WILL AMERICANS BE SCIENTIFICALLY LITERATE BEFORE COMET HALLEY RETURNS IN 2061?

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The first phase of this massive nationwide effort to reform U.S. science education has produced six reports that recommend in detail what all citizens should know about science, mathematics, and technology.

They consist of an integrated report, Science for All Americans (AAAS order no. 89-01S), by the National Council on Science and Technology Education, and reports by five independent panels: Biological and Health Sciences (89-02S), Mathematics (89-03S), Physical and Information Sciences and Engineering (89-04S), Social and Behavioral Sciences (89-05S), and Technology (89-06S).

Send orders giving titles and AAAS order numbers—and a check, money order, or purchase order (made out to AAAS)—to AAAS Books, Dept. 2061, P.O. Box 753, Waldorf, MD 20604.

Prices: Science for All Americans: $14.50 (AAAS members, $11.50), 10–49 copies $9.25 each, 50 or more $8 each; each panel report: $7.50 (AAAS members, $6), 10–49 copies $3.50 each, 50 or more $3 each; all six reports (order no. 89-12X): $35 (AAAS members, $28), 10–49 sets $18, 50 or more $15.50. (For shipments to California, add 6% sales tax.)

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SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Any deadline in ad must be at least 2 weeks after date of issue in which ad appears. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. SCIENCE reserves the right, in its discretion, to decline to publish advertisements submitted to it.

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Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date). For deadlines for display advertising, please contact Scherago Associates.

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Send copy for all Positions Wanted ads and Line Classified ads to:
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1181 Broadway
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Telephone: 212-730-1400

Blind ad replies should be addressed as follows:
Box (give number)
SCIENCE
1333 H Street, NW
Washington, DC 20005

POSITIONS WANTED


Immunologist, Ph.D. Experienced senior-level scientist with broad-based experience in industry and academia seeking responsible position in established or start-up biotechnology company. In-depth experience in tumor immunology, hybridomas, and large-scale cell culture. Significant project management experience. Box 93, SCIENCE.

M.D., early retired (age 55) from drug industry seeks part-time or projects; excellent at data interpretation and medical writing for NDAs, etc. Telephone: 215-794-5881 or Box 86, SCIENCE.

POSITIONS WANTED

Mass Spectrometrist, Ph.D. Broad and productive research experience applying mass spectrometry in the chemical and biological sciences. Many publications. Excellent writing and interpersonal skills. Experienced in all aspects of NIH grant writing and space. Seeks interdisciplinary opportunity at the mid- to senior professional level in academia, government, or private sector. Box 81, SCIENCE.

Ph.D. Several years experience in RIA, GC, HPLC, immunoassay development. Over 10 years in reproductive endocrinology research. Last 5 years involved in ANF research. Excellent references and publications. Seek academic, industrial, or clinical research position. Box 95, SCIENCE.

Reproductive Physiologist/Endocrinologist, Ph.D. Seeks position in academia or industry. Research training in reproductive physiology and reproductive endocrinology. Postdoctoral training in reproductive physiologic, animal science. Research interests in ovarian physiology. Laboratory experience in radioimmunoassays, receptor assays, tissue and embryo cultures, human in vitro fertilization, and andrology. Excellent teacher and researcher. Box 88, SCIENCE.

Toxicologist, Ph.D., Board-certified with 10-plus years of industrial experience seeks position in California: chemical, consumer product, pharmaceutical, and hazardous waste site experience. Box 71, SCIENCE.

POSITIONS OPEN

ADJUNCT ASSISTANT PROFESSOR OF SURGERY/ONCOLOGY position available for Ph.D., with a minimum of 5 years of postdoctoral experience in human solid tumor oncology, cellular immunology, and cellular immunology. Individual will participate in designing and assessing biological response modifiers and vaccine in patients receiving therapy, isolation, and characterization of glycoprotein tumor antigens, and will develop a program to investigate immune cell recognition of glycoprotein tumor antigens. Salary is in the range of $50,000. Send curriculum vitae and names of three references by 31 July 1989 to: Donald L. Morton, M.D., Surgery/Oncology, UCLA Medical Center, 9-267 L. Factor Building, Los Angeles, CA 90024-1782. UCLA is an Affirmative Action/Equal Opportunity Employer.

ANATOMIC PATHOLOGIST—University of California School of Medicine at San Francisco is seeking a full-time academic pathologist at the assistant or associate professor level for San Francisco General Hospital (SGFH). Candidate expected to share in service and teaching; subspecialty pathologist interest desirable. Primary effort and time commitment to continuing or developing independent research program expected. Anatomic Pathology Board certification or eligibility and California license are required. Send curriculum vitae to: SFGH Search Committee, Department of Pathology, University of California, San Francisco, CA 94143-0506. Inquiries: Edward L. Howes, 415-821-8212. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR PLANT BIOCHEMIST

The Department of Botany invites applications for a tenure-track position beginning as soon as possible. Applicants should have a Ph.D. in plant biology and postdoctoral experience. The successful candidate will be expected to develop a vigorous research program in the compartmental regulation of carbohydrate metabolism with emphasis on chloroplast membrane transport, to obtain extramural funding, and to participate in graduate and undergraduate teaching. Send curriculum vitae, reprints, summary of past accomplishments, future research plans and names (addressed of four references) to: Dr. Glenn Patterson, Plant Biochemist Search Committee Chair, Botany Department, University of Maryland, College Park, MD 20742-5815 by 1 August 1989. The University of Maryland is an Equal Opportunity/Affirmative Action Employer and especially seeks women and minority candidates.

SCIENCE, VOL. 244
The Maryland Department of the Environment seeks individuals to work on multidisciplinary programs related to Chesapeake Bay, water management, data analysis, report writing, technical review and committee representation. Positions available at Ph.D. and M.S. levels.

Submit résumés by 31 July 1989 to: Dr. Robert Magnien, Chesapeake Bay and Special Projects Program, Maryland Department of the Environment, 2500 Broncoing Highway, Baltimore, MD 21224.

ASSISTANT DIRECTOR, TRANSPLANT IMMUNOLOGY AND THERAPEUTICS. University of Nebraska Medical Center, Omaha, NE 68105. The position requires a Ph.D. in immunology. Initial appointment to the position is expected to be for a minimum of three years.

Submit letters of application and three letters of reference to: Dr. John R. Purtilo, University of Nebraska Medical Center, Omaha, NE 68105 by 1 September 1989.

ASSISTANT/ASSOCIATE PROFESSOR, Biochemistry, University of Nebraska Medical Center, Omaha, NE 68105. The University is seeking an individual to develop a research program in biochemistry that is consistent with the mission and plans of the University.

Applicants should have a Ph.D. in biochemistry, a strong record of research productivity, and a commitment to teaching.

Send letter of application, curriculum vitae, and three references to: Dr. William A. Lane, University of Nebraska Medical Center, Omaha, NE 68105 by 15 November 1989.

ASSISTANT/ASSOCIATE PROFESSOR, Department of Pathology, University of Nebraska Medical Center, Omaha, NE 68105. The position requires a Ph.D. in pathology. The University seeks an individual to join the faculty of the Department of Pathology.

Applicants should have a Ph.D. in pathology and a strong record of research productivity.

Send letter of application, curriculum vitae, and three references to: Dr. John R. Purtilo, University of Nebraska Medical Center, Omaha, NE 68105 by 15 November 1989.

ASSISTANT/ASSOCIATE PROFESSOR, Comparative Medicine, Texas A&M University, College Station, TX 77843. The University seeks an individual to develop a research program in comparative medicine.

Applicants should have a Ph.D. in comparative medicine and a strong record of research productivity.

Send letter of application, curriculum vitae, and three references to: Dr. John R. Purtilo, Texas A&M University, College Station, TX 77843 by 15 November 1989.

ASSISTANT PROFESSOR, Department of Pathology, University of Nebraska Medical Center, Omaha, NE 68105. The position requires a Ph.D. in pathology. The University seeks an individual to join the faculty of the Department of Pathology.

Applicants should have a Ph.D. in pathology and a strong record of research productivity.

Send letter of application, curriculum vitae, and three references to: Dr. John R. Purtilo, University of Nebraska Medical Center, Omaha, NE 68105 by 15 November 1989.

ASSISTANT PROFESSOR, Department of Biochemistry, University of Nebraska Medical Center, Omaha, NE 68105. The position requires a Ph.D. in biochemistry. The University seeks an individual to join the faculty of the Department of Biochemistry.

Applicants should have a Ph.D. in biochemistry and a strong record of research productivity.

Send letter of application, curriculum vitae, and three references to: Dr. John R. Purtilo, University of Nebraska Medical Center, Omaha, NE 68105 by 15 November 1989.

ASSISTANT/ASSOCIATE PROFESSOR, Department of Pathology, University of Nebraska Medical Center, Omaha, NE 68105. The position requires a Ph.D. in pathology. The University seeks an individual to join the faculty of the Department of Pathology.

Applicants should have a Ph.D. in pathology and a strong record of research productivity.

Send letter of application, curriculum vitae, and three references to: Dr. John R. Purtilo, University of Nebraska Medical Center, Omaha, NE 68105 by 15 November 1989.

ASSISTANT/ASSOCIATE PROFESSOR, Department of Pathology, University of Nebraska Medical Center, Omaha, NE 68105. The position requires a Ph.D. in pathology. The University seeks an individual to join the faculty of the Department of Pathology.

Applicants should have a Ph.D. in pathology and a strong record of research productivity.

Send letter of application, curriculum vitae, and three references to: Dr. John R. Purtilo, University of Nebraska Medical Center, Omaha, NE 68105 by 15 November 1989.

ASSISTANT/ASSOCIATE PROFESSOR, Department of Pathology, University of Nebraska Medical Center, Omaha, NE 68105. The position requires a Ph.D. in pathology. The University seeks an individual to join the faculty of the Department of Pathology.

Applicants should have a Ph.D. in pathology and a strong record of research productivity.

Send letter of application, curriculum vitae, and three references to: Dr. John R. Purtilo, University of Nebraska Medical Center, Omaha, NE 68105 by 15 November 1989.
The Department of Microbiology and Immunology, East Carolina University School of Medicine invites applications for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level in immunology. Applicants must hold a Ph.D. or equivalent degree and have completed postdoctoral training. Successful candidates will be expected to develop and maintain a vigorous, grant-supported research program, and participate in the teaching of medical and graduate students. Salaries and research start-up support are nationally competitive. Submit curriculum vitae, description of research interests, and names of three references to: Paul V. Phillips, Chair, Department of Microbiology and Immunology, School of Medicine, East Carolina University, Greenville, NC 27858-4354. ECU is an Equal Opportunity/Affirmative Action Employer.

BASIC RESEARCH FACULTY POSITIONS

The Pittsburgh Cancer Institute, School of Medicine, University of Pittsburgh, is continually searching for qualified candidates for faculty positions. Interested candidates should hold a doctorate with additional postdoctoral training. Applicants in the fields of immunology, molecular oncology, experimental therapeutics and biochemistry and cell biology are encouraged to apply. Send curriculum vitae to: Ronald B. Herberman, M.D., Director, Pittsburgh Cancer Institute, 200 Meyran Avenue, Second Floor, Pittsburgh, PA 15213.

The University of Pittsburgh is an Equal Opportunity Employer.

INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT)

CIMMYT, headquartered in Mexico, has a mandate to support national programs in developing countries to increase the productivity of resources committed to maize and wheat research and production. Applications are invited for the following positions:

DEPUTY DIRECTOR GENERAL OF ADMINISTRATION AND FINANCE (DDG/AF)

The DDG/AF reports to the Director General and supervises six major offices: Financial Officer; Administrative Officer; Executive Officer; Human Resources Officer; Head/Visitor and Conference Services; and Head/Training Services Office. While differing academic backgrounds could qualify, a proven record of achievement in administration and finance is essential. Fluency in English is required, and Spanish competencies are needed. Experience in international agricultural scientific or development efforts will be given priority.

SUBPROGRAM LEADER FOR CROP PROTECTION (WHEAT)

Crop protection program has eight international scientist positions, four outside Mexico. Research concentrates on reducing crop losses to all major diseases of wheat. The principal strategy is genetic resistance. The efficiency of selection procedures and the genetics of host-parasite relations are important themes. The subgroup collaborates in a Global Wheat Disease Surveillance Network and conducts training in wheat pathology.

SUBPROGRAM LEADER FOR CROP MANAGEMENT AND PHYSIOLOGY (WHEAT)

The crop management and physiology subgroup has seven international scientists, four outside Mexico. Research activities include root and canopy screening and testing for yield and resistance to abiotic stress, component agronomy, and on-farm trials with national program scientists. Crop management is an additional activity.

Applications should be sent to: Barbara Coleman on 202-357-7601 (hearing impaired individuals may call: TDD 202-357-7492) to request Announcement EP (49) of the search. Interested candidates should send a curriculum vitae and the names of three references directly to the Personnel Officer, Animal Resource Management, 120 West 64th St., Washington, DC 20037. This search will conclude when the position is filled. An Equal Opportunity Employer.

ECOTOXICOLOGIST

Exxon Biomedical Sciences, Inc. has an immediate opening for a qualified individual specializing in ecotoxicology and environmental hazard assessment. The successful candidate will have a Ph.D. in ecotoxicology or an environmentally related field with 0 to 2 years of postdoctoral experience. Experience in or a knowledge of the application of aquatic effects and fate to real world concerns as well as knowledge of regulatory requirements (TSCA/PMN) would be desired.

Exxon Biomedical Sciences, Inc. performs both contract and in-house research for laboratories around the world. Its resources include state-of-the-art aquatic toxicology, environmental chemistry and mammalian toxicology laboratories. This position will provide an opportunity to study monitor and internal consulting toxicologist. Client interactions are an important aspect of our work, and thus, we are also seeking an individual who has excellent communication skills. Please forward resume to: Human Resources.

Exxon Biomedical Sciences, Inc.

Cerro Gordo

East Millstone, NJ 08875-2350

Equal Opportunity Employer M/F/H/V

HEAD OF POSTDOCTORAL RESEARCH

The University of Western Ontario, London, Ontario, invites applications for an appointment as Head of Postdoctoral Research. The successful candidate will be expected to develop and direct a vigorous, multi-disciplinary research program in an area related to a strong existing program in the area. In addition, the Head will be expected to stimulate and maintain a lively environment among the postdoctoral fellows and to provide assistance to postdoctoral fellows in their career development. The Head will be expected to contribute to the overall scientific, educational, and administrative mission of the University. The University of Western Ontario is an Equal Opportunity/Affirmative Action employer.

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

DIRECTOR, ENVIRONMENTAL/OCUPATIONAL HEALTH PROGRAMS

The Tufts University School of Medicine seeks a candidate with a doctorate in a scientific discipline with substantial postdoctoral training in environmental medicine to help develop and direct a new interdisciplinary program focusing on the interactions of environmental factors (e.g., toxicants) and factors of human development (e.g., behavioral, genetic, social) that contribute to the expression of disease. The program is intended to prepare physicians for careers in environmental health and to develop new paradigms for medical education and research. The successful candidate will develop and direct the program and will participate in the planning and administration of the School’s other health professional programs. An M.D. is highly desirable. Applications are encouraged from those who are committed to enhancing diversity among the faculty. Applications should include a curriculum vitae and a brief statement of research and teaching interests. The review of applications will begin December 15, 1989. Send applications to: Chair, Environmental Health Search Committee, Tufts University School of Medicine, 130 Harrison Avenue, Boston, MA 02111. An Equal Opportunity/ Affirmative Action Employer.
Queensland Institute of Medical Research

DIRECTOR

Applications are invited for the position of Director of the Queensland Institute of Medical Research on the retirement of its present Director, Professor C. Kidson.

The Institute is the major medical research facility in Queensland. It has staff of 190, at present, and is closely, and formally, affiliated with the University of Queensland. The two principal research streams at the Institute are interlinked through the Tropical Health Program and the Joint Oncology Program with relevant departments of the University of Queensland. The staff have a network of collaborative research in Australia and world-wide. Staff involved in the joint programs have adjunct appointments in the University.

A unique opportunity for the new Director to establish initiatives and expand the staff, will occur with the completion of a new building in 1991. This building of 15,000m², will be centered in the heart of Australia’s largest hospital complex (1,800 beds).

Strong clinical interactions are available and encouraged. The Institute has state-of-the-art equipment for a diversity of technologies based in molecular biology, immunology, biochemistry, microbiology, epidemiology, parasitology, entomology and genetics.

An attractive salary package including superannuation is negotiable.

Applications including a Curriculum Vitae and names and addresses and contact telephone numbers of at least three professional referees should be forwarded to:

The Secretary
Queensland Institute of Medical Research
Bramston Terrace
BRISBANE Q 4006
AUSTRALIA

Closing date for applications is Friday, 28 July, 1989. Please note: Confidentiality of information is assured. Further details may be obtained by contacting: Professor K. Eblem, Deputy Director on 61-7 253 6205. Fax: 61-7 252 5499.

Queensland Institute of Medical Research

STAFF POSITION

IN MAMMALIAN MOLECULAR GENETICS/MOLECULAR BIOLOGY (GS-13/14)

The Cellular and Genetic Toxicology Branch, National Institute of Environmental Health Sciences, National Institutes of Health, Research Triangle Park, NC, invites applications for the position of Head, Mammalian Molecular Genetics Group. The successful candidate will be expected to conduct an active research program involving molecular genetic approaches to studying the carcinogenic and mutagenic effects of chemicals and other environmental agents in vivo or in vitro systems. In addition to laboratory research the position would carry responsibility as a Project Officer or Co-Project Officer on research and development contracts. The mechanism of action of nonmutagenic carcinogens, and changes in gene expression as a function of chemical exposure and carcinogenesis are of particular interest. Eligible candidates should have a doctoral degree, postdoctoral and independent research experience in molecular genetics, molecular biology, molecular aspects of carcinogenesis or a related field. Experience in oncogene research, transgenic technology, virology, recombinant DNA or mammalian gene expression is desirable. A demonstrated record of productivity in one or more of the above areas is essential.

The salary range is $41,121pa to $63,172pa depending on qualifications and experience. US citizenship is required. Interested candidates should send their CV and the names of three references by August 11, 1989 to:

Mr. Johnny L. McLean (Code: HN7)
Personnel Office
National Institute of Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, NC 27709
(919) 541-7513

"AN EQUAL OPPORTUNITY EMPLOYER"

ABBOTT LABORATORIES

Abbott Laboratories’ Diagnostics Division holds an undisputed leadership position in the development of medical diagnostic products. Our extensive technical resources create a superior environment for those who would like to make a significant personal and professional commitment.

BIOCHEMIST/IMMUNOCHEMIST

Immunoasitology/Infectious Diseases

Currently we seek accomplished scientists to play lead roles in the development of Diagnostic Assays for infectious, parasitic agents. The selected candidates will possess a Ph.D. in Biochemistry or Microbiology, and experience with infectious diseases or parasitic infections. At least 2-3 years of post doctoral or industrial experience is necessary. Research background must include protein biochemistry, immunochemistry, ligand binding assays, cell surface proteins, and immunoassay techniques. Familiarity with nucleic acid probes and related techniques is desirable.

Located in an attractive suburban area approximately 30 miles north of Chicago, Abbott Laboratories provides a competitive compensation and benefits package including profit sharing. If your credentials meet the indicated requirements, please send your curriculum vitae to: Keith Allen, Corporate Placement, Job #7620, ABBOTT LABORATORIES, 1 Abbott Park Rd., Abbott Park, IL 60064. (To facilitate handling your resume, please indicate job number on your cover letter or resume.) Abbott is an Affirmative Action Employer.

Meeting Bound?

Please bring your resume and look for us at the Protein Society and American Association for Clinical Chemistry Conventions later this summer.

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Quality Health Care Worldwide

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FACULTY POSITION

The University of North Carolina at Chapel Hill invites applications for two junior or senior tenure-track faculty positions in the Department of Cell Biology and Anatomy. Appointees will be expected to establish or have a funded research program in a modern area of cell or developmental biology, and participate in the teaching of histology to first-year medical students. All applicants are welcome, but preference will be given to those employing techniques in molecular biology and biotechnology. Women and minorities are encouraged to identify themselves. Send curriculum vitae, a brief description of research plans, and the names of three references to: Dean of Faculty, University of North Carolina at Chapel Hill, Box 7299–7090, Chapel Hill, NC 27599–7090. An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN BIOCHEMISTRY

Applications and nominations are invited for a tenure-track faculty position in the Department of Biochemistry, Purdue University. We are particularly interested in individuals trained in molecular biological approaches to plant research programs. Candidates must have postdoctoral training, a strong research record, and be capable of providing focused and active participation in departmental teaching and research. For consideration, send curriculum vitae, a statement of research interests, and the names and addresses of three references. Biochemistry Search Committee, Department of Biochemistry, 120 Biochemistry Laboratory, West Lafayette, IN 47907–6799. Purdue University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN MOLECULAR GENETICS

Assistant or associate professor in the Department of Genetics, Medical College of Georgia, to form and head a new Molecular Genetics Unit, situated in the Maiman Research Center (MRC) of McLean Hospital. The appointee will be expected to establish an independent research program in the molecular biology of vertebrate or invertebrate systems with relevance to neuroscience and to have an interest in interacting with existing institutions. The MRC is a 45,000-square-foot facility entirely devoted to clinical and basic research in the neurosciences with laboratories for nmr, neutron, neurobiology, neurochemistry, neuropharmacology, molecular neurobiology, cell biology, developmental biology, and genetics, and experimental psychology. The Center also has a federally funded Clinical Research Center and a brain bank.

Applicants should send curriculum vitae, a statement of their research interests, and the names of three references by 1 October 1989, to: Bruce M. Cohen, M.D., Ph.D., Department of Molecular Genetics, MRC Committee, McLean Hospital, Maiman Research Center, 115 Mill Street, Belmont, MA 02178. McLean Hospital and Harvard Medical School are Equal Opportunity Employers, and we are especially eager to identify qualified women and minority candidates.

FACULTY POSITION: MOLECULAR VIROLOGY

The Division of Molecular Virology at Baylor College of Medicine is searching for a tenure-track faculty position at the assistant or associate professor level. An innovative scientist is sought with training and research capabilities in the areas of genetics and replication of retroviruses (preferably AIDS retrovirology). Applicants should have a Ph.D. with at least 2 years of productive research. Applicants are expected to participate in teaching junior and seniorlevel courses. The successful applicant is expected to establish an independent research program and to participate in graduate training in an expanding academic department. New laboratories and equipment are being provided and the position is expected to be an early tenure-track career position.

Interested candidates should send curriculum vitae, a brief description of research plans, and the names of three references to: Department of Pathology, University of Texas Health Science Center at Houston, 6566 Fannin, Room 427, Houston, TX 77030. An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION: Tenure-track, Department of Physiological Optics, School of Optometry. The University of South Florida, Optometry Program, is inviting applications for a faculty position at the assistant professor or possibly the associate professor level. The Department of Physiological Optics is seeking a vision scientist for a faculty position at the assistant professor or possibly the associate professor level. The position will be expected to teach professional and graduate courses. Candidates should have a record of accomplishment in research. Applications should be submitted as soon as possible and should contain curriculum vitae and the names of at least three references. Send application to: Dr. Graeme Wilson, Department of Physiological Optics, School of Optometry, Optometry Hall, University of South Florida, Tampa, FL 33620, or Professor Charles R. Hacke, Chair, Department of Cell Biology and Anatomy, School of Medicine, 108 Swing Building, CB #7090, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599–7090. An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN DEVELOPMENTAL BIOLOGY

The Center for Endocrinology, Metabolism and Nutrition, University of Northwester Medical School, is seeking applications from molecular biologists for a faculty position. The candidate should be using molecular techniques to study gene expression and growth factor actions during mammalian embryogenesis. The successful applicant will join an established multidisciplinary program in this area. The candidate should have Ph.D. or M.D. as well as 2 years of postdoctoral experience; and a record of research productivity. Appointment at the level of assistant professor with appropriate departmental affiliation is possible. Send curriculum vitae, brief description of previous research, names of three references and letters of recommendations by 15 August 1989 to: Dr. Norbert Freinkel, Northwestern University Medical School, 360 East Chicago Avenue, Chicago, IL 60611. Northwestern University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.

GENETICS

ASSISTANT LABORATORY DIRECTOR

CYTOGENETICS

Large cytogenetics laboratory is seeking an individual to fill position of assistant director. Candidate must have either Ph.D. or M.D. and have completed 1 to 2 years of postdoctoral training and be certified in clinical genetics by the American Board of Medical Genetics. Candidate should have strong clinical interest as well as the ability to participate in clinical research. Excellent salary and benefit package with full-time tenured appointment at the assistant professor or associate professor level in the Department of Child and Development of George Washington University. Position available for 1 September 1989. Send curriculum vitae to: Jocelyn M. Hicks, Ph.D. Director, Department of Laboratory Medicine, National Medical Center, 111 Michigan Avenue, NW, Washington, DC 20010 or call: 202–745–8335. Equal Opportunity Employer.

GLOBAL CLIMATE CHANGE

The World Resources Institute, a policy research and analysis center in Washington, D.C., seeks to fill a position within its interdisciplinary Climate, Energy and Pollution Program. Primary responsibilities are analysis and development of international and domestic policy options for global climate change and participation in related projects such as energy policy. The candidate is expected to write clear and focused policy analyses; have an established publication record; should have experience in policy development and/or a Ph.D. or equivalent degree in an appropriate field; economics, and a Ph.D. Rank is open, and salary will reflect experience. WRI is an Equal Opportunity Employer. Send a writing sample and curriculum vitae by 20 July 1989 to: Dr. William R. Moomaw, World Resources Institute, 1709 New York Avenue, Washington, DC 20006.

MICROBIAL ECOLOGIST

Assistant or Associate Professor. The Department of Biology, Utah State University, Logan, is seeking applicants for a tenure-track microbial ecologist position. A Ph.D. is required and postdoctoral experience is recommended. We seek an individual who will complement and strengthen existing programs in the Ecology Center and the area of plant-soil interaction and soil science. Publication and development of an externally funded research program in one of the following areas is expected: nutrient cycling, soil microorganisms, carbon and nitrogen fixation, genetic exchange or a related area of microbial ecology. Excellence in teaching is expected. The applicant must be able to teach the undergraduate major course in general microbiology and develop a course in microbial ecology. In addition, an upper division or graduate-level course or seminar in the area of specialization is required in alternate years. Applicants must submit a statement of research and teaching interests, unOfficial transcripts, and curriculum vitae and three letters of reference to: Dr. James L. Major, Chair, Department of Biology, Utah State University, Logan, UT 84322–5500.

Review of applications will begin 1 September 1989. USU is an Affirmative Action/Employer and strongly encourages IRCA Employer.
POSITIONS OPEN

UNIVERSITY OF GLASGOW

DEPARTMENT OF BOTANY

Applications are invited for a New Academic Appointment Scheme (NAAS): LECTURESHIP in the Department of Botany, which is part of the newly-founded School of Biological Sciences. Applicants should have research interests in the area of plant molecular biology, but candidates whose research uses molecular techniques to investigate fundamental problems in plant science are also encouraged to apply.

It is anticipated that the initial appointment will be on the Lecturer Grade A scale (£9,260 to £14,500). Further particulars may be obtained from: The Academic Personnel Office, University of Glasgow, Glasgow, U.K. G12 8QQ, where applications (eight copies), giving names and addresses of three referees should be lodged on or before 21 July 1989. In reply, please quote Ref. No. 6461/1.

MASS SPECTROMETRY

THE SECTION OF

ANALYTICAL CHEMISTRY

LABORATORY OF

CLINICAL STUDIES (LCS)

NAAIA, PHS

Invites applications for a STAFF/SENIOR FELLOW position to study lipid and eicosanoid metabolism and to participate in our basic and clinical studies of the effects of alcohol on cellular membrane function. A unique opportu- nity to join a research multidisciplinary research team located on the grounds of the NIH in Bethesda, Maryland. The fellow will be responsible for the operation of a Kratos MS-80 GC/MS and must have MS experience. The salary ranges from $24,000 to $45,234 and is commensurate with qualifications and experience. Interested candidates should contact: Norman Salem, Jr., Ph.D., Building 10, Room 3C-218, LCS-NIIAA, 9000 Rockville Pike, Bethesda, MD 20892. Telephone: 301-496-4900.

The position is available immediately. An Equal Opportunity Employer.

NEUROSCIENTIST: A position is available in the Physiology Department at the Armed Forces Radiobiology Research Institute (AFRRI) for a neuroscientist. Specific field is not critical; however, glial cell physiology, brain metabolism, sensory and motor systems and/or electrophysiology are areas of special interest. Applicants should have a Ph.D. and postdoctoral experience and be capable of establishing a strong research program. Send curriculum vitae, a statement of research interests and SF 171 to: Dr. Terry Pellmar, Chief, Neurophysiology Division, Physiology Department, AFRRI, Bethesda, MD 20814–5145. Please reference announcement number AFRRI #5/89. U.S. citizenship is required. DNA is an Equal Opportunity Employer.

NEUROTRAUMA RESEARCH LABORATORY

DIRECTOR SOUGHT

The Department of Neurological Surgery at the University of California, San Francisco (UCSF) and the Neurosurgical Service at the San Francisco General Hospital (SFGH) are seeking a qualified candidate to direct research efforts at the Laboratory for Neural Injury at the SFGH. Current and recent research have examined models of traumatic brain injury and focal cerebral ischemia and their treatment. Future investigations will include examination of mechanisms of progressive cellular injury, in vivo and in vitro, and evaluate possible methods of cell protection. The candidate should have a background in basic and/or applied research in brain injury and be prepared to conduct independent research as well as direct the research efforts of a variety of medical students and other research fellows and staff in this area. Existing grant support would be helpful but not essential for the position, but it is anticipated that the director will secure extramural support within several years. Interested applicants should send curriculum vitae to: Lawrence H. Pitts, M.D., Department of Neurological Surgery, UCSF, San Francisco, CA 94143-0112. UCSF is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

The International Laboratory for Research on Animal Diseases (ILRAD), is an internationally funded, major institution with the mandate of developing improved methods to control two important diseases of livestock, trypanosomiasis and theileriosis. The multidisciplinary research program includes microbiology, molecular biology, immunology, cell biology, pathology, parasitology, electron microscopy and entomology with appropriate supporting units. Applications are invited for the positions of:

Scientist — Social anthropology (Ref. Sci/89/1)

A position is available to join a recently established multi-disciplinary team assessing the epidemiological, social and economic factors affecting the delivery and impact of improved methods of control of theileriosis and trypanosomiasis. The successful candidate will participate in collaborative research programmes in several African countries to assess potential social impacts of improved livestock disease control at the community, household and intra-household level. Applicants will have a doctorate in social anthropology and substantial experience of African livestock production systems. Candidates will have proven abilities in formal and informal survey techniques, analysis of large data sets and experience in working in an interdisciplinary environment.

Post-doctoral scientist — Immunology/Biology (Ref. PD/89/1)

A position is available in a group studying endocytosis and related processes in salivarian trypanosomes. Applicants should have a first degree in the biological sciences and post-graduate qualifications in relevant areas of immunology and biochemistry. Research experience in the use of immunological and biochemical techniques to identify functional compartments in the endocytotic process in eukaryocytes will be advantageous.

Post-doctoral scientist — Molecular Biology (Ref. PD/89/2)

A position is available in a group studying the molecular mechanisms underlying the processes of differentiation which occur during the life cycle of salivarian trypanosomes. Applicants should have a first degree in the biological sciences and post graduate qualifications in molecular biology of eukaryocytes. Research experience in the identification and characterisation of developmentally regulated genes will be advantageous.

Post-doctoral scientist — Cellular Immunology (Ref. PD/89/3)

A position is available in a multidisciplinary research group studying the cellular immune responses of cattle to the protozoan parasite Theileria parva. Applicants should have a first degree in the biological sciences, or preferably a veterinary qualification, and post-graduate qualifications in analysis of cell-mediated immune mechanisms. Research experience in analysis of cell-mediated immune mechanisms to pathogenic agents in livestock would be advantageous.

Research Associate — Bovine bone marrow cell culture (Ref. RA/89/1)

A research associate position is available in a group studying the mechanisms involved, at the cellular level, of the anaemia induced in cattle by infections with salivarian trypanosomes. Applicants will have advanced technical qualifications, or a degree in biological sciences, and at least five years experience in a senior technical position with supervisory and training responsibilities. Consideration will be given only to those applicants with proven abilities in the development and application of in vitro culture conditions for mammalian cells and preference will be given to candidates with experience of in vitro cultivation of haemopoietic cells from ruminant, mouse or man.

These are International staff positions and salary will be paid in US dollars. Initial salary will be determined by qualifications and experience. Scientific staff are expected to contribute to the training program. Moving, housing, commutation and education allowances are paid and there are medical and retirement benefits. Applicants should include current curriculum vitae and names and addresses of three referees. Applications, citing the position reference number, should be sent by August 15th, 1989 to:

The Chief Personnel Officer
ILRAD
P. O. Box 30709
NAIROBI
Kenya

30 June 1989
POSITIONS OPEN

MOLECULAR BIOLIGIST

Full-time, tenure-track position available immediately for a senior-level candidate in Department of Ophthalmol- ogy or an affiliated department to establish a reciprocal joint appointment. Some equipment support provided. Candidates preferably should have experience in the application of molecular biological approaches to vision research. Appointment is expected to establish strong research programs with potential interaction with existing basic and clinical vision scientists. Salary com- mences with experience. Publications and extramural support vital. Send curriculum vitae, five representative reprints, statement of research interests, and names of three references to: R. Green, Department of Ophthalmology, Medical College of Georgia, Augusta, GA 30912-3400. To expedite communication, ap- plicants may telephone: 404-721-8400. Equal Opportunity/Affirmative Action Employer.

PHYSIOLOGICAL ANATOMIST

Tenure-track position available immediately for a senior-level candidate in Department of Physiology. The position will be established in the laboratory of J.H. Purkerson and will focus on the molecular physiology of renal and adrenal functions. The candidate will be expected to establish a strong research program with potential interaction with existing basic scientists. Salary commences at $24,000. Send curriculum vitae, five representative reprints, statement of research interests, and names of three references to: R. Green, Department of Ophthalmology, Medical College of Georgia, Augusta, GA 30912-3400. To expedite communication, applicants may telephone: 404-721-8400. Equal Opportunity/Affirmative Action Employer.

U.S. DEPARTMENT OF ENERGY (DOE) PHYSICISTS/GENERAL ENGINEER

The DOE's Superconducting Super Collider Office (SSC) is seeking candidates to fill three positions: (1) an assistant physicist (GS-1310-13), (2) a postdoctoral research scientist (GS-1310-15), and (3) a physicist/general engineer (SSC-3, GS-1310-801-15) with a high degree of knowledge of design, development, fabrication, use and operation of experiment- al and research facilities. Research activities include design and fabrication of experimental systems associated with the SSC, including proton injector system magnets, cryogenic systems, radio frequency and vacuum systems, SSC detector program, experimental physics program and SSC technical systems, respectively; review and critique of research proposals; analysis of SSC site visits, outside peer reviews and personal evaluation; organizing/chairing on-site reviews of programs and facilities; review and analysis of SSC technical systems designs through periodic on-site reviews and review of project documentation; liaison with SSC program advisory committee; and SSC budgetary activities. Contacts are with industry, universities, national/international laborato- ries, Congressional staffs, and the public. U.S. citizenship required. Salary range for GS-13 is from $57,158 to $74,803. Duties: (i) Technical direction of SSC; (ii) DOE obligations for SSC and the NRC. Send curriculum vitae, five representative reprints, statement of research interests, and names of three references to: R. Green, Department of Ophthalmology, Medical College of Georgia, Augusta, GA 30912-3400. To expedite communication, applicants may telephone: 404-721-8400. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP AVAILABLE IMMEDIATELY FOR 3 YEARS.

The position is available immediately for a senior-level candidate in the laboratory of J.H. Purkerson and will focus on the molecular physiology of renal and adrenal functions. The candidate will be expected to establish a strong research program with potential interaction with existing basic scientists. Salary commences at $24,000. Send curriculum vitae, five representative reprints, statement of research interests, and names of three references to: R. Green, Department of Ophthalmology, Medical College of Georgia, Augusta, GA 30912-3400. To expedite communication, applicants may telephone: 404-721-8400. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

U.S. DEPARTMENT OF ENERGY (DOE) PHYSICISTS/GENERAL ENGINEER

The DOE's Superconducting Super Collider Office (SSC) is seeking candidates to fill three positions: (1) an assistant physicist (GS-1310-13), (2) a postdoctoral research scientist (GS-1310-15), and (3) a physicist/general engineer (SSC-3, GS-1310-801-15) with a high degree of knowledge of design, development, fabrication, use and operation of experimen- tal and research facilities. Research activities include design and fabrication of experimental systems associated with the SSC, including proton injector system magnets, cryogenic systems, radio frequency and vacuum systems, SSC detector program, experimental physics program and SSC technical systems, respectively; review and critique of research proposals; analysis of SSC site visits, outside peer reviews and personal evaluation; organizing/chairing on-site reviews of programs and facilities; review and analysis of SSC technical systems designs through periodic on-site reviews and review of project documentation; liaison with SSC program advisory committee; and SSC budgetary activities. Contacts are with industry, universities, national/international laborato- ries, Congressional staffs, and the public. U.S. citizenship required. Salary range for GS-13 is from $57,158 to $74,803. Duties: (i) Technical direction of SSC; (ii) DOE obligations for SSC and the NRC. Send curriculum vitae, five representative reprints, statement of research interests, and names of three references to: R. Green, Department of Ophthalmology, Medical College of Georgia, Augusta, GA 30912-3400. To expedite communication, applicants may telephone: 404-721-8400. Equal Opportunity/Affirmative Action Employer.

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ANNOUNCING
NATIONAL RESEARCH COUNCIL
POSTDOCTORAL RESEARCH ASSOCIATESHIP AWARDS IN
BIOTECHNOLOGY
AT THE NATIONAL INSTITUTES OF HEALTH

Research opportunities include:
- MOLECULAR BIOLOGY
- MOLECULAR GENETICS
- BIOCHEMISTRY
- CELL & STRUCTURAL BIOLOGY
- PHYSIOLOGY
- IMMUNOLOGY
- CHEMICAL PHYSICS
- COMPUTER SCIENCE
- MATHEMATICS

The National Research Council in cooperation with the National Institutes of Health conducts three annual competitions for research awards for independent scientific research. Recipients will be free to pursue research problems of their own choice as guest investigators at NIH. Duration of award is one year renewable to a maximum of three. Annual stipends start at $28,000. Relocation reimbursement and funds for professional travel on tenure are available, and a health insurance program is provided.

Deadlines for application: August 15, 1989, January 15, April 15 and August 15, 1990 for competitions to be held in October 1989 and February, June and October 1990 respectively.

For application materials and further information concerning specific participating Institutes and Laboratories, write to:
Associateship Programs
(GR 430W/H)
NATIONAL RESEARCH COUNCIL
2101 Constitution Avenue, NW • Washington, DC 20418 • FAX: (202) 334-2759

VICE CHANCELLOR—RESEARCH UNIVERSITY OF CALIFORNIA, DAVIS

The University of California, Davis, seeks outstanding candidates for the newly-created position of Vice Chancellor-Research. The Vice Chancellor-Research is the senior campus officer responsible for overall leadership, development, management, and quality of the research programs of the Davis campus. A major purpose of this new position is to increase further the strength and effectiveness of the Davis campus as a major national and international research university.

The Vice Chancellor-Research will enhance, promote, and oversee research within all of the campus's colleges, schools, hospitals, and clinics; enhance the research ethos of the campus; increase and manage extramural financial support including support for large, long-term, and interdisciplinary projects; and further relationships with government and industry.

The Vice Chancellor-Research must be familiar with the culture of a major research university; be able to deal effectively with public and private agencies that support scholarly research; have a full understanding of the contributions and requirements of scholars from all fields; and have a strong record of personal accomplishment as a research scholar and as an administrator.

Nominations and applications, desired by October 1, 1989, should be sent to Chancellor Theodore L. Hullar, Office of the Chancellor, University of California, Davis, CA 95616. Applicants should include a curriculum vitae and the names, addresses, and telephone numbers of five references. Salary will be commensurate with experience and qualifications; position open until filled.

Equal Opportunity/Affirmative Action Employer.

BEHAVIORAL NEUROPHARMACOLOGIST

The Merrell Dow Research Institute, located in suburban Cincinnati, has a challenging career opportunity for an experienced neuroscientist to join our CNS Pharmacology group.

The successful candidate will contribute actively to basic research and drug discovery programs directed toward the identification of new therapeutic approaches to CNS disorders. Qualified applicants should have a Ph.D. in Pharmacology/Psychology/Neuroscience with a minimum of 2 years post-doctoral experience. Experience with operant and non-operant behavioral paradigms is important. Drug discrimination or shock-avoidance techniques would be an additional asset. An ability to work with state-of-the-art equipment and techniques is consistent with our modern multidisciplinary approach to research and the candidate should have shown clear evidence of familiarity with these areas of expertise.

We offer excellent compensation, comprehensive benefits and relocation assistance. Please send your resume and names of three references in confidence to:

Merrell Dow
Manager, Human Resources

MERRELL DOW RESEARCH INSTITUTE
2110 East Galbraith Road
Cincinnati, OH 45215
Equal Opportunity Employer M/F/H/V
POSITIONS OPEN

POSTDOCTORAL POSITION is immediately available to study the molecular and cellular biology of a newly described protein in breast cancer. [See Proc. Natl. Acad. Sci. U.S.A. 86, 1188–1192 (1989)]. A strong background in molecular biology is required; excellent training in protein chemistry and cell culture will be provided in the course of a comprehensive study. Send curriculum vitae and references to: Gary R. Pasterнак, M.D., Ph.D., Pathology to: Dr. Rosalind Coleman, Box 3208, Pediatric Genetics and Metabolism, Duke University Medical Center, Durham, NC 27710. Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL position is immediately available in the Division of Pediatric Infectious Diseases of the Johns Hopkins University School of Medicine, to study humoral immune responses to human retroviruses using synthetic peptides. The project is part of a research program devoted to molecular diagnostic virology. A prospective candidate should have experience with organic or peptide synthesis or biochemical techniques, and preference will be given to individuals with experience in virology, immunology, or protein chemistry. Salary is competitive. Interested individuals should call: Dr. Raphael Visicidi, telephone: 301-955-3271.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study (1) developmentally regulated enzymes of carbohydrate metabolism and (2) the regulation and transport in placental cells. Ongoing studies involve (i) purification and cloning of enzymes of hepatic diacylglycerol synthesis, (ii) delineation of enzymes involved in placental transport of fatty acids, and (iii) elucidation of metabolic pathways to which these enzymes contribute. Applicants will analyze long-term data of woodpecker fecundity, survivorship, and genetic variation to develop population viability assessments involving modeling population persistence in relation to demographic, environmental and genetic variation. A strong candidate will have demonstrated research capability in population modeling and the skills and inclination to communicate effectively with faculty and administrators in diverse departments as well as conservation managers. Starting salary is $28,852 and applicants must be available no later than 1 July 1989. USDA Forest Service is an Equal Opportunity Employer. Women and minorities are encouraged to apply. Send curriculum vitae and the names of three references to: Dr. Stephen L. Lenzara, USDA Forest Service, Department of Forestry, Clemson University, Clemson, SC 29634–1003.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE—GENE EXPRESSION Available immediately to investigate molecular mechanisms of regulated secretions. We are studying gene regulation and secretion of proteins, i.e., histatin and proline-rich proteins. Candidates must have Ph.D. and experience in recombinant DNA methodology. Applicants with experience in characterizing the cloning, expression, and purification of cDNA's are especially encouraged. Early start preferred. Send curriculum vitae and references to: Dr. Frank Oppenheim, Room G-217B, Department of Oral Biology/Biochemistry, Boston University School Medical, 100 East Newton Street, Boston, MA 02118.

POSITIONS OPEN

POSTDOCTORAL POSITION in MEDICINAL CHEMISTRY AND PHARMACOLOGY is available immediately to participate in the study of (i) protein/nucleic acid interactions during DNA polymerization, and (ii) neuropeptide SAR and pharmacology. Strong background in peptide chemistry or cardiovascular pharmacology preferred but not required. Send curriculum vitae and three letters of recommendation to: Dr. M. B. Doughty, Department of Medicinal Chemistry/Biochemistry, University of Kansas, Lawrence, KS 66045–2506. Equal Opportunity Employer/Affirmative Action.

POSITIONS OPEN

POSTDOCTORAL POSITIONS are available in the Division of Developmental Biology at the University of Texas, Galveston, Texas 77550. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS in PLANT MOLECULAR BIOLOGY. University of Arizona. Applicants are invited for appointments as postdoctoral fellows in plant molecular biology to study nuclear and chloroplast gene regulation in the laboratories of Hans Bohnert, Don Bourque, David Galbraith, Richard Hallick, Martha Hawes, Brian Larkin, or Elizabeth Vierling. Ph.D. with previous experience in biochemistry or molecular biology is desirable. Send letter of intent, curriculum vitae, and three letters of reference to: Jane Brodie; Department of Biochemistry, University of Arizona, Tucson, AZ 85721. An Equal Opportunity/Affirmative Action/Title IX, Section 504 Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE: The program includes isolation of complex carbohydrate molecules, structural characterization of polypeptides combined with determination of their structure and conformation. Methods will be HPLC, circular dichroism spectroscopy, molecular modeling, molecular dynamics simulation, and high-resolution 2-D NMR spectroscopy. Candidates should send curriculum vitae and three letters of recommendation to: C. Allen Bush. Department of Chemistry, University of Maryland Baltimore County, Baltimore, MD 21228. UMBC is an Equal Opportunity/Affirmative Action Employer, and applications from qualified women, minorities, and disabled candidates are especially encouraged. Applications will be received until a suitable candidate is found.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE is needed to join our multidisciplinary research team to understand hippocampal function. Research focuses on associative potentiation/depression. Collaborators include molecular and cellular neurobiologists, a single cell biochemist, and a neural network theoretician. The ideal candidate is experienced in either electron microscopy or electrophysiology, but training in one or both areas is desired in acquiring and applying the other technique. Position is available September 1989, and is funded for 4 years. Salary is $32,000 to $32,000 depending on experience and expertise. Send curriculum vitae and names of three references to: Dr. William B. Levy, Department of Neurosurgery, University of Virginia Health Sciences Center, Box 2037. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE—POPULATION ECOLOGY/CONSERVATION BIOLOGY. Two-year postdoctoral position available to conduct research on population dynamics and population viability of the endangered red-cockaded woodpecker. The position includes long-term data of woodpecker fecundity, survivorship, and genetic variation to develop population viability assessments involving modeling population persistence in relation to demographic, environmental and genetic variation. A strong candidate will have demonstrated research capability in population modeling and the skills and inclination to communicate effectively with faculty and administrators in diverse departments as well as conservation managers. Starting salary is $28,852 and applicants must be available no later than 1 July 1989. USDA Forest Service is an Equal Opportunity Employer. Women and minorities are encouraged to apply. Send curriculum vitae and the names of three references to: Dr. Stephen L. Lenzara, USDA Forest Service, Department of Forestry, Clemson University, Clemson, SC 29634–1003.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE—VACCINE FAMILY BIOLOGISTS BIOSTAR Inc. has immediate openings for staff scientists in its vaccine development program. We are seeking individuals to participate in the formulation and characterization of subunit antigens (including formalin and insect cell production facilities, plus an individual who is an expert in large-scale product purification and vaccine formulations.

Bacterial Fermentation Engineer: One position in the area of bacterial fermentation, specifically involving recombinant protein production.

Eukaryotic Cell Production Engineer: One position involving large-scale production of eukaryotic cells expressing recombinant proteins. Initially, we are interested in growing insect cells and mammalian and insect cell production facilities, plus an individual who is an expert in large-scale product purification and vaccine formulations.

Production Engineers: Opportunities for an individual with experience in downstream processing, product purification, antigen presentation and adjuvant technology. Applicants for the above positions should have 2 to 4 years of postdoctoral and/or industrial experience.

BIOSTAR Inc., in conjunction with the Veterinary Infectious Disease Organization (VIDO) provides a stimulating environment for collaborative research, and has demonstrated a history of successful collaboration with other scientists in the fields of virology, bacteriology, immunology, and molecular biology. Successful applicants for this position could be expected to work as an integral part of the research team and should have demonstrated a good understanding of basic skills. For consideration, please forward your curriculum vitae and the names of three referees to: Dr. Stephen D. M. Hoyle, President, B D. #6, Saskatoon, Saskatchewan Canada, S7N 0W0.

PRODUCTION ENGINEERS PROKARYOTIC/EUKARYOTIC FERMENTATION AND VACCINE FAMILY BIOLOGISTS

SCIENCE, VOL. 244
MEDICAL AND SENIOR STAFF FELLOW

The Laboratory of Clinical Studies, National Institute on Alcohol Abuse and Alcoholism, Public Health Service, invites applications for one Fellowship position to study the pathophysiology, psychobiology, and molecular biology of alcoholism and its complications. Unique opportunity to become an active member of a multidisciplinary research team working with a 10 bed unit and outpatient clinic. State-of-the-art equipment and experienced technical support available. The position is that of a Medical or Senior Staff Fellow with a salary range of $37,000 to $52,000 per annum commensurate with qualifications and is located on the NIH campus in Bethesda, MD. Interested candidates must be board certified or eligible internists, who are U.S. citizens or permanent residents. Position information and qualification requirements may be obtained by contacting:

Ted George, M.D.
Bldg. 10, Room 3B-19
900 Rockville Pike
Bethesda, MD 20892
Phone: (301) 996-7605

Submit Curriculum Vitae and names of three references to Dr. George.

The position is now available.

*An Equal Opportunity Employer*

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RESEARCH INVESTIGATOR

Radiopharmaceutical Research

The Squibb Institute for Medical Research is an internationally recognized leader in the research and development of innovative pharmaceuticals and related health care products. Currently, we have a position available for a Research Investigator to join our Radiopharmaceutical Research Department at our New Brunswick, NJ facility.

Candidates should possess a Ph.D. in a chemical or biological science and 1-3 years of relevant post-doctoral experience in the analysis of samples in biological matrices. Experience in HPLC is essential while exposure to work in the separation of transition metal complexes is desirable. Pluses include computer and instrumentation skills and/or previous experience in the handling of radioactive materials.

You will be responsible for developing methods to determine the metabolic fate of technetium coordination complexes, and for the assays of in-vivo and in-vitro stability of radiodiagnostic agents.

We offer a very competitive compensation package and participation in our comprehensive benefits program. Interested candidates should submit their resume, including salary history to: The Squibb Institute for Medical Research, Department AK/E20488. P.O. Box 191, New Brunswick, NJ 08903. An Equal Opportunity Employer.

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University of Pennsylvania
Dean of the School of Engineering and Applied Science

Applications and nominations are invited for the position of Dean of the School of Engineering and Applied Science at the University of Pennsylvania. Correspondence should be directed to:

Professor Campbell Laird
Chair
Dean Search Committee
School of Engineering and Applied Science
c/o Office of the Secretary
University of Pennsylvania
121 College Hall
Philadelphia, PA 19104-6382

The University of Pennsylvania is an Equal Opportunity Affirmative Action Employer.

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Nucleic Acid Diagnostics

Chiron Corporation is seeking to build a team for the commercial introduction of diagnostic products based on a unique nucleic acid probe technology. Located in the San Francisco Bay Area, the company offers competitive salaries and benefits, and excellent career opportunities.

Assay Development Scientist

The scientist will be involved in the development of tests for Sexually Transmitted Diseases. Candidates should have a Ph.D. degree in Molecular Biology, Biochemistry or a related field and at least 2 years' experience in the development and market introduction of new products in human medical diagnostics. (Position NAC-201)

Assay Development Associate

The individual will provide technical support in the development and market introduction of assays for Sexually Transmitted Diseases. Candidates should have a B.S. degree in Molecular Biology, Biochemistry, Immunology or a related field and at least one year experience in a basic research (preferably commercial) laboratory setting. Excellent organizational and record-keeping skills are necessary. (Position NAC-202)

Clinical Microbiology

The scientist will acquire, grow, maintain and characterize human pathogenic organisms. A special emphasis on Sexually Transmitted disease-causing bacteria and/or transfusion-mediated viral pathogens is required. The successful candidate will have at least 4 years' post-graduate hands-on experience in related activities. (Position NAC-204)

Qualified individuals should send a resume and three references to: Personnel Department, Chiron Corporation, 4560 Horton Street, Emeryville, CA 94608. Please indicate the position sought. No calls please. EOE.
oncor

Oncor, Inc. is a rapidly-growing company in the development and marketing of nucleic acid (DNA/RNA) probes, reagents and instrumentation systems for the early detection and characterization of molecular diseases such as cancer and genetic disorders.

Director of Sales

Degrees and/or experience in the Life Sciences. Successful track record in sales management in both domestic and international markets. Experience in national account sales management.

Sales Specialist

Requires B.S. in Life Sciences or minimum two years work experience in basic research or pathology laboratory. High level of motivation and initiative. Excellent listening and organizational skills. Limited field travel with home office base.

Senior Molecular Biology Laboratory Technicians

Requires skills in hybridization techniques such as Southern and Northern Blotting, nucleic acid/protein purification, radiolabeling and other molecular biology techniques desirable.

Outstanding opportunity for career advancement, excellent salary and participation in Company stock option program. Please contact the personnel department and write with your C.V. and references to:

Personnel Department
Oncor, Inc.
P.O. Box 280
Gaithersburg, MD 20884
Tel. (301) 963-3500 Fax (301) 926-6129

Technical Services Manager

Requires a Ph.D. in Biochemistry or Molecular Biology. Experience in nucleic acid analysis. Strong communication and writing skills.

Product Manager

Requires a B.S./M.S. in Biochemistry or Molecular Biology. Experience with nucleic acid techniques. Minimum of two years of product management experience for research products.

ENVIRON® Corporation, a leading national scientific and regulatory affairs consulting firm, is seeking highly motivated health scientists looking for challenging career opportunities in the fields of chemical risk assessment and environmental risk management. Our multi-disciplinary staff assists our clients in addressing the complex issues and problems of human exposure to potentially hazardous substances in the environment.

Exciting career opportunities exist in our Washington, DC, Princeton, NJ, and Emeryville, CA offices for experienced health scientists. Qualified applicants must be familiar with the concepts and methodologies for evaluating risks from human exposure to toxic chemicals in various environments. M.S./Ph.D.s in biochemistry, epidemiology, pharmacology, public health, toxicology, or related disciplines are required. Must possess strong analytical ability and excellent writing skills.

ENVIRON offers competitive salaries, excellent benefits, and a challenging work environment. For an evaluation of your potential at ENVIRON, send your resume, writing sample, and salary history to ENVIRON Personnel, Dept. SC-789, 1000 Potomac St., N.W., Washington, DC 20007. We are an equal opportunity employer.

INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH

ADVERTISMENT

The International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), is a non-profit international medical research institution situated in Dhaka, Bangladesh. Its aims are to conduct research and training in diarrhoeal diseases and related subjects of nutrition and fertility, and to develop improved health programmes for control of diarrhoeal diseases in developing countries. It is also involved in major demographic surveys. There are four scientific divisions: Clinical Sciences, Laboratory Sciences, Community Health and Population Sciences.

Salary scales, rules and regulations are similar to those followed by the UN. The 1,400 employees include 200 researchers coming from 13 countries. ICDDR,B is supported by 21 countries and international organizations, including WHO and UNICEF.

The Division of Laboratory Sciences has a vacancy for Scientist/Senior Scientist for a period up to 2 years (suitable for a sabbatical leave) to conduct research. Interested individuals would be required to carry out research on diarrhoeal disease at the Centre. Specific area of research is to be mutually agreed upon and must fall within the research priorities of the Centre. It is expected that the investigation should broadly be on either clinical, epidemiological or laboratory aspect relevant to invasive, persistent or watery diarrhoea. The selected individual will have no administrative responsibilities and will be provided with technical staff and a grant to conduct research.

Qualification and experience:

Medical or science graduates with appropriate postgraduate qualifications and experience in diarrhoeal disease are sought. Candidates must have a demonstrable ability to generate ideas and conduct and lead a research team. Candidates should submit a brief outline of a proposal for research they wish to conduct at the Centre.

Salary:

Salary and grade level will be based upon an applicants experience up to a maximum of UN equivalent P4.

For further information, please contact Dr. Saul Tzipori, Associate Director, Laboratory Sciences Division OR Aminul Huq, Personnel Manager (Professional), ICDDR, B, GPO Box 128, Dhaka-1000, Bangladesh. Telex: 675612 ICDD BJ; FAX: 880-02-411846.

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SCIENCE MAGAZINE
NEW LAB SERVICE DEPT.
1515 BROADWAY
NEW YORK, N.Y. 10036
Molecular Devices Corporation has developed a highly sensitive, silicon sensor assay system—Threshold™—to make innovative measurements for the biotechnology marketplace. To be part of this exciting technology, explore the following opportunities:

**Molecular Biologist**
You will be involved in the research and development of novel diagnostic procedures to determine specific nucleic acid sequences. Requires a background in biochemistry or molecular biology and expertise with methods related to the use and design of oligonucleotide and large DNA fragment probe hybridization. Experience in the development of commercial diagnostic reagents preferred.

**Protein Biochemist**
As part of our applications group supporting Threshold, you’ll be responsible for customer support and application development with special emphasis on immunoassay applications. Requires experience in either protein chemistry or immunoassay development.

Both positions require a PhD or equivalent and at least 2 years’ experience in the biotechnology industry.

Send your resume to Molecular Devices Corp., 4700 Bohannon Drive, Menlo Park, CA 94025. Principals only. EOE.

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**Research Opportunities**

**Molecular Sciences**

Beckenham, Kent

Wellcome and its worldwide associated companies develops and produces pharmaceutical products for the advancement of human healthcare. The Wellcome Foundation Limited is based in the U.K., has a turnover in excess of £1.250m and has been the source of many of the group’s notable discoveries.

To complete our teams of dedicated scientists, we are currently looking for the following professionals to join the Department of Molecular Sciences.

**Cell Biology (Oncogenes)**

We have an exciting opportunity for an experienced scientist to work in the Oncogene area where we are building a very strong team which has adopted an integrated multi-disciplinary approach to the discovery of the selective inhibitors of oncogene function and assessment of their potential in the treatment of cancer. Our initial target is the ras oncogene which has been implicated in many common human tumours.

The successful candidate should have 3-5 years’ post-doctoral experience in the oncogene area and have a strong background in both cell and molecular biology with a proven track record of excellence in research.

**Molecular Biologist**

We are seeking a young and talented molecular biologist to join a multi-disciplinary team devoted to the discovery of novel therapeutic agents. Heavily committed to AIDS research, we are expanding our activities to include work on Pneumocystis Carinii, a rather poorly understood organism which is a major cause of death in AIDS patients. The successful candidate will initially work in this new and challenging area identifying and cloning suitable target genes and expressing their products through genetic manipulation in heterologous systems.

A PhD is a necessary requirement for this post but post-doctoral experience is not essential. A background in molecular parasitology would be an advantage.

In addition to a competitive salary you can look forward to our generous benefits package which includes 5 weeks’ holiday, annual profit sharing bonus, pension and free life assurance schemes, excellent sports and social facilities. Relocation assistance will be provided where appropriate.

Please write with full career details to Miss S. J. McKinlay, Personnel Officer, The Wellcome Research Laboratories, Langley Court, Beckenham, Kent BR3 3BS, quoting reference 91/128.
RESEARCH ASSISTANT needed to study the structure and biology of an intrinsically membrane glycoprotein, and to develop assays for its detection, by antibody production, immunochromeny, immunohistochemistry and molecular biology is required. $25,000 to $28,000. Please write in two references to: Dr. Ruth Hogue Angeletti, Developmental Biology and Cancer, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.

RESEARCH ASSISTANT PROFESSOR. To perform research on molecular genetics and biochemistry in various prokaryotic systems, and teach graduate courses in bacterial genetics. Requires Ph.D. in chemistry, experience with genetic recombination (especially polynucleotides), microbiology, DNA recombinant techniques in the fields of resistance to antimicrobial agents and bacterial iron transport as well as extensive experience in plasmid systems at the DNA, RNA, and protein level. At least 3 years of experience teaching graduate students. Postdoctoral experience of at least 2 years. About 20 scientific articles in peer-reviewed journals being senior author in at least half of them. A history of successful grant support as Principal Investigator. Applications will be considered for a month after publication of the advertisement. Send application letter, curriculum vitae and names of three references to: Dr. Jorge H. Crossa, Department of Biochemistry and Molecular Biology, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201. Equal Opportunity Employer/Affirmative Action.

RESEARCH ASSOCIATE. Perform basic and clinical research in a new quantitative fluorescence microscopy laboratory equipped with state-of-the-art imaging and image analysis instrumentation. Experience in protein and enzyme biochemistry, immunochromeny or fluorescence spectroscopy is desirable. Investigations include novel emission microscopic techniques as well as antigenic site and membrane fluidity mapping in living cells. Please submit resume to: Professor Josef Eisinger, Department of Physiology and Biophysics, University of Southern California, School of Medicine, New York, NY 10029–6574. An Equal Opportunity Employer.

RESEARCH ASSOCIATE. To study the properties of novel enzymes which possess the pyrolyoxinoline quinine (PQQ) prosthetic group. These studies will define the role of protein-bound PQQ in catalysis and the kinetics of the interaction of these enzymes with their physiological redox partners, which include cytochromes and metalloproteins. Emphasis on rapid kinetics is desired. Apply to: Dr. V. L. Davidson, Department of Biochemistry, The University of Mississippi Medical Center, Jackson, MS 39216–4505. Equal Opportunity Employer, M/F/H/V.

RESEARCH ASSOCIATE. To conduct clinical research for the functional, anatomical, physiological, and morphological changes that occur after retinal, optic nerve, and macular function and visual development. Work specifically involves research into the evaluation and understanding of pediatric, hereditary and genetic diseases resulting in visual impairment such as retinopathy of prematurity, macular glauosis, and retinitis pigmentosa, utilizing electrophysiological techniques such as the electroretinogram (basal and flash averaged), the electrooculogram, the visual-evoked response and pattern-reversal visual-evoked response, along with psychophysical tests such as the perception of gratings and the visual analog test. Work also involves the development of models and structuring experiments to evaluate visual function in, and mechanisms of these disease processes, especially the conditions resulting in visual impairment, and the investigation into the structures of tests to evaluate low vision in infants. Minimum requirements include an M.D. with a very strong background in visual, macular and optic nerve disease pathologies. Candidate must have had demonstrated expertise in (i) performing and evaluating electro-ophthalmological, and postmortem examinations; (ii) both hereditary and acquired, specifically in the electroretinogram, (ii) assessing pediatric/infant ocular conditions, especially amblyopia. Salary is $25,000 per year for Ph.D. as a post-doctoral fellow. Interested applicants should respond with résumé to: J.O. #9986, Massachusetts Department of Employment and Training, Special Programs Department, 19 Stanford Street, Boston, MA 02114.

RESEARCH ASSOCIATE: LipoGen Inc., located in the East Tennessee Technology Corridor, is a dynamic biotechnology company dedicated to the development of novel immunodiagnostic assays. We currently have an opening for a research associate in molecular biology with the following responsibilities: (i) be expected to provide screening of recombinant DNA expression libraries; (ii) protein purification; (iii) small scale fermentation (1-10L); experience with 1L or above fermentors in addition to those of E. coli would be an asset. This position requires a B.A./B.S. degree with experience or an M.S. degree. Please reply in confidence to: Dr. L. A. Stringfield, LipoGen, Inc., 16815 Research Drive, Knoxville, TN 37922.

RESEARCH ASSOCIATE IN ASTRONOMY. To maintain and use FDS microdensitometer system, Wide Field Stereomicroscopic paraflin microscope, and analyze a survey of stellar proper motions and parallaxes. Thirty-seven and one-half hours per week, $22,400 per year. Research Group invites applications for a postdoctoral position in ASTRONOMY. Send resumes and three references to: Dr. Andre Staniford, Division of Biological Sciences and Nutritional Biochemistry, 321 Savage Hall, Cornell University, Ithaca, NY 14853.

RESEARCH ASSOCIATE/POSTDOCTORAL POSITION. Available now to investigate mechanisms of regulation of lipoprotein lipase and hepatic lipase gene expression, particularly in obesity, and carbohydrate and lipid metabolism (liver, adipocyte, endothelial), molecular biology, immunology, monoclonal antibodies, and recombinant DNA technique approaches are employed. Applicants should have training in biochemistry or molecular biology. Experience with recombinant DNA desirable. Send GFAV resume and names of three references to: Dr. Andre Staniford, Division of Biological Sciences and Nutritional Biochemistry, 321 Savage Hall, Cornell University, Ithaca, NY 14853.

RESEARCH SCIENTIST. Position available for a research scientist in the laboratory of Dr. John F. Aloia, Chairman, Department of Medicine, Division of Endocrinology, at Winthrop-University Hospital. The successful candidate will have a Ph.D. and at least 2 years of postdoctoral experience. Research interests of the division include mechanisms of carbohydrate and lipid metabolism, and the role of endogenous lipoproteins in inflammation. Send curriculum vitae to: John F. Aloia, M.D., Chairman, Department of Medicine, Division of Endocrinology, Winthrop-University Hospital, 259 First Street, Mineola, NY 11501.
Molecular Biologists
Protein Chemists

BioGrowth, Inc., a biotechnology company located in the San Francisco Bay area, has immediate openings for MOLECULAR BIOLOGISTS and PROTEIN CHEMISTS to aid in the development of novel human therapeutic agents. A Ph.D. is required in addition to at least two years postdoctoral experience, preferably in biotechnology. Particular expertise in the areas of mammalian or bacterial gene expression and purification of proteins is desired.

BioGrowth offers competitive salaries, benefits, and the opportunity to make a major contribution. Please send resume to

BioGrowth, Inc.
3065 Atlas Road, Suite 117
Dept. MB-3
Richmond, CA 94806

NATIONAL INSTITUTES OF HEALTH
FELLOWSHIP IN BIOLOGY

The Laboratory of Neurosciences, National Institute on Aging, invites applications for the position of Postdoctoral Research Fellow to study the postmortem human brain in relation to age, Alzheimer’s disease and Down syndrome, coordinated with ongoing clinical program. Animal models of disease (e.g., murine trisomy 16) and actions of centrally acting drugs will be examined. Applications are invited from individuals having a Ph.D. and/or M.D., plus experience in neurochemistry, molecular approaches to gene expression (including in situ hybridization) or neuroanatomy (including quantitative autoradiography). Salary is commensurate with qualifications. Appointments vary in duration from 2 to 7 years, and are tenure-track. Interested applicants should send Curriculum Vitae plus two letters of recommendation to:

Stanley I. Rapoport, M.D.
Chief, Laboratory of Neurosciences
Bldg. 10, Rm. 6C-103
National Institute of Aging, NIH
9000 Rockville Pike
Baltimore, MD 20892

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

RESEARCH OPPORTUNITIES

T THE JACKSON LABORATORY, located by the coast of Maine on the fringe of Acadia National Park, is a world-renowned center for mammalian biology and genetics.

POSTDOCTORAL FELLOWS (2): To study (1) genetics, biochemistry and immunobiology of non-H-2 histocompatibility genes and antigens. (2) biology of immunity to Pneumocystis carinii.

RESEARCH ASSISTANT (1): BS or MS to carry out experiments in cellular immunology, immunogenetics, and techniques, have experience in tissue culture and background in genetics and biochemistry.

Openings are in the lab of Dr. Derry Roopenian. Please contact:

The Jackson Laboratory
Attn: Harold E. Wheeler
Employment Manager
600 Main Street
Bar Harbor, ME 04609
207/288-3371
EOE/Affirmative Action Employer

WHOLE ANIMAL BIOLOGIST

An entry level senior research scientist position is available in the Growth Factor Research Department of Merck Sharp & Dohme Research Laboratories for a whole animal biologist to study the physiology and endocrinology of specific hormone-dependent disorders and to evaluate therapeutic approaches to treat these disorders. Candidates should have either a D.V.M. or Ph.D. or equivalent plus postdoctoral training. Additional experience in either cell biology or biochemistry could be beneficial but is not mandatory.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. Interested candidates should submit their curriculum vitae with the names of three references to Dan Hoffman, Merck & Co. Inc., P.O. Box 2000, Rahway, New Jersey, 07065.

AN EQUAL OPPORTUNITY EMPLOYER

Molecular Genetics
Research Assistants

As part of our expanding research activities, we seek several innovative scientists to join our Molecular Genetics Department at the Central Research facility in Groton, Connecticut. These positions offer an opportunity to join a group of highly motivated scientists carrying out basic research and developing biotechnology applications for the advancement of our drug discovery and medicinal research programs.

Candidates should have a BS or MS degree in a biological science with 1-2 years of relevant laboratory research experience involving recombinant DNA techniques. In addition, you should have experience in one or more of the following:

- Analysis of gene expression
- cDNA library screening
- Mammalian cell culture
- Protein purification
- Construction of expression vectors
- DNA sequencing

In addition to a stimulating scientific environment, we offer a competitive compensation/benefits package and relocation assistance to an attractive southeastern Connecticut shore community. Qualified applicants should submit their resume and the names of three references, in confidence, to: Mrs. Lorraine C. Corr, Personnel Associate, Pfizer Central Research, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.
RESEARCH FACULTY position available beginning July 1989 in the Department of Psychiatry, Duke University Medical Center. Working with a research group investigating the psychopharmacology of nicotine and the role of conditioned stimuli in maintaining cigarette smoking. Experience in nicotine pharmacology and analysis of human smoking behavior. Strong background in neuroscience and pharmacology preferred. Please send curriculum vitae to: Jed Rose, Ph.D., Nicotine Research (151), VA Medical Center, 508 Fulton Street, Durham, NC 27705. Duke University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH SCIENTIST
MOLECULAR BIOLOGY/TRANSGENIC MOUSE TECHNOLOGY
HHMI, UNIVERSITY OF CHICAGO

A position is available beginning Summer 1989 in a laboratory studying the molecular mechanisms underlying differentiation and development in skin. Approaches include tissue culture, gene transfections, transgenic mouse technology, molecular biology, immunofluorescence and immunoelectron microscopy. Applicants should have a minimum of a B.S. degree. Experience with animal husbandry is preferred.

Send curriculum vitae, summary of experience, and names and telephone numbers of references to:
Dr. Elaine Fuchs
Howard Hughes Medical Institute
University of Chicago
5841 South Maryland Avenue
Chicago, IL 60637

RESEARCH TECHNICIAN
AVAILABLE to conduct research on RFLP analysis of cereal crops. Applicants should have experience with standard molecular biology techniques. Familiarity with DNA sequencing and PCR technology desirable. Candidates with a B.S. or M.S. in molecular biology and/or genetics are encouraged to apply. Please send resume to: Sybil Paul, Assistant Departmental Director, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Telephone: 703-231-6300. VPI/VSU is an Equal Opportunity/Affirmative Action Employer.

U.S. DEPARTMENT OF ENERGY
DOE SUPERVISORY PHYSICIST

The DOE's High Energy Physics Division, Office of High Energy and Nuclear Physics, is seeking a supervisory physicist (GM-1310-15) with a high degree of knowledge of edge of development, design, construction, operation and use of advanced particle accelerators and colliding beam facilities. Responsibilities include serving as principal assistant to the Division Director in managing Division technical activities, recommending long-range research objectives and strategies, program development to achieve objectives, research and development in establishing and implementing research policies; monitoring existing and proposed projects; and recommending funding levels, timetables and milestones.


The Department of Energy is an Equal Opportunity Employer.

A STAFF SCIENTIST position is available to study the virological and immunological mechanisms of HIV infection as well as vaccine development in chimpanzees. A Ph.D., M.D., or D.V.M. is required with appropriate research experience and a strong background in the areas of HIV cellular immunity, virology, or molecular biology. The program is under the direction of Jorg W. Eliechen, Ph.D., with an annual salary up to $40,000, dependent upon relative experience. Please send curriculum vitae with names, addresses, and telephone numbers and a brief letter of interest by 1 August 1989. Address material to: Personnel Director (040), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78284. Equal Opportunity Employer M/F.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
SOUTHERN FOREST EXPERIMENT STATION

SUPERVISORY RESEARCH ENTOMOLOGIST/PRO/ELECT LEADER in Pineville, Louisiana. Provides technical and administrative leadership in three primary research problem areas, which are: effects of current control techniques on southern pine beetle populations and beetle dispersal; development of adequate techniques to predict the outbreak, duration and severity of southern pine beetle-borne diseases; and the development of adequate prevention and suppression techniques to achieve desired reduction in southern pine beetle damage in a cost-effective manner. Preference will be given to candidates with experience in these areas. Send curriculum vitae to: Richard Quick, Personnel Management Specialist; or Dr. Stanley J. Barras, Assistant Director-Wood-Bug Research, Southern Forest Experiment Station, Room T-10210, USDA Forest Service, USDA Forest Service, Room T-10210, USDA Forest Service, 701 Loyola Avenue, New Orleans, LA 70118, from 15 July 1989. The USDA, Forest Service is an Equal Opportunity/Affirmative Action Employer, and encourages letters from women and minority applicants.

TOXICOLOGIST
THE UNIVERSITY OF TEXAS MEDICAL BRANCH
BROOKSVILLE, TEXAS

Applications are invited for a research position within a large interdisciplined program on neurotoxicity of heavy metals and effects on the central nervous system. Applicants will be expected to develop research on the neurotoxicity of heavy metals, $20,000 to $32,000 plus benefits, dependent upon qualifications. Applications should be submitted to: Dr. A. L. A. Bear, Division of Environmental Health, School of Health and Natural Sciences, The University of Texas Medical Branch, Galveston, TX 77555. The University of Texas Medical Branch is an Equal Opportunity/Affirmative Action Employer.

RESEARCH GRANTS

Benign Essential Blepharospasm Research Foundation, Inc. is pleased to announce the availability of basic science and clinical RESEARCH GRANTS relevant to essential blepharospasm or Meige's syndrome. Support for up to $50,000 is available. The deadline for filing application is 1 October 1989. For information or applications, please contact: Benign Essential Blepharospasm Research Foundation, Inc., P.O. Box 12460, Beaumont, TX 77706-2468.

AMERICAN EPILEPSY SOCIETY
RESEARCH GRANTS AND FELLOWSHIPS PROGRAM
1990 to 1991

The American Epilepsy Society announces a Research Grants and Fellowships Program designed to encourage the development of academic physicians and scientists in epilepsy and to provide support to investigators early in their careers. Preference is given to applicants and research proposals whose focus is on developmental or pediatric aspects of epilepsy.

RESEARCH FELLOWSHIPS: Eight first-year fellows each carrying a stipend of $25,000 will be available for funding 1 July 1990. Physicians or Ph.D. neuroscientists who desire postdoctoral research and training experience are eligible to apply. The Fellowships must be carried out at a facility where there is an ongoing epilepsy research program. Application deadline is 15 September 1989.

RESEARCH GRANTS: Six 1-year research grants will be awarded to support projects in research that will advance understanding, treatment or prevention of epilepsy. Support is intended for investigators in the early stages of their careers and to new or innovative projects. Support is limited to $25,000. Application deadline is 1 October 1989.

The American Epilepsy Society has the sole responsibility for selection of recipients. Awards will be announced at the annual meeting of the American Epilepsy Society in Boston, 2 to 7 December 1989. Application forms and guidelines are available free of charge from the American Epilepsy Society, Executive Office, 173 Bethany Road, Suite 304, Hartford, CT 06110-1488. Funds for the Research Fellowships have been generously provided by the Miliken Family Medical Foundation and Abbott Laboratories. The Research Grants Program is supported by the Miliken Family Medical Foundation.
DEPARTMENT OF BIOCHEMISTRY
SUNY AT STONY BROOK
POSTDOCTORAL POSITIONS

The Department of Biochemistry, State University of New York at Stony Brook has postdoctoral positions available in the laboratories of the following faculty members:

Dr. William Lennatz: Mechanism of assembly of glycoproteins. Structure and function of glycoproteins in cell differentiation and embryonic development.

Dr. Kenneth Marcu: Transcriptional control of the maize e-myc proto-oncogene by cis-acting positive and negative elements and their associated nuclear regulatory factors; biological properties of the myc gene product.

Dr. Jakob Schmidt: Regulation of acetylcholine receptor subunit expression during development and in response to plasma membrane activity.

Dr. Sanford Simon: Cell biology/biochemistry of inflammatory processes, e.g. inflammatory cell activation, degradation of extracellular matrix and cytokines.

Dr. Rolf Sternglanz: DNA topoisomerases and their roles in DNA replication, transcription and recombination. Histone acetylation and its role in chromatin structure and gene expression.

Send curriculum vitae and three letters of reference to: Drs. Lennartz, Marcu, Schmidt, Simon or Sternglanz, Department of Biochemistry, State University of New York at Stony Brook, Stony Brook, New York 11794-5215 by 15 August 1989.

State University of New York at Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.

RESEARCH OPPORTUNITIES
IN BIOTECHNOLOGY

The Department of Biotechnology Research of Pioneer Hi-Bred International, Inc. is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities, and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, regeneration, and gene isolation programs.

Molecular Biologist: Regulated expression of marker sequences and agronomically important genes in monocots is the principal goal. The position is well supported and will complement existing programs in plant transformation, biochemistry, and dicot gene expression. Candidates should have a PhD and post-doctoral experience or equivalent in a related discipline.

Protein Biochemist: Biochemical characterization of proteins from plants and bacteria and developing novel assay systems to detect and quantitate expressed proteins in transformed plant tissues are the principle goals. Tasks associated with the primary duty will include protein isolation and characterization of enzyme assays and ELISA development. Candidates should have at least a B.S. Degree or equivalent, preferably with two years’ experience.

Scientific Business Manager: Responsible for handling administrative aspects of contracts between the biotechnology research department, universities, and other companies. This person will also aid in obtaining marketing information and will provide other general administrative support for the department. Candidates shall have a B.S. Degree in life science or equivalent with a minimum of five years’ experience. Experience in business negotiations and administrative matters is highly desirable.

Postdoctoral Associate Position: The successful applicant will join an existing group whose primary interest is genetic transformation of agronomic crops such as maize, soybeans, sunflowers, and alfalfa. This two-year position will emphasize transformation of dicots, especially alfalfa and soybeans, and will include subsequent analysis of positive transformants. Candidates should have a PhD in Biology or equivalent experience.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity/Affirmative Action Employer. Send resume with at least three references to:

Lisa Wilson
Pioneer Hi-Bred International, Inc.
7300 Northwest 62nd Avenue • P.O. Box 38
Johnston, Iowa 50131

RESEARCH SCIENTIST—Ph.D.
PULMONARY INFLAMMATION

Wyeth-Ayerst Research has an immediate opening in its Immunopharmacology Division for a Pulmonary Pharmacologist to work at its modern research facility located in the Princeton, New Jersey area.

The successful candidate will investigate the contributions of pulmonary inflammation to airway hyperreactivity and disease of the lung, and will be responsible for establishing appropriate in vivo models of the late phase response and for evaluating the pharmacologic activity of drug candidates. Experience in the measurement of pulmonary function will be considered an asset.

A Ph.D. in Pharmacology, Physiology or a related medical science with 0-3 years post-doctoral training is required. Candidates should possess highly developed oral and written communication skills and a strong publication record in major scientific journals.

We offer an excellent salary and benefits package plus opportunities for career advancement. Interested candidates should submit their curriculum vitae and salary requirements to:

Personnel Manager, Dept. 2776-BW

WYETH-AYERST RESEARCH
CN 8000
Princeton, NJ 08543-8000
An Equal Opportunity Employer M/F/H

SENIOR ASSOCIATE RESEARCH SCIENTIST
ELECTROPHYSIOLOGY

The Miles Institute of Preclinical Pharmacology is currently looking for an Electrophysiologist to join an expanding Institute in the new Miles Research Center in West Haven, Connecticut. This position will involve use of voltage-clamp techniques and study of voltage dependent channels in a variety of cell types. Responsibilities will also include investigation and analysis to assess drug/channel interactions.

The ideal candidate will have an MS in Physiology in Biophysics with a minimum of 2 years’ experience or a recent PhD in a directly related field of study. Knowledge of computer programming (BASIC) is essential and experience in digital imaging and measurements using intracellular recording dyes is a plus.

We offer an attractive compensation commensurate with qualifications, generous benefits, and an excellent opportunity for personal growth and professional satisfaction. Resumes should be forwarded to: Department ARA.

Miles Research Center
A Bayer USA INC. COMPANY
400 Morgan Lane
West Haven, CT 06516

AN EQUAL OPPORTUNITY EMPLOYER M/F/H
We are planning to solve your biotech problems.

Our new pilot plant is designed to solve your process and scale-up problems.

We've invested in your future. You may need to scale up microbial or animal cell products, develop bioseparations, or quality control methods. Let us help. We have the equipment and the expertise to do the job.

Our personnel, procedures and commitment reflect our professional approach to your problems. Our industry experienced pilot plant manager will insure that your projects are managed efficiently. We will open our pilot plant in October and operate with Good Manufacturing Practices.

Penn State is a diverse research university, with an impressive biotechnology history. Eighty-three Penn State faculty members from many disciplines are conducting biotechnology research, and can be your partners for solving biotechnology problems.

Our Bioprocessing Resource Center offers pilot plant services, training, protein and DNA chemistry, biocomputing, and other bioprocessing services. Call to discuss how we can help solve your biotech problems: 1-800-833-5533.

Biotechnology Institute and Bioprocessing Resource Center

519 Wartik Laboratory, The Pennsylvania State University, University Park, PA 16802
(814) 863-3650 FAX (814) 863-1357

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The Pennsylvania Department of Commerce sponsors the Penn State Bioprocessing Resource Center.