume to: H.R. McConnell, M039, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. Equal Opportunity Employer, M/F/H/V.



POSITIONS OPEN

VICTORIA UNIVERSITY OF WELLINGTON PROFESSOR OF PLANT SCIENCE

Applications are invited for the above post in the School of Biological Sciences, available from 1 February 1993. The School teaches a wide range of courses including botany and related biological sciences. Relevant research interests include biological conservation, marine biology, plant taxonomy and physiology, and applied aspects of biochemistry and molecular biology. Candidates should have an established reputation in some field of plant science. Applications will be welcome from those with interests in any area of the subject, but particularly from those with research experience at the cellular and molecular level. The professor will take a leadership role in research and teaching, will be committed to excellence in teaching and will share some administrative responsibilities within the school. Initial inquiries may be made to the: **Chairperson of the School of Biological Sciences, Dr. J. R. H. Andrews (FAX: +64 4471 5331).** Conditions of appointment and method of application available from the: **Appointments Admin**istrator, **Victoria University of Wellington, P.O. Box 600, Wellington, New Zealand, FAX: +64 4 495 5238; email: munroa@matai.vuw.ac.nz. Closing date for applications 19 June 1992.** *The University is an Equal Opportunity Employer.*



DIRECTOR OF RESEARCH

The Department of Otolaryngology-Head and Neck Surgery at Saint Louis University School of Medicine currently has a full-time faculty position available for a director of research. The successful candidate will have a Ph.D. or equivalent degree, have demonstrated an ability to successfully complete and obtain independent research grants, and be experienced in basic science disciplines related to otolaryngology-head and neck surgery. Salary and academic rank will be commensurate with qualifications. Send curriculum vitae to: Dr. Michael D. Maves, Professor and Chairman, Department of Otolaryngol ogy-Head and Neck Surgery, Saint Louis University Medical Center, 3635 Vista Avenue at Grand Boulevard, Saint Louis, MO 63110. Saint Louis University is an Equal Opportunity Employer. Minorities and women encouraged to apply.

CHAIRPERSON DEPARTMENT OF PATHOLOGY LOYOLA UNIVERSITY MEDICAL SCHOOL 2160 SOUTH FIRST AVENUE MAYWOOD, IL 60153

Applications are invited for the position of **PROFES-SOR** and **CHAIRPERSON** of the Department of Pathology at Loyola University Medical School, Maywood, Illinois. Candidates must have a distinguished record of scholarship and professional achievement, proven leadership and administrative ability. Send applications and curriculum vitae to the Chairman of the Search Committee:

Robert J. Freeark, M.D. Chairman, Department of Surgery Loyola University Medical Center 2160 South First Avenue Maywood, IL 60153

An Affirmative Action/Equal Opportunity Employer.

COORDINATOR FOR EDUCATION, THE ORGANIZATION FOR TROPICAL STUDIES (OTS), a non-profit international consortium of universities and research institutions, seeks a full-time staff member to administer the organization's program of intensive field courses. The position is based at the U.S. office of OTS at Duke University and will coordinate with staff in OTS' Central American office to implement courses and workshops taught in Costa Rica for U.S. and Latin American students, professionals, and policy-makers. Academic background in biology, natural resources, agroecology or related fields is required; Ph.D. preferred; OTS course experience highly desirable. Bilingual communication skills are essential. Experience in administration and fund raising is desirable. Applicants should send letter of interest, curriculum vitae and names of four references to: Donald E. Stone, Executive Director, OTS, P.O. Box DM, Duke Station, Durham, NC 27706 (telephone: 919-684-5774). Deadline: 15 May 1992. Equal Opportunity/Affirmative Action Employer. The University of Wisconsin Medical School, Madison, is searching for a CHAIRPERSON for the Department of Pharmacology to succeed Professor Lowell Hokin, who has provided 24 years of strong leadership. We seek a person who is able to give outstanding scientific, academic and administrative leadership to all aspects of the department. Send reply with curriculum vitae to: Professor Richard Moss, Chair of the Search Committee, c/o Margie Martin, 1205 Medical Sciences Center, 1300 University Avenue, Madison, WI 53706. To ensure full consideration, applications should arrive by 30 May 1992. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. The University of Wisconsin System is required to release, within 2 days of a request after the deadline for receipt of nominations and applications, a combined list of all nominees and applicants without differentiation.

CURATOR OF MAMMALOGY. The Denver Museum of Natural History is seeking a curator of mammalogy to begin 1 September 1992. Duties include development and curation of mammal collections, development of an active, collection-based research program (preferably systematics, biogeography, ecomorphology), and significant involvement in exhibitry and public programming. Ph.D., at least 2 years of curatorial experience, evidence of successful grantsmanship, strong communication skills and demonstrated commitment to public education required. Statement of interest, curriculum vitae, and three letters of recommendation to: Dr. Charles R. Preston, Search Committee Chairman, Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, CO 80205, by 30 June 1992.

ASSISTANT DEAN (CHAIR) of the Basic Sciences Division. Responsible for administration of the departments of anatomy, biochemistry, immunology, microbiology, pathology, pharmacology and physiology, and development of curricula coordinated with clinical sciences. Ph.D. in a biomedical science required; experience in administration, teaching, curriculum development; and history of funded research in basic and/or clinical studies. Opportunities for clinical research. The New York College of Podiatric Medicine (NYCPM) is a 4-year postgraduate institution with 450 doctoral students in podiatry. Send curriculum vitae by 1 June 1992 to: Jean Berkoff, Director of Human Resources, NY-CPM, 53 East 124th Street, New York, NY 10035.

DEPARTMENT HEAD, FOREST PRODUCTS COLLEGE OF FORESTRY OREGON STATE UNIVERSITY (OSU)

A full-time, 12-month appointment at the rank of professor with indefinite tenure. Salary competitive. Starting date negotiable. Requires a doctoral degree in wood science, engineering, or related science; thorough knowledge of forest products; the ability to lead and to interact with industry and academic groups. Applications, including résumé and names, addresses,

Applications, including résumé and names, addresses, and telephone numbers of three references, will be received until 1 August 1992, or until the position is filled, and may be directed to: Dr. Jeffrey J. Morrell, Chair, Forest Products Search Committee, College of Forestry, Oregon State University, Corvallis, OR 97331-5704. OSU is an An Affirmative Action/Equal Opportunity Employer and is responsive to the needs of dual career couples.

ECOLOGIST/HEAD OF THE DEPARTMENT OF BIOLOGY WASHINGTON AND LEE UNIVERSITY

The department invites applications for the position of head of the department with teaching and research responsibilities in the areas of ecology and zoology. In addition to administrative responsibilities, the appointee will be expected to teach a course in ecology, a course in zoology and a third course to be determined by departmental needs and the applicant's interest. All courses will have a laboratory component. Applicants should be established research ecologists presently at the associate or full professor rank and willing to work with undergraduate students as the department offers no graduate degrees. Salary is competitive and start-up funds are available. Send letter of application, curriculum vitae and the names of three persons to whom we may write concerning qualifications to: Dr. Thomas G. Nye, Department of Biology, Washington and Lee University, Lexington, VA 24450. Closing date for applications is 1 November 1992. Washington and Lee is an Equal Opportunity Employer.

PROGRAM DIRECTOR

The Seatuck Research Program, a nonprofit cooperative research program of the Seatuck Foundation and U.S. Fish and Wildlife Service, is seeking a Director to provide academic and administrative oversight for biological conservation research, management, and policy relating to natural resources in urbanizing environments.

Responsibilities include staff supervision, program development, inter-governmental relations, and fundraising. Ph.D. and demonstrated scholarly activity required. Prior administrative and fundraising experience preferred. Salary commensurate with experience. Deadline 15 May 1992.

Direct inquiries to:

Search Committee Seatuck Research Program P.O. Box 31 Islip, NY 11751

MOLECULAR/CELL BIOLOGIST THE BEN MAY INSTITUTE THE UNIVERSITY OF CHICAGO

The Ben May Institute of the University of Chicago is seeking applicants for a junior or intermediate level **FACULITY POSITION**. We are developing a strong program in the molecular aspects of the control of cell growth and differentiation. We are seeking an outstanding individual who is using the approaches of molecular biology or cell physiology to examine basic mechanisms of cell signaling events or regulation of gene expression. Existing related research programs in the Ben May Institute include molecular and genetic aspects of receptor signaling mechanisms involving steroid hormone receptors, growth factor receptors, and T lymphocyte activation and regulation. Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of three references should be sent to: Dr. Frank Fitch, Director, Ben May Institute MC6027, THE UNIVERSITY OF CHICAGO, 5841 South Maryland Avenue, Chicago, IL 60637. An Affirmative Action/Equal Opportunity Employer.

Nova University's Oceanographic Center invites applications for a permanent FACULTY POSITION in PHYSICAL OCEANOGRAPHY. Experimentalists are preferred, but theoreticians will also be considered. The position requires a Ph.D. in oceanography and the ability to develop an independent research program supported by extramural grants and contracts. Limited teaching opportunities are available at both graduate and undergraduate levels to supplement research salary. Submit curriculum vitae, statement of research and teaching interests, and names of three references before 29 May 1992 to: Dr. Julian P. McCreary, Jr., Dean and Director, Nova University Oceanographic Center, 8000 North Ocean Drive, Dania, FL 33004. Nova University is an Equal Opportunity/Affirmative Action Employer. Minorities are encouraged to apply.

COMPUTATIONAL CHEMIST

The Chemistry Department of Washington University has an opening for a staff position in computational chemistry. The duties include consultation with research groups in the chemistry department in the use of molecular modeling, dynamic simulation, quantum chemical calculations, molecular mechanics, etc. for both research and teaching purposes. The position includes ample opportunity for both individual and collaborative research. The position requires a Ph.D. in chemistry or a related field with experience in computational chemistry. Salary is commensurate with qualifications. Applicants should send curriculum vitae and have three letters of recommendation sent to: Computational Chemist Search Committee, Department of Chemistry, Washington University, One Brookings Drive, St. Louis, MO 63130 by 15 July 1992. Washington University is an Equal Opportunity/Affirmative Action Employer.

> More than 150,000 people paid to see your ad in SCIENCE. Classified Advertising Department Telephone: 202-326-6555 FAX: 202-682-0816

Bio-Research Laboratories is one of the world's leading contract laboratories in the field of life sciences and is located on 30 acres just outside cosmopolitan Montreal. The company undertakes preclinical testing with a staff of 450.

Veterinary Neuropathologist

The main responsibility of the successful applicant will be pathological evaluations of neurotoxicity studies. You will participate in the development of new methods in neuropathology and will work in collaboration with other neurotoxicology specialists. Other responsibilities will include the interpretation of studies of laboratory animals to evaluate the potential toxicity of pharmaceuticals, chemicals and biotechnology products.

You should possess a DVM or equivalent, along with an M.Sc., D.V.Sc. or PhD in Anatomic Pathology. Board certification or eligibility for certification with the ACVP would be a definite asset.

Veterinary Pathologist

Responsibilities will include the interpretation of studies on animals to evaluate the toxicity of potential new pharmaceuticals, agrochemical and biotechnology products. The successful candidate will also participate in a diagnostic pathology service offered to veterinarians. Additionally, participation in neurotoxicology and immunotoxicology research programs is anticipated.

You should possess a DVM, along with an M.Sc. or D.V.Sc. in Pathology. Board certification or eligibility for certification with the ACVP would be preferred. Experience in neuropathology would be an asset.

Senior Research Scientist Specialty Toxicology

This challenging and unique career opportunity is available in our rapidly growing Specialty Toxicology group. The ideal candidate will interact with highly trained scientific staff and technical personnel in developing and applying novel methodologies for GLP safety evaluations of potential new pharmaceutical and biotechnology products. The individual will be expected to assist in the management of the department.

The sought candidate is a graduate of the biological sciences with at least ten years' or relevant study director experience in toxicology, preferably in the pharmaceutical and contract laboratory industries. As considerable client interaction will be required in the design and interpretation of toxicity and pharmacology studies, a high level of energy is a must, and strong interpersonal skills will be essential in this growth position.



Specialist in Xenobiotic Metabolism

The Metabolism Department of Bio-Research Laboratories is seeking a scientist to supervise preclinical ADME projects. The position calls for a PhD in Pharmaceutical Sciences or Medicinal Chemistry and ideally postdoctoral experience in the drug metabolism field. In addition, you must have a strong background in radiometric techniques and bioanalytical methods of analysis, as well as excellent oral and written communication skills. Knowledge of GLP regulations would be an asset.

Opportunities in Neurotoxicology Behavioral Toxicologist

We are seeking someone to join a team of scientists working for our rapidly expanding neurotoxicology business. The successful applicant will be required to conduct safety toxicity and efficacity studies for the pharmaceutical, chemical and biotechnology industries and to develop further methods for behavioral assessments of a full range of laboratory animal species.

You should possess a PhD or DVM and experience in behavioral toxicology.

Neurophysiologist

We are seeking a scientist to develop an electrodiagnostic service. The service is intended to complement the existing behavior, neuropathology and neurochemistry capabilities of the company. Once methods are developed, the individual will be expected to conduct commercial studies for the pharmaceutical, biotechnology and chemical industries. This is an exciting opportunity with great potential for someone with energy and drive.

You should possess a PhD or DVM and experience with electrodiagnostic techniques.

These positions are accompanied by an attractive compensation package, commensurate with experience, as well as a relocation allowance. Please forward your résumé to:

Human Resources Department Bio-Research Laboratories Ltd. 87 Senneville Road Senneville, Quebec H9X 3R3

We are an equal opportunity employer.

The quality of R&D depends on the quality of the resources.

Research Scientists

88X

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There are a number of components to success in the pharmaceutical research process. The most important is our people. At Schering-Plough, we hire the best talent in our industry. Then, we provide them with the technical resources they need to do their best work: the most advanced instrumentation; the latest computerized systems; modern lab facilities. Finally, we spend over \$400 million annually on R&D, and are completing a \$300 million R&D facility.

Commitment of this scope has helped us achieve over \$3 billion in annual sales around the world.

HEAD SCIENTIST Protein NMR Spectroscopy

To head up our research effort in protein NMR spectroscopy, we are seeking an individual with detailed knowledge of protein structural relationships and NMR of proteins and peptides to participate in the design and development of research protocols for a variety of biophysical experiments.

Our current technology includes seven NMR spectrometers from 200-500 MHz and a 600 MHz spectrometer now on order, a variety of SPARC and SGI data stations and a Convex C-240 superminicomputer for molecular modelling applications.

Our ideal candidate will have a Ph.D. in Biophysics, Chemistry or other relevant discipline and at least 5 years' experience at a leading institution

including familiarity with modern techniques for molecular modelling and structure generation from NMR data. Respond to #92-04.

SENIOR SCIENTIST Immunology

Become involved in cytokine regulation of T and B cell maturation and activation. To be successful, you will possess relevant Ph.D. and 2-4 years' experience in cytokine biology and cell immunology. Experience in molecular techniques such as northern analysis and PCR is a definite plus. Respond to #92-13.

We offer highly competitive salaries and an excellent benefits package. Please send resume to appropriate #, attn: George Czuba, Schering-Plough Research Institute, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.





DISCOVERY RESEARCH

Our client, a long-established and highly reputed international pharmaceutical firm, has retained Sampson, Neill & Wilkins to fill this challenging key position at their state-of-the-art Corporate/R&D Center in the Northeast. Choice of desirable life styles, urban to rural.

This newly defined position reports to the head of R&D and will manage a staff of over 150 scientific personnel, 40% of whom hold Ph.D. degrees. The staff, which will grow to over 200, is organized into Biochemistry, Molecular Biology, Medicinal Chemistry, Immunology, and Pharmacology Departments. The main thrust of the research is directed toward medical disorders which have a virology or immunology basis.

The successful candidate will have an M.D. and/or Ph.D degree with a significant and published record of accomplishment conducting and directing relevant research with sizable research groups. Scientific training in biochemistry and molecular biology with research interests in virology or immunology based on concepts of modern biology would be most appropriate.

This is a position with superior compensation and advancement opportunities. To inquire further, please submit your curriculum vitae (including bibliography) in confidence to William T. Jackson, Vice President.



Sampson, Neill & Wilkins, Inc. 543 Valley Road, Upper Montclair, NJ 07043 (201) 783-9600 Fax: (201) 746-0414 Equal Opportunity Employer

DIRECTOR OF MEDICAL RESEARCH

Marshfield Clinic, a 400-physician multispecialty notfor-profit group practice, is seeking a M.D. or Ph.D. Director for its expanding Medical Research Foundation. Experience in medical research plus management and excellent communication skills are required. The Director is responsible for the planning, development, implementation and evaluation of basic and applied clinical research programs. He or she reports directly to the President of the Marshfield Clinic.

Founded in 1959, the Research Foundation has grown significantly and currently includes five complete Basic Science Research Laboratories, the Department of Epidemiology and Biostatistics, the National Farm Medicine Center, the Rural Health Research Center, ongoing clinical research projects and other areas of study. This outstanding opportunity is located in one of the Midwest's best small cities.

Send curriculum vitae with cover letter to:

MARSHFIELD CLINIC

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William O. Myers, M.D. Chairman Search Committee 1000 North Oak Avenue Marshfield, WI 54449



Wyeth-Ayerst Research We're building on our success

Wyeth-Ayerst Laboratories is a Division of Fortune 100 American Home Products Corporation, a leading manufacturer and marketer of health care products with multi-billion dollar annual sales and an impressive record of growth and profitability.

As a GLOBAL research-based pharmaceutical company, we are committed to helping people lead healthier lives through innovative pharmaceutical and nutritional products. It is from this commitment and position of strength that we move forward with a major expansion of our research and development activities.

Ph.D. SCIENTIST Immunology

Join our team of scientists in autoimmunity research and participate in the research and drug discovery activities in the area of immunosuppression and autoimmunity. Ideally, you will possess the scientific acumen and experience to capitalize and enhance therapeutic opportunities as well as to develop the next generation of immunosuppressive agents to rapamycin. Your background must include a doctoral level degree with a minimum of 5 years post-doctoral immunological experience. **Position #321.**

ELECTROPHYSIOLOGIST Cardiovascular & Metabolic Disorders

Your primary responsibilities will include conducting studies into the mechanisms of K+ channel block and activation by novel chemical agents as a basis for new drug discovery. Candidates should possess a BS/MS in Physiology or Biomedical Engineering and a minimum of 2 plus years experience conducting electrophysiology studies. Experience with computer based data acquisition analysis, dissociating/maintaining single cells from cardiac or neural preparations, and the measurement of whole cell currents are necessary. **Position #403.**

PHARMACOLOGIST Pulmonary

This position will be responsible for initiating, designing and completing various pulmonary pharmacologic studies for the testing of potential anti-asthma compounds in vivo. This will include analyzing data and statistical tests, as well as preparing and presenting results. Will be involved in new model development and assist with the overall operation of the laboratory. We seek an individual with a BS/MS degree in biological sciences and a minimum of 4 plus years experience conducting in vivo pharmacological, physiological or immunological experiments related to pulmonary and/or cardiovascular research. Candidate should have experience with in vivo physiological monitoring techniques. **Position #465.**

MOLECULAR BIOLOGIST Cardiovascular & Metabolic Disorders

Research will include the application of a broad spectrum of techniques in recombinant DNA. These techniques will be applied to isolation, analysis, and expression of genes of potential pharmaceutical interest in Cardiovascular Research. The successful candidate should possess a BS/MS and a minimum of 2 plus years laboratory experience in molecular biology. Experience in performing tissue culture, gene cloning, DNA sequencing, southern/northern blot analysis and gene expression in either prokaryotic or mammalian systems is required. Experience in situ hybridization and/or oocyte expression techniques desirable. **Position #520.**

We offer excellent compensation and benefits. Our research laboratory is just minutes away from Princeton University and convenient to many other cultural, educational and leisure activities. Please forward resume with salary requirements (indicating position #) to: WYETH-AYERST RESEARCH, Personnel Manager, CN 8000, Princeton, NJ 08543-8000. An equal opportunity employer, M/F/D/V.



The recent opening of the new Glaxo Inc. Girolami Research Institute, located in Research Triangle Park, NC, represents Glaxo's continued commitment in the pharmaceutical industry to the discovery of drugs for unmet patient needs. Scientists engaged in Glaxo's expanding research and development programs at the Center have a premier facility in which to work.

The expansion of our **Transgenic** Animal Section, which includes a 6000 box full barrier mouse facility and tissue culture rooms, has created immediate openings for the following individuals.

SR. SCIENTIST

Transgenics

This highly challenging position will assist in developing human disease models using embryonic stem cell technology. Individual will use both knockout and replacement techniques and develop new approaches to create models in the areas of metabolic diseases, inflammation and cancer.

This is an entry-level Ph.D. opening requiring a minimum of 3 years postdoctoral experience in mouse development, ES cell technology, transgenic mice, and one of the above therapeutic areas. Please refer to Job # 9116-MR-SC on all resumes.

ASSOCIATE SCIENTISTS Transgenics (2 Openings)

One opening will provide support to the Sr. Scientist working with ES cells. A minimum of 2 years experience in tissue culture and molecular biology is required.

The second opening will provide support to ongoing projects using traditional transgenics. A minimum of 1-3 years experience in molecular biology in cloning, Northerns, RNase protection assays, and Westerns is required. Please refer to Job # 9116-SM-SC on all resumes.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and filness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume, INDICAT-ING THE CORRESPONDING JOB # and salary bistory, to: Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.



POSITIONS OPEN

BOTANY FACULTY POSITION

Applications invited for 9-month fixed term appointment beginning September 1992. Ph.D. in botany and college teaching experience required. Responsibilities include teaching general botany, crop production for agribusiness management majors, freshman biology courses and upper division botany electives. The successful candidate must have a strong commitment to undergraduate teaching and have the ability to manage the departmental greenhouse. Salary and rank commensurate with experience. Send application letter, curriculum vitae, transcripts and three letters of reference to: Director of Personnel Services, Southwest State University, Marshall, MN 56258. Applicant screening begins 7 May 1992. Southwest State University is an Equal Opportunity Educator and Employer and encourages applications from women and persons of color.

FACULTY LEVEL RESEARCH POSITION available for studies on cell-matrix interactions involving extra cellular matrix proteins and protein-based polymers (including elastomeric polypeptide matrices), chemotaxis and cell adhesion. Interested parties please send résumé to: Dr. Dan W. Urry, Director, Laboratory of Molecular Biophysics, The University of Alabama at Birmingham, VH300, University Station, Birmingham, AL 35294– 0019; telephone: 205-934-4177 or 934-3543. An Equal Opportunity/Affirmative Action Employer.

STAFF ASSOCIATE

Nontenure-track staff position in the Department of Physiology and Cellular Biophysics. Candidates must possess bachelor's degree or equivalent and at least 5 years of experience in cell culture, molecular biology, and protein chemistry. Send application with full curriculum vitae to: Dr. David M. Stern, Department of Physiology and Cellular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.

THE CENTER FOR COGNITIVE SCIENCE at New York University (NYU) invites applications for a **TENURE-TRACK POSITION** (level open) from candidates with good computational or mathematical skills, and a strong interdisciplinary research program. Preference will be given to the following areas: neural/ adaptive networks, pattern recognition, motor control, learning and memory, and judgment and decision-making. Send a letter of interest, résumé, three letters of recommendation and representative publications to: Cognitive Sciences Search Committee, 6 Washington Place, 8th Floor, New York University, New York, NY 10003. NYU encourages applications from women and members of minority groups.

POSTDOCTORAL POSITION available immediately to study the molecular genetics and biochemistry of antiviral-resistant human immunodeficiency virus. Outstanding department of molecular virologists. Two-year position funded by the Department of Veterans Affairs. U.S. Citizenship or permanent resident status required. Send curriculum vitae and names of three references to: Dr. John W. Mellors, Department of Infectious Diseases and Microbiology, 403 Parran Hall, Graduate School of Public Health, 130 DeSoto Street, Pittsburgh, PA 15261.

POSTDOCTORAL POSITION DUKE UNIVERSITY

Postdoctoral position available at Duke University Medical Center, Department of Medicine. Research involves molecular biology of cellular senescence and role of protein kinase C and lipid second messengers in cellular aging. Successful candidate should be trained in molecular biology/biochemistry. Send curriculum vitae and three letters of reference to: Drs. Lina M. Obeid and Yusuf A. Hannun, Duke University Medical Center, Box 3345, Durham, NC 27710.

POSTDOCTORAL POSITION, BOULDER, COLORADO. Immediate opening for 2-year position to study completion of chromosome replication and cell division in *E. coli* (See *New Biologist* 3, 799). Requires Ph.D. with background in molecular biology. Send curriculum vitae and names of three references to: Dr. **Peter Kuempel, MCDB Box 347, University of Colorado, Boulder, CO 80309.** The University of Colorado is an Affirmative Action/Equal Opportunity Employer.

SCIENCE • VOL. 256 • 24 APRIL 1992

POSITIONS OPEN

POSTDOCTORAL POSITION IN MOLECU-LAR AND CELL BIOLOGY. Available immediately to investigate mechanisms of regulation of lipoprotein lipase, hepatic lipase and lipase binding-heparan sulfate proteoglycans at the transcriptional and posttranscriptional levels. Topics studied include: dissection of promoter regions, purification, cloning and characterization of transcription factors, tissue-specific expression. Experience with recombinant DNA necessary. Send résumé and names of three references to: Dr. Andre Bensadoun, Professor, Division of Biological Sciences and Nutritional Biochemistry, 321 Savage Hall, Cornell University, Ithaca, NY 14853. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION, MOLECULAR BIOLOGY. Available immediately to study the molecular structure and function of membrane molecules in lung tumors and bronchial epithelial cells. Experience with recombinant DNA and mammalian expression systems required. The position is available immediately. Send curriculum vitae, summary of past work and the names of three references to: Dr. Rolf Stahel, Laboratory of Oncology, University Hospital, Haeldeliweg 4, CH-8044 Zuerich, Switzerland. FAX: 0 1-257 28 72.

POSTDOCTORAL PROGRAM IN DIABETES RESEARCH AT WASHINGTON UNIVERSITY SCHOOL OF MEDICINE ST. LOUIS, MISSOURI

Postdoctoral positions are available in the use of modern cellular, molecular and immunological techniques to investigate diabetes and related endocrine diseases. Trainees will be offered opportunities in the following areas of diabetes research: cellular mechanisms in insulin secretion from β -cells, lipid-derived mediators and signal transduction-processes including ionic events regulating β -cell cytosolic [Ca²⁺]_i, islet transplantation, autoimmunity and effects of IL-1 and other cytokines, and vascular and neurological complications. A position is currently open to study the role of IL-1, other cytokines and nitric oxide in the pathogenesis of insulindependent diabetes mellitus. U.S. citizenship or permanent resident status is required. Salary on NIH scale. For information, please contact: Dr. Michael L. McDaniel, Box 8118, Washington University School of Medicine, Department of Pathology, St. Louis, MO 63110. Telephone: 314-362-7435. Washington University is an Equal Opportunity Employer. We are particularly interested in minority applicants.

POSTDOCTORAL POSITION IN IMMUNOL-OGY/INFECTIOUS DISEASE. To study host defenses mediated by a calcium and zinc binding protein of neutrophils. Strong background in the methodology for isolation and purification of proteins desired. Salary is negotiable. Send curriculum vitae and names and addresses of three references to: Dr. Peter G. Sohnle, Medical College of Wisconsin, Research Service/151, Veterans Administration Medical Center, Milwaukee, WI 53295. The Medical College of Wisconsin is an Equal Opportunity/Affirmative Action Employer, M/F/D.

PLANT MOLECULAR BIOLOGY

POSTDOCTORAL POSITION available August 1992 for research in studying transcriptional regulatory elements and protein factors for the bean seed storage protein phaseolin gene. A Ph.D. in plant molecular biology, biochemistry or genetics. Salary \$24,000 per year. Dr. Norimoto Murai, Department of Plant Pathology and Crop Physiology, Louisiana State University, Baton Rouge, LA 70803. Telephone: 504-388-1380. An Equal Opportunity Employer.

POSTDOCTORAL POSITION—Massachusetts General Hospital and Harvard Medical School, Boston. Position in antibody engineering available summer 1992 for candidates with Ph.D. or M.D. Experience in molecular biology, immunochemistry, protein chemistry appropriate. Research involves structural and functional characterization of mutant antibody combining sites at protein and DNA level. Training includes immunochemistry, molecular biology, protein chemistry in interdisciplinary group. Send curriculum vitae, statement of research interests, names of three references to: Dr. Michael N. Margolies, Jackson 14, Massachusetts General Hospital, Boston, MA 02114. Telephone: 617-726-8552, FAX: 617-726-4811.

NEURODEGENERATIVE DISEASES

Cephalon, Inc. seeks two Ph.D. research scientists to join interdisciplinary programs focused on therapeutic approaches to neurodegenerative diseases.

Signal Transduction

The research effort is directed at elucidating the signal transduction mechanisms activated by certain neurotrophic molecules. The successful candidate will have at least two years postdoctoral experience in growth factor/receptor interactions or intracellular second messenger systems, and a solid background in biochemistry and cell biology techniques. Prior experience in neuronal systems is helpful but not required. Send curriculum vitae and names and addresses of three references to Dr. Craig Dionne.

Proteases/Protease Inhibitors

The role of calcium-activated proteases in mediating neurodegenerative processes is being investigated. Combined biochemical, cell biological, and immunochemical approaches are being undertaken to study protease function and develop therapeutically useful protease inhibitors. The position offers extensive collaboration with Cephalon's Chemistry department. Candidates with at least two years experience with proteases and their inhibitors should send applications to Dr. Robert Siman.

Cephalon offers a highly interactive, stimulating research environment, and new, extensive laboratory facilities located in suburban Philadelphia. The company provides excellent compensation and benefits, including a 401K plan, and a generous insurance and stock option package.

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The Division of Research Grants National Institutes of Health

Health Scientist Administrators

Invites inquiries into special employment opportunities as Health Scientist Administrators of study sections in various scientific fields. Study sections, managed by health Scientist Administrators, known as Scientific Review Administrators, provide the initial review for technical and scientific merit of research grant applications submitted to NIH.

We are seeking individuals with proven independent research experience in the health-related and social sciences. Immediate needs are in the areas of: Immunology, Dental Sciences (physical, biological, clinical and behavioral), Neurosciences, Clinical Sciences, Biological Sciences and Behavioral Sciences, but scientists in other health-related areas are also encouraged to apply. Individuals must be U.S. citizens and have a Ph.D. degree or equivalent in an academic field of health or pertinent sciences allied to health or health-related research. A Health Scientist Administrator Notice of Rating from the Office of Special Examiner, NIH, is required.

Further information and qualification requirements can be obtained by contacting the:

Personnel Office Division of Research Grants National Institutes of Health 5333 Westbard Avenue Room 438 Bethesda, MD 20892



NIH is an Equal Opportunity Employer

POSTDOCTORAL ASSOCIATE POSITIONS THE UNIVERSITY OF IOWA

Please contact the appropriate department to express your specific interest:

ANATOMY—Dr. Joe Dan Coulter, Professor and Head, Bowen Science Building.

ANESTHESIA-John H. Tinker, M.D., Professor and Head.

BIOCHEMISTRY—Alan G. Goodridge, Professor and Head, Bowen Science Building.

DERMATOLOGY—John S. Strauss, M.D., Professor and Head; or Kenzo Sato, M.D., Professor; 2 Boyd Tower, General Hospital. A postdoctoral research associate for the study of electrophysiology of cultured cells.

INTERNAL MEDICINE—Openings available in all disciplines in the Internal Medicine Department, College of Medicine, University of Iowa. Contact Francois M. Abboud, M.D. Professor and Head; or Darris Goerdt, Administrator. Phone 319/356-2850.

MICROBIOLOGY—Dr. J. Markovetz, Professor and Acting Head, Bowen Science Building.

NEUROLOGY—Postdoctoral associate positions are available in Cognitive Neuroscience, Neurophysiology, Neurobiology, Cerebrovascular Disease, Epilepsy, Sleep, and Neuromuscular Diseases. Antonio R. Damasio, M.D., Professor and Head, 2151 Roy Carver Pavilion.

PATHOLOGY—Dr. Richard G. Lynch, Professor and Chairman, 144 Medical Laboratories. Research activity in all areas of pathology.

PEDIATRICS—Dr. Frank H. Morriss, M.D., Professor and Head. **PHARMACOLOGY**—Dr. P. Michael Conn, Chairman and Head, Bowen Science Building. Openings available in all areas of pharmacology and toxicology.

A Ph.D. or equivalent is required. Desirable qualifications are based on Project Investigator's interest for research. Women and minorities are encouraged to apply. The University of Iowa, College of Medicine, Iowa City, Iowa, 52242, is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION/ BACULOVIRUSES

Available immediately, two positions to study: (a) the biochemical and molecular basis of baculovirus pathogenesis, specifically focusing on virulence gene products and their interactions with the insect midgut epithelium (Dr. R. Granados lab); (b) functional characterization of a baculovirus fusion protein, with studies involving in vitro mutagenesis and functional assays (Dr. G. Blissard lab). Experience and background in protein biochemistry, virology, or molecular/cellular biology is preferred. Send complete curriculum vitae, relevant publication reprints, and names and addresses of three references to: Dr. R. Granados, telephone: 607-254-1265, or Dr. G. Blissard, telephone: 607-254-1366, Boyce Thompson Institute at Cornell University, Tower Road, Ithaca, NY 14853–1801. An Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN NEURO-SCIENCE. One position involves the study of opioid receptors and related ion channels in midbrain dopaminergic neurons. Experience in intracellular and/or patch clamp recording is desired. The second position involves modern neuroanatomical and computer imaging analysis of diseased human brains (c.g., Alzheimer's disease, schizophrenia). Experience with neuroanatomy, histochemical staining and computer imaging is desired. Send curriculum vitae and names of three references to: Dr. D. C. German, Department of Psychiatry, University of Texas Southwestern Medical Center, Dallas, TX 75235–9070. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study glycoconjugate roles in *Dictyostelium* cellcell cohesion and structure/function relationships of the glycoconjugates. Experience in biochemistry preferred. Send curriculum vitae and names (with addresses and telephone numbers) of three referees, and foreign applicants should themselves arrange for three letters of recommendation to be sent to: Professor Ellen J. Henderson, Department of Biology, Georgetown University, Washington, DC 20057–1028. FAX: 202-687-5662.

POSITIONS OPEN

A POSTDOCTORAL POSITION is available to study the expression and function of osteopontin (a secreted glycosylated phosphoprotein) using transgenic mice. Expertise in molecular biology required. Experience with transgenic mice desirable. U.S. citizenship or permanent residence required. Send curriculum vitae and the names of three references to: Dr. Raul A. Saavedra, Harvard Medical School and The Children's Hospital, Enders 1106, 300 Longwood Avenue, Boston, MA 02115. Harvard Medical School and The Children's Hospital are Equal Opportunity Employers.

POSTDOCTORAL POSITION, MOLECULAR/ CELLULAR ENDOCRINOLOGY. Funded position to characterize cloned parathyroid hormone receptors, members of a novel G protein–linked family [*Science* 254, 1024 (1991)], in a premier, multidisciplinary laboratory that studies signal transduction/hormonal control of calcium/bone physiology. Send curriculum vitae, a brief statement of research interests, and three references to: Dr. Gino V. Segre, Endocrine Unit, Wellman 5, Massachusetts General Hospital (Harvard Medical School), Boston, MA 02114; telephone: 617-726-3966; FAX: 617-726-7543. An Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION CARDIAC PHYSIOLOGY

A postdoctoral position is available immediately for research in electrophysiology and excitation-contraction coupling of cardiac muscle. The research will involve the use of patch clamp techniques and fluorescent ion-indicators, including imaging, 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. C. William Balke or Dr. Michael R. Gold, Department of Physiology, University of Maryland at Baltimore, 660 West Redwood Street, Baltimore, MD 21201. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS, two available immediately, to study how ion channels and intracellular Ca^{2+} shape the firing characteristics of neocortical neurons and the computational role of these dynamics. Studies use voltage-clamp, fluorimetric dyes and activation of caged compounds. Experience in electrophysiology desirable. Send curriculum vitae and addresses of three references to: Dr. Alan Kay, Department Biological Sciences, University of Iowa, 138 Biology Building, Iowa City, IA 52242–1324. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION: An NIH training grant position is available immediately for training in all aspects of in vivo metabolic NMR. The training grant is available to U.S. citizens or permanent residents. Persons with a Ph.D. and/or M.D. are invited to apply. Please send curriculum vitae, relevant reprints, and three letters of reference to: Dr. John S. Leigh, The University of Pennsylvania, Basement, Blockley Hall, Philadelphia, PA 19104–6021. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE, PEANUT TRANSFORMATION. Position available immediately for collaborative project on peanut transformation. Tissue culture and molecular biology knowledge and experience required. Send curriculum vitae and names of three references to: Dr. Peggy Ozias-Akins, Department of Horticulture, University of Georgia Coastal Plain Experiment Station, P.O. Box 748, Tifton, GA 31793. Telephone: 912-386-3961. FAX: 912-386-7005.

POSTDOCTORAL POSITION available in wellestablished laboratory studying extracellular matrix components, including receptors. Special emphasis is placed on the molecular, biological and biochemical aspects of elastogenesis in blood vessels and lungs. Candidate must be eligible for NIH-funded training grant. Please send curriculum vitae and names of three references to: Dr. Carl Franzblau, Department of Biochemistry, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118. Equal Opportunity Employer.



NeXagen, Inc., a Boulder-based biotechnology company, seeks scientists to develop new approaches and algorithms for the understanding of nucleic acid structures. NeXagen research is aimed at the creation of new pharmaceutical reagents through the application of SELEX technology developed at the University of Colorado. Nucleic acid structures obtained by SELEX will be studied free in solution, within crystals, and in complexes with proteins. Previously unknown nucleic acid motifs are presently under study.

Computational Structural Biologists

Successful candidates will understand molecular mechanics and molecular dynamics. Applicants must be comfortable with mathematics and computer programming, and enjoy collaborating with molecular biologists and organic chemists. Both a Ph.D. and postdoctoral experience are required; senior-level scientists are invited to apply.

Please submit C.V., references, and a brief description of research interests and skills, and include a short note describing your capacity to establish an independent research effort in this relatively new area. NeXagen has close research ties to the University of Colorado in Boulder, and established collaborative arrangements with other strong scientists throughout the world. Submissions should be sent to the Personnel Director, NeXagen, Inc., Dept. COMP, 2860 Wilderness Place, Boulder, CO 80301.



Air Force Office of Scientific Research An Exciting Opportunity in Research Management Bioenvironmental Science

The Air Force Office of Scientific Research (AFOSR) is seeking an experienced physiologist/biologist to manage the Air Force research investment in bioenvironmental sciences (approximately \$4 million annually) within the Directorate of Life and Environmental Sciences. AFOSR's research managers are responsible for the formulation, organization, execution, evaluation, and transition to development of the entire Air Force basic research program performed at universities, industries, and its own in-house laboratories. If successful, you will identify research opportunities, communicate Air Force interests to the scientific community, evaluate proposals, review ongoing projects, and manage fiscal resources; you will represent the program and assist in the transition of research results within the Air Force and DOD.

The technical area of responsibility includes the broad area of bioenvironmental science. Program content addresses both mechanistic and environmental toxicology, as well as the biological effects of physical hazards such as non-ionizing radiation.

A PhD in physiology or a related area of biological science is highly desired. You should have first-hand research experience and broad knowledge of the latest developments in the field as demonstrated by a record of publications in refereed scientific journals. Experience, or at least a strong interest, in research management and shaping broad national research programs to meet Air Force research needs is desired.

The position is competitive civil service (GM 13-14) with a salary within the range of 46,210 to 70,987. No prior Government service is required.

To apply you should send Standard Form 171, a resume, and a list of publications to arrive by 1 June 1992 at the address:

Civilian Personnel Office 89th MSSQ/MSCA Ann. No. 92-070 ATTN: Margaret Brown Andrews AFB, MD 20331–5694

U.S. citizenship required. An equal opportunity employer.

RESEARCH ASSOCIATES

OPPORTUNITIES IN PHARMACOLOGY ELECTROPHYSIOLOGY AND BEHAVIOR

NEUROGEN CORPORATION, a young dynamic company in the field of neuroscience, is currently expanding its staff in Pharmacology, Behavioral Biology, and Electrophysiology. Neurogen scientists are developing novel therapeutics for neurological and psychiatric disorders.

PHARMACOLOGY

The position involves analyzing the *in vivo* efficacy of anxiolytic, anticonvulsant and sedative hypnotic actions of novel compounds using biochemical, physiological and behavioral techniques. A B.S. or M.Sc. in neuroscience, biology, chemistry or experimental psychology is required. A basic understanding of nervous system function, experimental design and a desire to work with lab animals (rodents) are prerequisites.

ELECTROPHYSIOLOGY

The position involves using electroencephalographic (EEG) and related techniques for preclinical research into the hypnotic actions of novel compounds. An M.Sc. degree or equivalent, with experience in EEG recording techniques, or sleep research, is required.

BEHAVIORAL BIOLOGY

The successful candidate will employ animal behavioral models designed to predict clinical effects in humans. Knowledge of experimental design and statistics, an understanding of psychopharmacology and nervous system function, and experience working with rodents are preferred. A B.S. or M.Sc. in Experimental (Physiological) Psychology or related field is necessary.

NEUROGEN is located in Branford Connecticut, close to New Haven. We offer a stimulating intellectual environment and state of the art laboratory facilities. Neurogen has a comprehensive compensation program consisting of competitive salary, equity participation, 401 (K) plan, health and medical programs, as well as relocation assistance.

Interested candidates should send resumes with cover letter indicating position of interest, to **Director of Human Resources (Science), Neurogen Corporation, 35 N.E. Industrial Road, Branford, CT, 06405.**

Neurogen is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS are now available in the Pharmacology Department at Cornell University Medical College, New York City, in the areas of molecular pharmacology and toxicology, clinical pharmacology, drug metabolism, drug/receptor interactions, and signal transduction mechanisms. Previous experience in pharmacology, biochemistry, cell biology and/or molecular biology is desirable. Faculty in the department include: Drs. W. Chan, S. Gross, L. Gudas, C. Inturrisi, R. Levi, M. Okamoto, M. Reidenberg, A. Rifkind, and H. Szeto. To apply, please send curriculum vitae and the names of three references to: Ms. C. Conti, Department of Pharmacology, Cornell University Medical College, Room E-409, 1300 York Avenue, New York, NY 10021.

THEORETICAL NEUROBIOLOGY

The Neuroscience Institute (NSI) invites applications for positions as **INSTITUTE FELLOW IN THEO-RETICAL NEUROBIOLOGY**. The NSI supports an in-house research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include both detailed and large-scale simulations of neuronal networks, the design of network automata, and models of perceptual systems. Advanced supercomputer facilities are available.

Institute fellows, who are appointed for 2 years with the possibility of renewal, receive stipends that depend on qualifications and experience. Applicants should be at the postdoctoral or assistant professor level and have a background in experimental or theoretical neuroscience or related fields.

The NSI is an independent organization that is an international center of study and research for distinguished visiting neuroscientists as well as the home of the Neurosciences Research Program. Fellows have opportunities to use the NSI's extensive facilities and to interact with visiting scientists.

Applicants should send a short statement of research interests, curriculum vitae, and the names of three references to: Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 1230 York Avenue, New York, NY 10021.

POSTDOCTORAL FELLOWSHIPS funded by the NIA will be available to Ph.D. and M.D. trained individuals through the Center for the Neurobiology of Aging at the University of Florida beginning 1 July 1992. Training is available in all areas of neuroscience relating to aging, with potential preceptors in 13 departments with expertise ranging from behavior to molecular biology. Application deadline: 29 May 1992. To apply, please contact: Dr. Edwin M. Meyer, Box 100267, University of Florida College of Medicine, Gainesville, FL 32610.

POSTDOCTORAL FELLOWSHIP HARVARD MEDICAL SCHOOL CARDIOVASCULAR DIVISION

NIH-funded position(s) available immediately to study the role of the protein kinase C gene family in vascular and megakaryocyte-lineage cells. (J. Biol. Chem., May 1992). Project includes analysis of cellular signal transduction mechanisms, including gene expression and regulation. An advanced degree in molecular biology or biochemistry with experience in standard cell biological techniques and/or recombinant DNA methodology is highly desirable. Curriculum vitae and the names of three references should be forwarded to: Dr. J. Anthony Ware, Cardiovascular Division, Harvard Medical School, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.

CLINICAL CHEMISTRY POSTDOCTORAL FELLOWSHIPS at Mayo Clinic. Seeking applicants for 2-year ComACC-approved fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by 31 October 1992 will be considered for appointment beginning in July 1993. Contact: Mary F. Burritt, Ph.D., Section of Clinical Biochemistry, Mayo Clinic, Rochester, MN 55905 for more information. Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOW MOLECULAR IMMUNOLOGY

A postdoctoral position available for studies of human immunogenetics, focused on MHC/TCR interactions, mechanisms of T-cell alloreactivity. Experience in molecular biology highly desirable. Highly interactive environment. Send curriculum vitae and names of three references to: Dr. William Kwok, Virginia Mason Research Center, 1000 Sencca Street, Seattle, WA 98101. Affirmative Action/Equal Opportunity Employer.

GRADUATE FELLOWSHIPS IN AGRICUL-TURAL MOLECULAR BIOLOGY. The Interdepartmental Graduate Program in Molecular Biology of Utah State University announces first-year graduate fellowships for students to pursue M.S. and Ph.D. degrees in molecular biology related to agriculture. Degrees are offered jointly with the Departments of Animal, Dairy, and Veterinary Sciences; Biology; Chemistry and Biochemistry; Plants, Soils and Biometeorology; Nutrition and Food Sciences; and the Program in Toxicology. Each fellowship is \$10,000 per year plus tuition from the Utah Agricultural Experiment Station. After the first year, research assistantships will come from one of 21 faculty members of the program. Application forms and information can be obtained from: Graduate Program in Molecular Biology, Utah State University, Logan, UT 84322–5305. Telephone: 801-750-2491 or 801-750-1770. FAX: 801-750-1575. USU is an Equal Opportunity/Affirmative Action Employer.

SENIOR POSTDOCTORAL FELLOW/INSTRUCTOR

A position is open for an individual with Ph.D. or M.D. training interested in molecular biology and cancer. A general background in molecular biology with specific training in one or more of the following areas is sought: biochemistry, cell biology, genetics, virology, or molecular pathogenesis. Applicants should send their curriculum vitae and names of three references to: Thomas L. Benjamin, Harvard Medical School, 200 Longwood Avenue, Room D2-230, Boston, MA 02115. Harvard Medical School is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

Position available summer or fall 1992 for the study of ischemia/reperfusion and hypoxia/reoxygenation injury of myocardium and coronary endothelium in intact animals and cell cultures. Focus is on role of intracellular iron and on leukocyte-endothelial interactions. Send letters with complete curriculum vitae, and names and addresses of three references to: Lawrence D. Horwitz, M.D., Cardiology Campus Box B-130, 4200 East 9th Avenue, Denver, CO 80262. Affirmative Action/Equal Opportunity Employer.

BUGHER FOUNDATION/AMERICAN HEART ASSOCIATION FELLOWSHIP

In molecular biology of the cardiovascular system at Brigham and Women's Hospital-Harvard Medical School. These fellowships are designed to support individuals with an M.D. or M.D./Ph.D. degree who will pursue postdoctoral training in the molecular biology of the cardiovascular system in a Brigham and Women's Hospital- or Harvard Medical School-affiliated laboratory. Stipend: \$42,000 annually. Candidates must be citizens or permanent residents of the United States. Applications from women and underrepresented minorities are strongly encouraged. For further information, contact: Bugher Executive Committee, c/o Ms. Paula McColgan, Cardiovascular Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Telephone: 617-732-5867.

POSTDOCTORAL FELLOW/RESEARCH AS-SOCIATE. Several openings available immediately to join a group working on the structure of human immune response molecules and development of DNA typing techniques for HLA testing. Candidates should have a Ph.D. or M.D., 2 years of experience with molecular biology techniques, and a background in immunology. Position and salary commensurate with experience. Send curriculum vitae and the names and addresses of three references: Dr. Carolyn Hurley, S109 Lombardi Cancer Center, Georgetown University, 3800 Reservoir Road, NW, Washington, DC 20007.

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW to conduct biochemical and molecular research on neurotropism of bacterial meningitis using techniques in protein, glycolipid and carbohydrate biochemistry. Must present reports, plan and execute experiments. Ph.D. in biochemistry and 3 years of experience required. Salary. \$2400 per month. Job and interview: Los Angeles. California. Send this ad and résumé to: Job No. ET 3433, P.O. Box 9560, Sacramento, CA 95823–0560 no later than 10 May 1992.

RESEARCH ASSOCIATE (POSTDOCTORAL) to analyze and model Columbia River fisheries: current impact of fisheries on stocks, effects of alternative management scenarios. Proven skills in modeling and analysis of large databases required. Over 2 years, salary \$32,000 to \$36,000. Send letter of interest, curriculum vitae, three references, three publications by 26 May 1992 to: Dr. James J. Anderson or Dr. Ray Hilborn, School of Fisheries, WH-10, University of Washington, Seattle, WA 98195. University of Washington is an Equal Opportunity Employer.

TWO POSTDOCTORAL RESEARCH POSI-TIONS available in molecular oncology. Studies involve (1) the identification and characterization of novel oncogenes and (2) the oncogenic interference with the processes of proliferation and differentiation in hemopoietic cells. Candidates must have a Ph.D. or M.D. with training and experience in molecular biology, retrovirology, or molecular genetics. Please send curriculum vitae and the names of three references to: Dr. Giovanni Rovera, The Wistar Institute, 3601 Spruce Street, Room 374, Philadelphia, PA 19139.



The Fermentation Biochemistry Research Unit of the National Center for Agricultural Utilization Research (NCAUR), USDA-ARS, Peoria, Illinois, is seeking **THREE POSTDOCTORAL RESEARCH ASSO-CIATES.** The goals of this interdisciplinary research group are to develop fermentation and enzyme technology for (1) conversion of agricultural commodities into biofuels, chemicals, polysaccharides, biocontrol agents, and for (2) improved rumen function. All positions are open immediately. Two associates will participate in a biofuels program using biochemical and genetic engineering approaches to develop superior ethanol-producing yeasts or anaerobic bacteria. Experience and knowledge of molecular genetics and bacterial or fungal physiology are desirable. The third associate will participate in a biocontrol program on the production, storage, and formulation of microbial agents for the control of noxious weeds. Experience and knowledge of microbial physiology and membrane structure/function are desirable.

Salary is commensurate with experience. GS11-GS12 (\$32,423 to \$38,861). Please send curriculum vitae marked 2N034 with names of three references to: Dr. R. J. Bothast, NCAUR-ARS-USDA, 1815 North University Street, Peoria, IL 61604. ARS is an Equal Opportunity Employer.

RESEARCH ASSOCIATE to join multidisciplinary group in the Department of Dermatology, at New York Medical College. The candidate will be studying purification, characterization and molecular genetics of human ferrochelatase. Ph.D. required with strong background in protein biochemistry; molecular biology experience helpful. Excellent benefits and modern facilities. Submit curriculum vitae, statement of research interests and three references to: Dr. M. Poh-Fitspatrick, Department of Dermatology, Box B, New York Medical College, Valhalla, NY 10595. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE is invited to join a laboratory affiliated with the University of Montreal, interested in the mechanisms of active calcium and sodium transport through cell membranes. Experience in membrane biochemistry, carriers, protein purification and molecular biology. Available immediately. Applicants should have postdoctoral training. Submit application to: M. Gagnan-Brunette, M.D., Hôpital Maisonneuve, 5415 Boulevard L'Assomption, Montreal, H1T2M4 Canada.



As a Postdoctoral Fellow at DuPont Merck Pharmaceutical Company, you'll have a rare **two-year** experience which will last a lifetime. As members of this powerful researchdriven organization with its significant resources and stimulating environment, our Postdoctoral fellows are given the opportunity to experience and impact the broader world of pharmaceutical research.

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POSTDOCTORAL FELLOWSHIP PROGRAM

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If you are an experienced scientific professional who qualifies for any of the following **Two-Year Postdoctoral Positions,** then be part of the future at DuPont Merck:

GROWTH FACTOR RECEPTOR/ STRUCTURAL BIOLOGY

A two-year postdoctoral fellowship is available in the area of growth factor receptor structure/function characterization. Individuals with skills in molecular biology, biophysical chemistry, medicinal chemistry, and molecular modeling are needed to strengthen ongoing efforts to characterize the interactions of growth factors with their respective receptors. Facilities exist for thermo-dynamic (titrating and scanning calorimetry) and spectroscopic characterization of protein/ligand interactions and protein folding/stability, together with an X-ray crystallographic lab with several Silicon Graphics molecular modeling workstations. Please respond to SCI/MP.

PROTEASE INHIBITORS

A two-year fellowship is available in the area of rational design of protease inhibitors. Candidates should have a strong background in synthetic organic chemistry. In addition, applicants should have an interest in the evaluation of the interaction of small molecules with proteases and in therapeutic applications of protease inhibitors. Please respond to: **SCI/CK.**

INFLAMMATORY DISEASES RESEARCH (3)

Three postdoctoral positions are available within Inflammatory Diseases Research. Ideal candidates will have a PhD, MD or DVM degree with experience and interest in inflammatory or immune-based models. Research experience should include aspects of tissue culture, immunology, histology, immunochemistry and molecular biology. Individual research projects will be customized to fit the candidate's interests.

• INTRACELLULAR STEROID RECEPTORS

Here is a challenging opportunity to investigate the role of intracellular steroid receptors in gene activation and regulation of transcription factors. To qualify, you must have experience with the principles of gene regulation, molecular biological techniques, DNAprotein assays, steroid receptors and/or general transcription factors. Please respond to **SCI/RR**.

• MACROPHAGE PATHOLOGY The ideal candidate will have an interest in the role of macrophage pathology in inflammatory diseases. Expertise in tissue culture, blood cell isolation, cytokine and macrophage biology is preferred with additional preference to candidates with background in histology and immunocytochemistry. PhD required. The individual research project will be customized to the candidate's interests in combination with the group research objectives. Please respond to SCI/RN.

• IMMUNOSUPPRESSION/ IMMUNE-BASED TOLERANCE The ideal candidate will have an interest in the role of the T lymphocyte in immunosuppression and immunebased tolerance. Experience with models of immunosuppression and tolerance is desirable with a preference to candidates with expertise in T lymphocyte activation and T cell anergy. The individual research project will be customized to the candidate's interests in combination with the research objectives of the group. Please respond to SCI/BJ.

RADIOPHARMACEUTICAL ACCUMULATION RESEARCH

This fellowship is available for research of the mechanisms of radiopharmaceutical accumulation in solid tumors. This project will utilize radionuclide imaging technology as well as biochemicăl and cell culture procedures. The successful candidate will have a recent MD or PhD in Molecular Biology, Biochemistry or a related discipline. This position is based at the Radiopharmaceutical Research facilities of DuPont Merck in Billerica, MA. Please respond to SCI/MT.

THROMBOSIS RESEARCH

Enhance your expertise as a member of our multidisciplinary Thrombosis Research group. This is an ideal opportunity for a motivated individual with experience in any of the following areas: platelet and/or endothelial cell biology; integrins and cell adhesion molecules; and animal models of thrombosis. Please respond to **SCI/TR.**

TRANSGENIC TECHNOLOGY

This is an exciting opportunity to develop animal models for pharmaceutical research and development. Experience in embryo microinjection/ES cell methodology, animal surgery, recombinant DNA, and methods of gene detection at DNA, RNA and protein levels would be a plus. Please respond to **SCI/GJ.**

For prompt confidential consideration, please indicate position number and area of interest, and forward a CV, statement of research interests and career goals to: Administrator, Postdoctoral Fellowship Program, The DuPont Merck Pharmaceutical Company, Dept. SCI-50, P.O. Box 80328, Wilmington, DE 19880-0328. EOE.

CELLULAR BIOLOGISTS/ PHARMACOLOGISTS DRUG DISCOVERY RESEARCH

BIOFOR has created several positions for BS, MS, and Ph.D. level celullar biologists/pharmacologists with drug discovery knowledge and experience in the area of inflammatory and/or cardiovascular diseases. These are positions for ambitious scientists who want to make a significant contribution to our success.

BIOFOR is a drug design and discovery company based on the Computer Automated Structure Evaluation (CASE) artificial intelligence technology. Our goal is to identify new chemical entities for inflammatory and cardiovascular diseases. We offer a competitive salary, benefits, and opportunity for professional growth.

Send resume and salary history to: Dr. J. C. Sircar

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Innovation & Efficiency

Using innovation to improve the efficiency of molecular biology research products has been the cornerstone of Stratagene's development since our founding in 1984. With more than 200 employees and 500 products, Stratagene is now seeking a Sales Representative in the New England area.

TECHNICAL SALES REPRESENTATIVE

Candidate should have strong practical experience in molecular biology or a related field. Sales experience is beneficial, but we will provide an extensive one-month training program at our beautiful headquarters in La Jolla, California.

We offer a competitive salary, incentive and benefits program. Please send your resume and a letter of interest to: STRATAGENE, Attn: Human Resources, 11099 N. Torrey Pines Rd., La Jolla, CA 92037. AA/EOE.



Cytogenetic Technologist II. 1) Perform all technical procedures in cytogenetics laboratory: a) establishing and maintain ing cultures including human peripheral blood, bone marrow, amniocytes, and tissues samples; b) harvesting cultures and preparing chromosomes from above specimens; c) performing staining and banding techniques including G-banding, Q-banding, Nor-banding, C-banding and R-banding and other special techniques, including the detection of Sister Chromatid Exchange and Late-Replication X Chromosome, and d) counting and analyzing human chromosomes under microscope, taking, developing and printing photographs for chromosomes and karytotyping. 2) Perform high-resolution chrototyping. 2) Perform high-resolution Chro-mosome (HRC) preparation by using chemically arrested and synchronized techniques, and analyze HRC. Perform the procedure of Fragile X Chromosome Syndrome and analyze slides. 3) Estab-lish the technique and procedures for prenatal diagnosis from chorionic villus samples. 4) Institute new methods and revise old procedures to maintain un-torevise old procedures to maintain up-todate techniques of culturing and analysis for clinical applications. 5) Interpret lab results of individual cases and make rec ommendations for further cytogenetic/ genetic studies, and procedures to participate in educational and training program for physical and the public as needed. Job requires Bachelor of Science Medical Job requires Bachelor of Science Medical Genetics. Degree specializing in Cytoge-netics. 40 hrs./wk., 8:00 a.m. to 5:00 p.m., \$28,300.00/yr. Send resumes in duplicate (no calls) to J. Davies, JO#1330998, Ohio Bureau of Employ-ment Services, P.O. Box 1618, Colum-bus, Ohio 43216. Must have proof of legal authority to work permanently in the United States. United States.



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For over a quarter century, we've been helping the world see things clearly. We're Allergan Inc., an international leader in the eye and skin care product industry. Join our extraordinary research team and play an important part in the development of our advanced products.

Scientist, Toxicology

Within the Toxicology/Pathology Department, you will plan, organize and supervise animal safety studies to support drug application. Your work will involve scheduling acute/subacute/chronic toxicity studies, developing study protocols, leading research groups, reviewing/interpreting experimental data and formulating conclusions. You must have a Ph.D. in Toxicology or a related science and 2-4 years toxicology experience at a pharmaceutical company or contract laboratory. Strong supervisory and communication skills, including technical writing, are mandatory. Familiarity with automated data collection systems a plus. Code: KB-19718-SCI.

Section Manager, Ophthalmology Clinical Research

While in this position, you will coordinate the clinical trials for Botulinum Toxin Type A product for several indications, such as tremors, spasticity, juvenile cerebral palsy, etc. Responsibilities include clinical supplies manufacture and release; FDA notification, protocol design/approval; scientific literature search/review/summary; investigator selection/qualification; study monitoring for regulatory/protocol compliance; data analysis; and investigational payment. You must have experience in coordinating clinical research programs, including the writing of original study protocols. A Ph.D. in Neuroscience or Neurology is preferred. Code: KB-20271-SCI.

At Allergan, you'll enjoy a competitive salary and benefits package. For immediate consideration, please send your resume, indicating appropriate code, to: Allergan Inc., 2525 Dupont Drive, Irvine, CA 92715. EOE.

Helping The World See Things Clearly.

Public Health Service • National Institutes of Health • National Cancer Institute A Senior Executive Service Vacancy

ASSOCIATE DIRECTOR -- CANCER PREVENTION RESEARCH PROGRAM DIVISION OF CANCER PREVENTION AND CONTROL

Opening Date: April 20, 1992

Closing Date: May 26, 1992

Location: Rockville, Maryland

The Associate Director, Cancer Prevention Research Program, is responsible for implementing and monitoring a worldwide cancer prevention research program designed to provide prompt identification and study of new leads in cancer prevention. The Cancer Prevention Research Program has a staff of 46 who administer a large intramural and extramural program with a budget of approximately \$36 million annually.

This is a Civil Service position in the Senior Executive Service (SES) with an annual salary from ES-1 to ES-6 (currently \$90,000 to \$112,100 per annum). In addition, physicians may be eligible for a Physician's Comparability Allowance up to \$20,000 per year. (Applicants alternatively may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The individual selected, if not presently in

SES, must serve a one-year probationary period.

Applicants must meet the minimum educational requirements for either a Health Scientist Administrator, GS-601, or Medical Officer, GS-602. Applicants must further meet established mandatory professional /technical and managerial/executive requirements. Applicants will be further evaluated on the degree to which they possess desirable qualifications in the areas of additional professional/technical qualifications, additional managerial/executive qualifications, scientific reputation/peer recognition, training and education, and honors and awards. A copy of the requirements may be obtained by contacting Ms. Sue Hickman in the Personnel Management Branch, NCI, at (301) 496-8182.

Applications for Federal Employment (SF-171), are to be sent to:

Ms. Sue Hickman, National Cancer Institute, Personnel Management Branch, Building 31, Room 3A16, 9000 Rockville Pike, Bethesda, Maryland 20892.

A current curriculum vitae and bibliography must accompany all applications. Resumes are not acceptable applications for entrance into the SES. Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

Applications must be received by May 26, 1992.

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

NIH is an Equal Opportunity Employer

Sandoz Pharma Ltd.

We wish to recruit a

DNA and protein database sequence administrator

for the Biotechnology department of our Preclinical Research division.

The successful candidate's primary responsibility will be to manage the division's DNA and protein sequence databases, but he/she will also be expected to provide research scientists with training and assistance in the use of the databases, to evaluate and integrate new software, and to participate in local and international project and planning groups.

The principal requirement for this post, which offers good scope for development, is a doctorate (PhD) in biology or protein chemistry allied to a high level of expertise in information technology. In addition, candidates must have professional experience of molecular biology or protein chemistry and of the relevant databases (Intelligenetics, Wisconsin, etc.). Ideal candidates will also have the ability to function well in a team environment, good training and communications skills, and a working knowledge of German.

Applications should be addressed to:

Sandoz Pharma Ltd. Personnel Department, Ref. 2417 Mrs. V. Luginbühl CH-4002 Basel Switzerland



SENIOR RESEARCH **CELL BIOLOGIST**

The Department of Biochemical Parasitology in the Merck Research Laboratories has an immediate opening for a Senior Research Cell Biologist interested in exploring the biology of intracellular protozoan parasites and their interaction with the host cell.

Primary responsibilities include exploring the development of intracellular protozoa and determining the mechanism by which various antiprotozoal agents control parasite development. This position offers a unique opportunity to interact with a team of scientists in various disciplines focused on a better understanding of parasite biochemistry as a means of developing new chemotherapeutic agents.

The position requires a Ph.D. or equivalent in Cell Biology with at least 2 years of postdoctoral experience in a relevant field of biology. Superior skills in tissue culture and biochemistry are essential. The applicant's practical skills should be complemented by a high level of initiative and superior communication skills.

Merck Research Laboratories is located in Rahway, New Jersey, approximately 25 miles from New York City. Our facilities are state-of-the-art and our renowned research environment is excellent. For consideration, please send your resume with the names of three references to: Human Resources Manager, Dept. #S-36, Merck Research Laboratories, P.O. Box 2000, WBC-155, Rahway, NJ 07065. An EEO/AA/VH Employer.



BROOKHAVEN NATIONAL LABORATORY

OCEANOGRAPHY ASSOCIATE Molecular Ecology

Brookhaven National Laboratory, a major R&D facility under contract with the U.S. Department of Energy, has an exciting opportunity available to

work on a project involved with the growth, production and dynamics of marine microbes. Requirements include experience and training in basic microbiology and molecular biology techniques (BS level, MS preferred). Experience in microbial ecology, oceanography or limnology preferred. Ability to work on research cruises is required.

Brookhaven offers a stimulating work environment and a comprehensive benefits package. If you would like to be considered for this position, please send your resume, referring to position #NS8074, to: Nancy L. Sobrito, Brookhaven National Laboratory, Associated Universities, Inc., Personnel Division -Bldg. 185, Upton, L.I., NY 11973. Equal opportunity employer m/f/d/v.



SYMPOSIUM

International Symposium on **Tobacco Smoking and Nutrition:** Influence of Nutrition on Tobacco Associated Health Risks

September 14–16, 1992, Lexington, Kentucky

This two and one-half day symposium assembles authorities from the world-wide scientific community to focus on whether nutrition and diet have an influence on tobacco smoking related health risks. Topics include:

Tobacco Smoking and Free Radical Biology

R. Jenkins (USA), W. Pryor (USA), E. Niki (Japan), R. Anderson (South Africa), H. Sies (Germany)

Tobacco Smoking, Nutrition and Cardiovascular Disease Y. Stein (Israel), R. Bernhardt (Germany),

- G. Duthie (Scotland), R. Thompson (England),
- C. Cross (USA), T. Kita (Japan), B. Hennig (USA)
- Tobacco Smoking, Carcinogenic Agents and

Chemoprevention

- D. Hoffman (USA), W. Caldwell (USA), F.-L. Chung (USA), A. Castonquay (Canada), T. Edes (USA), J. Bertram (USA), D. Heimburger (USA)
- Tobacco Smoking, Nutrition and Lung Disease N. Krinsky (USA), P. Knekt (Finland), J. Schwartz (USA), P. Leanderson (Sweden), C. Chow (USA), J. Gosney (England)

- Diet and Tobacco Smoking S. Renaud (France), A. Subar (USA), G. Colditz (USA), G. Schectman (USA), C. Bolton-Smith (England),
- R. Ziegler (USA)

Featured Speaker: E. Wynder (USA)

Symposium Information: University of Kentucky Tobacco and Health Research Institute Telephone: (606) 257-5151 FAX: (606) 258-1077

Symposium Registration: University of Kentucky Special Programs

Telephone: (606) 257-3929 FAX: (606) 257-5171

POSTDOCTORAL SCIENTIST

Wyeth-Ayerst is a recognized world leader in the production of a wide range of highly advanced pharmaceuticals. We currently have an opportunity for a Postdoctoral Scientist to join our Microbiology and Biotechnology Division at our Radnor, PA research campus.

Become an integral member of our research team. We would like to talk with you if you are a recent Ph.D. with training in Virology, Molecular Biology or a related field. The project involves applying Cell and Molecular Biology techniques to vaccine/antiviral studies.

Wyeth-Ayerst offers an attractive salary and benefits which are immediately available for a one year appointment, and can be renewed for another year. Qualified candidates are invited to submit curriculum vitae to: Recruitment Representative, Job PD, Wyeth-Ayerst, Research Personnel, P.O. Box 8299, Philadelphia, PA 19101. Equal Opportunity Employer, M/F/D/V responses encouraged. Principals Only.



Scientist/Senior Scientist DNA Sequencing Lab

Genentech, Inc., a leader in the biotechnology industry, has an exceptional opportunity within our Department of Molecular Biology for a Scientist or Senior Scientist to head up the DNA Sequencing Lab.

This lab supports sequencing projects throughout the Research Departments as well as performing independent research and technology development. Qualified candidates must have a related PhD and experience in DNA sequencing.

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Our progressive company offers an extensive benefits package which includes child care facilities, free health club membership, an employee stock purchase plan and fully paid medical/dental/vision coverage. For immediate consideration, send your resume to Genentech, Inc., Human Resources, Dept. YS/WW, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment.

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This <u>first-time special section</u>, reprinted from the March 13 issue

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At the Miles Research Center in West Haven, CT, you'll be working in the Institute of Pharmacokinetics. As the expanding research center of an international pharmaceutical leader, we offer scientific challenges and the opportunity for individual growth. Enhance your future, and ours, by considering one of the following positions:

Institute of Pharmacokinetics

Ph.D. Level Positions

SENIOR RESEARCH SCIENTIST

Candidate will have primary responsibility for the design, conduct, supervision, and reporting of drug metabolism/pharmacokinetic studies in the discovery and development of new drugs. The candidate will be responsible for the development and validation of analytical methods for the detection of drugs and metabolites from preclinical ADME studies, establishment of in vitro and in vivo drug metabolism techniques.

Ph.D. in medicinal/pharmaceutical chemistry or related discipline required with a minimum of 4 years' industrial or postdoctoral experience in drug metabolism research and development. Demonstrated experience in the design, supervision, implementation, interpretation, and reporting of in vitro and in vivo drug metabolism studies required.

SENIOR RESEARCH SCIENTIST

Candidate will have primary responsibility for the development, supervision, validation and reporting of analytical/bioanalytical methods to support preclinical pharmacokinetic and toxicokinetic studies for IND/NDA and international filings. The candidate will supervise technicians, participate in the implementation of GLP, represent Pharmacokinetics on interdisciplinary project teams, and serve as study director on preclinical studies and scientific monitor of contract laboratory work.

Ph.D. in analytical/pharmaceutical chemistry or related discipline required with a minimum of 4 years' industrial or postdoctoral experience in the development and validation of methods for the trace analysis of xenobiotics in biological matrices. Demonstrated theoretical and practical knowledge of HPLC, GC and GC/MS required.

SENIOR RESEARCH SCIENTIST

Candidate will have primary responsibility for the development, supervision, evaluation, interpretation and reporting of preclinical pharmacokinetic and ADME studies to support IND/NDA and international filings. The candidate will supervise technicians engaged in ADME studies, participate in the implementation of GLP, participate in the evaluation of LIMS, represent Pharmacokinetics on interdisciplinary

Great For Miles.

project teams, and serve as study director on preclinical studies and scientific monitor of contract laboratory work.

Ph.D. in pharmacokinetics, pharmaceutical/medicinal chemistry, D.V.M. or related discipline required with a minimum of 4 years' industrial or postdoctoral experience in drug development research. Demonstrated experience in the design, supervision, execution and reporting of preclinical pharmacokinetic and ADME studies in support of the drug development process is essential.

M.S./B.S. Level Positions

SENIOR ASSOCIATE RESEARCH SCIENTIST

Candidate will develop and utilize analytical chromatographic methods, use in vitro and in vivo techniques, and isolate/purify metabolites in support of metabolic/pharmacokinetic studies under the supervision of a Senior Scientist. Handling and dosing of laboratory animals and animal surgery may also be performed.

M.S./B.S. in biology, chemistry, biochemistry or related discipline with 2-4 years' industrial experience in drug metabolism research required. Practical experience with the development of analytical assays (HPLC, GC), radionuclides, separation and purification of drug metabolites, and the conduct of in vitro enzymatic reactions is essential.

ASSOCIATE RESEARCH SCIENTIST

Candidate will assist in the design and execution of preclinical ADME studies in the support of drug development, under the supervision of a Senior Scientist. Candidate will have primary responsibility for the handling, dosing, sampling and surgery in animal ADME studies. Additional responsibilities will be the analysis of drug/metabolites in biological tissues and fluids using analytical chromatographic methods, radioisotope techniques, and data analysis.

M.S./B.S. in biology, biochemistry or related area with 1-3 years' industrial experience in pharmacokinetics/drug metabolism required. Demonstrated skills in the handling and dosing of laboratory animals and animal surgical techniques required. Prior experience in the conduct of ADME studies and the handling of radioisotopes highly preferred.

ASSOCIATE RESEARCH SCIENTIST

Candidate will assist in the development and validation of analytical methods for the analysis of drugs/metabolites in biological fluids, and conduct pharmacokinetic studies in support of drug discovery under the supervision of a Senior Scientist. Candidate will also be responsible for the handling, dosing, and sampling of biological fluids in animal pharmacokinetic studies.

M.S./B.S. in chemistry, biology or related area with 1-3 years' industrial experience in pharmacokinetics/drug metabolism required. Prior experience in the conduct of pharmacokinetic studies is highly preferred. A working knowledge of analytical techniques (HPLC, GC) relevant to preclinical pharmacokinetic studies is essential. Demonstrated skills in the handling and dosing of laboratory animals and animal surgical techniques would be an advantage.

ASSOCIATE RESEARCH SCIENTIST

Candidate will carry out the development and validation of analytical/bioanalytical methods for the analysis of drugs/metabolites in biological fluids using modern analytical techniques, under the supervision of a Senior Scientist. Previous experience with one or more of the following techniques is required: HPLC, GC, GC/MS, or RIA. Candidate will develop and validate methods for and analyze samples from pharmacokinetic/toxicokinetic studies.

M.S./B.S. in analytical/pharmaceutical chemistry or related discipline with 1-3 years' industrial experience in the trace analysis of xenobiotics in biological matrices using HPLC, GC, GC/MS required. Candidates with previous experience with radionuclides, GLP, RIA and LIMS are highly preferred.

These positions offer attractive compensation commensurate with qualifications, generous benefits, and an excellent opportunity for personal growth and professional satisfaction. Resumes including salary history should be forwarded in confidence to: **Department WB, Miles Inc., Pharmaceutical Division, 400 Morgan Lane, West Haven, CT 06516.**

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Pharmaceutical Division

NASA EARTH OBSERVING SYSTEM (EOS) SENIOR PROJECT SCIENTIST

The NASA/Goddard Space Flight Center, located in Greenbelt, MD is seeking candidates for the position of EOS Senior Project Scientist. The incumbent will provide the primary and day-to-day interface between the Earth Science community and the EOS Project in defining and representing scientific requirements and providing related scientific insight and guidance to the EOS Project. The incumbent will work with the EOS Program Scientist and other Earth Science Program personnel at NASA Headquarters to ensure that scientific and related programmatic requirements are appropriately implemented by the EOS project. Along with the Program Scientist, the incumbent will co-chair the EOS Investigators Working Group (IWG) and related panels and subpanels. The incumbent will guide and lead the efforts of EOS Project Scientists associated with the various EOS payloads and the EOS Data and Information Systems (EOSDIS).

An applicant should be an internationally recognized research scientist in an Earth science discipline or interdisciplinary Earth science, with substantial experience in developing and implementing research programs. There should be documented skill or knowledge in numerical modeling and data analysis using remotely sensed data from spaceborne, earth oriented observing systems and related data processing, archiving, and distribution systems. The salary associated with the position (\$64,233–\$104,000) will depend upon the selected applicant's background, qualifications, and experience.

In applying, the following is required: a resume including a list of scientific and technical publications and an Application for Federal Employment (SF-171). This material should be sent by May 8, 1992, to: NASA/Goddard Space Flight Center, Code 115G, Greenbelt, MD 20771. Inquiries should be directed to Ms. Dianne Hagerty at (301) 286-8319. Equal Opportunity Employer. U.S. Citizenship is required.



POSITIONS OPEN

CONSERVATION RESEARCH ASSOCIATE

The Chicago Zoological Park (Brookfield Zoo) invites applications for a 2-year position to assist basic and applied research on processes that threaten viability of wildlife populations. Analyze genetic and demographic data on captive and wild populations; synthesize literature on extinction processes; help develop computer models for population viability analysis; assist wildlife agencies in analyses; present results and applications to scientific and lay audiences. Requires Ph.D. or M.S. in population biology, evolution, or a related field, excellent communication skills, and knowledge of at least one programming language. Starting salary: \$28,500 to \$30,500. Send curriculum vitae and names of three references by 15 May 1992 to: Robert Lacy, Department of Conservation Biology, Chicago Zoological Park, Brookfield, IL 60513.

RESEARCH ASSOCIATE POSITION IN MOLECULAR NEUROENDOCRINOLOGY

Position available July 1992 for studies of the pathogenesis and regulation of human pituitary tumors. Background in molecular biology required. Research includes studies of oncogene mutations, hormone receptors, in vitro regulation by hypothalamic peptides. Send curriculum vitae and three letters of reference to: Dr. Anne Klibanski, Chief, Neuroendocrine Unit, Massachusetts General Hospital, Boston, MA 02114. Affirmative Action/Equal Opportunity Employer.

BIOASSAY DEVELOPMENT SENIOR BIOASSAY SPECIALIST

Our client, a major research-based pharmaceutical company, wishes to recruit a senior scientist to become a key member of a team developing bioassays for application in both clinical and manufacturing situations. Candidates should have experience in tissue culture and cell biology. It is unlikely that individuals with less than 3 years of postgraduate experience in a leading academia or industrial laboratory would be sufficiently qualified for this position. Refer to: 9 September 1992. The position offers highly competitive salary, superior benefits, and all the challenge and growth potential an international industry leader can offer. Work center: Rome, Italy. Applicants should submit their curriculum vitae to: **Egor Italia SRL, Via Bertoloni 29 -00197 Rome, Italy**.

IMMUNOCHEMIST

Sigma Diagnostics, a division of Sigma Chemical Company, has an immediate opening for an immunochemist in our Research & Development Department. The successful candidate must possess a Ph.D. in immunochemistry, immunology or biochemistry with a minimum of 3 years of bench experience in the development of immunoassay and knowledge of product development in in vitro diagnostics. This position interfaces with several disciplines and requires excellent written and verbal communication skills. We offer a stable and stimulating work environment as well as a competitive salary and full benefit package. For consideration, please send your résumé with salary history to: Sigma Diagnostics, Attn: Personnel/R & D, 545 South Ewing Avenue, St. Louis, MO 63103.

We are an Equal Opportunity Employer.

EUNICE KENNEDY SHRIVER CENTER FOR MENTAL RETARDATION

The Department of Biomedical Sciences has an immediate opening for a MOLECULAR NEUROBIOLO-GIST to establish a high-quality basic research program. Candidates will be considered at all levels. The candidate should have an active independent molecular biology research program related to Developmental Neurobiology, Genetics or Nervous System Disorders. The Shriver Center offers an interactive environment with many opportunities for collaborative research within the greater Boston biomedical community. Interested persons should submit curriculum vitae, a short summary of research plans and names of three references to: Dr. Marjorie Lees, E. K. Shriver Center, 200 Trapelo Road, Waltham, MA 02254. An Equal Opportunity Employer.

POSITIONS OPEN

MOTIVATED LABORATORY TECHNICIAN (B.S./M.S./Ph.D.) sought to analyze DNA mutations from human cells and tissues at University of Southern California (USC). Experience with PCR, DNA required, Southerns, radiolabeling strongly preferred. Salary \$24,000 per year plus USC benefits package. Mail or FAX cover letter and/or curriculum vitae to: mDNA, c/o M. Yasui, Institute for Toxicology, University of Southern California, 1985 Zonal Avenue, Los Angeles, CA 90033, FAX: 213-224-7473. USC is an Equal Opportunity Employer.

INSTRUMENT SPECIALIST

Assist faculty in training students in upper level and continuing education courses using: GC/MS, FTNMR, ICP, ION chromatograph, HPLC, SEM/X-Ray, Ultracentrifuge and DNA Sequencer/Synthesizer. Participation in faculty research and grantsmanship is expected. Ph.D. in-chemistry or related subject, and experience in maintenance and calibration of instruments required. Rank and salary dependent upon qualifications and experience for this grant-funded position. William Paterson College (WPC) on a 250-acre suburban campus 20 miles from New York City, is an accredited state college offering 50 undergraduate and graduate programs. WPC is an Affirmative Action/Equal Opportunity Employer. Please send résumé and supporting materials by 15 May 1992 to: Professor Gurdial Sharma, Chair, Department of Chemistry and Physics, William Paterson College, Drawer "\$," Wayne, NJ 07470.

RESEARCH PHARMACOLOGIST/PHYSIOLOGIST

Affinity Biotech, Inc., an innovative company in the field of oral drug delivery, seeks a pharmacologist/physiologist to direct a team of scientists to conduct in vivo studies involving the absorption, tissue distribution, metabolism and excretion of peptide and protein pharmacouticals. Requirements include a Ph.D. in pharmacology or the life sciences with research experience in pharmacokinetics of peptides and proteins and over 1 year of experience in the pharmaceutical or life sciences research industry. Located in the greater Philadelphia area. Affinity Biotech offers a stimulating work environment, modern facilities and an opportunity to make a significant impact on a young and growing company. For immediate consideration, please send your résumé to: Affinity Biotech, Inc., Personnel Coordinator, 305 Chelsea Parkway, Boothwyn, PA 19061.

RESEARCH ENGINEER

Salary \$25,000 per year, 40 hours per week. Conduct independent research to design and develop computer programs for image analysis of the microcirculation; understanding of 3-D image systems and design and development of 3-D image display software for microvascular images; design of peripheral microscope controls (i.e., motorized focus, filter wheels, image acquisition) and interface these devices with a host computer; plan and conduct experiments and write reports of the results. Requires M.S. or Ph.D. or the equivalent in Electronic Engineering, and 1 year of related experience in research in imaging instrumentation design.

In research in imaging instrumentation design. Apply at the Texas Employment Commission, Bryan, Texas, or send résumé to: **Texas Employment Commission, TEC Building, Austin, TX 78778, J.O. #6599189.** Ad paid by an Equal Employment Opportunity Employer.

RESEARCH TECHNICIAN position (funded by NIH grant) in Toledo, Ohio. Candidates must have Bachelor of Science degree in biology or microbiology and at least 2 years of experience in a molecular virology laboratory. Duties include animal cell culture, propagation and assay of animal viruses, cloning and sequencing cDNA, Northern and Western blotting, PCR technology and immunofluorescence microscopy. Forty hours per week, \$8.50 per hour. Must have proof of legal authority to work permanently in the United States. Send résumé in duplicate (no calls) to: J. Davies, JO#1153956, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

SCIENTIST for national public-interest group to work on food safety issues. Related Ph.D. and advocacy experience preferred. Salary range \$33,000 to \$40,000. Nonsmoking office. Send resume, salary history, writing samples to: J. Douglas, CSPI, 1875 Connecticut Avenue, NW, Room 300, Washington, DC 20009.

IRRI International Rice Research Institute

POSITION ANNOUNCEMENT FOR Agronomist

The International Rice Research Institute (IRRI) is seeking a highly motivated, dynamic, and creative agronomist to join its Rainfed Lowland Rice Ecosystems research program.

The Institute

IRRI is a renowned center for research excellence dedicated to improving the well-being of present and future generations of rice farmers and consumers, particularly those with low income. IRRI seeks to generate and disseminate rice-related knowledge and technology that is environmentally, socially, and economically sound.

The Institute is one of the 16 international agricultural research centers of the Consultative Group on International Agricultural Research (CGIAR). The research and administrative headquarters of this non-profit, autonomous organization is at Los Banos, Philippines. Outreach scientists are posted in 12 countries of Asia, Africa, and Latin America. IRRI scientists actively collaborate with national programs to develop more productive and sustainable rice technology.

The Position

The successful candidate will be the agronomist of a multidisciplinary team that also includes plant breeders, soil scientists, crop physiologists, water management specialists, and social scientists that is developing new plant types and management strategies to improve the productivity of the rainfed lowland ecosystem—an area of about 40 million hectares worldwide.

The agronomist will lead strategic research in crop establishment and crop management to increase production and optimize system productivity. Key areas will be (1) identifying plant traits and germplasm adapted to the abiotic stress complex of rainfed lowlands and (2) quantifying the performance of systems that integrate improved technologies for increasing productivity, efficiency of input use, and preserving the resource base.

The research will be conducted at IRRI headquarters and at key rainfed lowland sites in the Philippines, Thailand, Indochina, Indonesia, India, and Bangladesh in collaboration with the Rainfed Lowland Consortium. The successful candidate will also provide training and support the research capacity of national program collaborators.

The Qualifications

The successful applicant will have a Ph.D. in agronomy, soil science, or a related discipline, and have a minimum of 5 years relevant research experience. Experience in rice is highly desirable but not essential. Strong quantitative skills and a demonstrated capacity for quantitative analysis and synthesis of research results are needed. The candidate must have the ability to work within a multidisciplinary and multicultural team and with national program scientists.

Salary and Benefits

The salary and perquisites for this position are commensurate to qualifications and internationally competitive.

The Application

Applications must be received by 31 May 1992. This is a readvertisement; previous applicants are urged to indicate their present interest and availability. Submit c.v., date of availability, and names (with fax or telex addresses) of three references to:

Dr. Klaus Lampe, Director General International Rice Research Institute P.O. Box 933, 1099 Manila, Philippines Fax: 63-2-818-2087; Telex: (ITT)45365 RICE PM (RCA)22456 IRI PH

POSITIONS OPEN



The USDA Agricultural Research Services (ARS) is seeking a research plant pathologist to conduct investigations of cereal smut diseases, ranging from traditional plant pathology to contemporary genetic and/or biochemical analyses of smut fungi and their cereal hosts. The scientist will be a member of the ARS Cereals Crops Improvement Laboratory, and a member of the Plant Pathology Faculty, both located at Montana State University (MSU). A fully equipped laboratory and substantial support funds will be provided by ARS and MSU. A Ph.D. (preferably in plant pathology or a related field) and postdoctoral experience are desirable. The starting salary range is \$38,861 to \$60,070 and will be commensurate with research experience. For further information contact: Dr. Victor Raboy, USDA-ARS, #619 Leon Johnson Hall, Montana State University, Bozeman, MT 59717, telephone: 406-994-5054. For information/application procedures contact: Julia A. Murchison, USDA-ARS-PD, 6305 Ivy Lane, Room #318, Greenbelt, MD 20770–1435, telephone: 301-334-3138. Closing date is 1 June 1992. U.S. citizenship required. An Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH SCIENTIST

Saint Francis Hospital and Medical Center, located in Hartford, Connecticut, is seeking a candidate to join our Department of Research and Heart Institute to establish a new program in vascular biology. Candidates should have completed a doctorate degree and a postdoctorate fellowship and have prior experience in molecular aspects of vascular cells. Candidates will be eligible for an appointment at the University of Connecticut School of Medicine. Interested candidates should send a résumé and references to: Dr. Ernesto Canalis, Saint Francis Hospital and Medical Center, 114 Woodland Street, Hartford, CT 06105. FAX: 203-548-5415. Pre-employment drug testing required. Equal Opportunity Employer.

RESEARCH SCIENTIST

Research Scientist positions available in Microbial Pathogenesis and Molecular Immunology to study the molecular pathogenesis and basis of immunity to *Yersinia pestis*, the causative agent of plague. The program is focused on the identification and molecular characterization of microbial virulence determinants and their mechanisms of action; the nature and characterization of protective immunity to plague; and vaccine development. Interested applicants should send their curriculum vitae, reprints of representative publications, and names of three references to: Dr. Arthur M. Friedlander, Chief, Bacteriology Division, U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, Frederick, MD 21702. Telephone: 301-619-7341.

SCIENTIST MONOCLONAL ANTIBODIES

ABL-Basic Research Program, located at the Frederick Cancer Research and Development Center (FCRDC) in Frederick, Maryland, has a unique opportunity for a scientist to develop and direct production of monoclonal antibodies. Applicants must demonstrate proficiency in the generation of monoclonal antibodies, including: animal immunizations, fusion assays, subcloning and screening tests. Candidates will also be expected to interact with a group of scientists with diverse research interests including molecular biology of signal transduction, developmental biology and genetics. The candidate must be able to manage production and people. A Ph.D. or M.S. degree with 5 years of related experience is required. Salary commensurate with experience. Excellent benefits including medical/dental and retirement. To apply, please send curriculum vitae, together with a brief summary of professional expertise with special emphasis on expertise relevant to monoclonal antibody production, as well as the names of three professional references to: Personnel Office/MA, ABL–Basic Research Program, NCI-FCRDC, P.O. Box 5, Building 428, Frederick, MD 21702.

RESEARCH SCIENTIST

Saint Francis Hospital and Medical Center, located in Hartford, Connecticut, is seeking a candidate to join our NIH-supported bone biology laboratory to work on molecular and cellular biology of the bone. Candidates should have completed a doctorate degree and a postdoctoral fellowship with prior molecular and cell biology experience. Candidates will be eligible for an appointment at the University of Connecticut School of Medicine. Interested candidates should send a résumé and references to: Dr. Ernesto Canalis, Director, Department of Research, Saint Francis Hospital and Medical Center, 114 Woodland Street, Hartford, CT 06105. Pre-employment drug testing required. Equal Opportunity Employer.

SENIOR RESEARCH TECHNICIAN YEAST GENETICS AND MOLECULAR BIOLOGY BRANDEIS UNIVERSITY

Experience strongly preferred in yeast genetic manipulations, recombinant DNA techniques. Research in mechanisms of genetic recombination, chromosome structure. Salary depending on qualifications. Send résumé to: Dr. James Haber, Rosenstiel Center, Brandeis University, Waltham, MA 02254–9110. Equal Opportunity/Affirmative Action Employer.

MEETINGS

THIRD INTERNATIONAL CONFERENCE ON ENDOTHELIN Chairman—P. M. Vanhoutte, M.D., Ph.D. 14 to 18 February 1993

Houston, Texas Call for Abstracts (Deadline: postmarked 1 October 1992) Please contact: Dr. P. M. Vanhoutte Baylor College of Medicine Center for Experimental Therapeutics One Baylor Plaza Room 802E Houston, TX 77030 Telephone: 713-798-6453 FAX: 713-799-2469

ANNOUNCEMENTS

AMERICAN EPILEPSY SOCIETY AWARDS PROGRAM

The American Epilepsy Society announces the 1992 Awards Program designed to encourage and reward clinical and basic science investigators whose research contributes importantly to understanding and conquering childhood-onset epilepsy. CATEGORY ONE AWARDS: Two annual awards

CATEGORY ONE AWARDS: Two annual awards of \$100,000 each will be made to senior individuals who have a distinguished history of research achievements and professional excellence related to pediatric aspects of epilepsy. One award will go to a clinical investigator and the other to a basic scientist.

context for the American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society Awards are nominated by their peers. The American Epilepsy So

Candidates for the American Epilepsy Society Áwards are nominated by their peers. The American Epilepsy Society has the sole responsibility for selection of recipients. Nomination forms are available from the American Epilepsy Society. Deadline for completed nominations is 1 July 1992. Awards will be announced at the annual meeting of the American Epilepsy Society in Seattle, 4 to 10 December 1992.

Application forms and further information may be obtained from: The American Epilepsy Society Awards Program, AES Executive Office, 638 Prospect Avenue, Hartford, CT 06105–4298, telephone: 203-232-4825 or FAX: 203-232-0819.

The American Epilepsy Society Awards Program has been made possible by funds generously provided by the Milken Family Medical Foundation.

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