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POSITIONS OPEN

UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

Two tenure-track ASSISTANT PROFESSOR positions are available for the fall of 1991. The University of Louisville is part of the state system and the department is undergoing well-funded expansion at all levels. Candidates should hold a Ph.D., D.V.M., or M.D. degree and have at least 2 years of postdoctoral research experience. Successful applicants will receive good start-up support and line item 12-month salary and will be expected to excel in the teaching of medical and graduate students. They should also be able to establish an independent molecularly oriented research program in one of four areas: virology, immunology, pathogenic mechanisms, or cell structure and growth regulation. Applicants should send their curriculum vitae, a statement on research interests, and names of three references to: Dr. Gordon D. Ross, Chairman, Department of Microbiology and Immunology, University of Louisville, Louisville, KY 40292. The University of Louisville is an Equal Opportunity Educator and Employer that specifically encourages applications from women and minorities.

HARVARD MEDICAL SCHOOL CENTER FOR BLOOD RESEARCH

Applications are invited for ASSISTANT PROFES-SOR OF GENETICS in 1992. We are seeking candidates with strong potential for innovative research broadly relevant to the cell and molecular biology of blood cells, hematopoiesis, the immune system, and associated diseases. Candidates working in *Drosophila* or *C. elegans* will be considered if their research is relevant to the above areas.

The successful candidate will receive a faculty appointment in the Department of Genetics at Harvard Medical School and will be expected to establish an outstanding research program. The position offers significant scholarly and scientific resources and the opportunity to teach medical and graduate students. The center will scon occupy space in a new building on the medical school campus. Applicants should submit, no later than 31 May 1991, curriculum vitae, reprints of publications, a brief statement of present and future research plans (no more than 500 words), and the names of three references to:

Professor Timothy Springer Chair, Search Committee Center for Blood Research, Box 367 800 Huntington Avenue Boston, MA 02115

COLUMBIA UNIVERSITY CENTER FOR RADIOLOGICAL RESEARCH

Applications are invited for a faculty position at the **ASSISTANT PROFESSOR** level available after 1 May 1991. The center seeks a scientist with excellent research potential who is interested in human and rodent cell transformation assay systems at both the cellular and molecular levels. The center is well equipped for radiobiological studies. Adequate start-up funds will be available. Candidate should have a Ph.D. degree and post-doctoral experience. Salary will be commensurate with experience. Send curriculum vitae, reprints, and names of at least three references to: Dr. Eric J. Hall, Director, Center for Radiological Research, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032.

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ANATOMY DEPARTMENT seeks ASSISTANT/ ASSOCIATE PROFESSOR expert in molecular and cellular biology. Applicant should have independent program and cooperate with colleagues within and outside the department. Send curriculum vitae to: Dr. Dale E. Bockman, Department of Anatomy, Medical College of Georgia, Augusta, GA 30912–2000. An Equal Opportunity/Affirmative Action Institution.

ANATOMIST

Full-time position. Must have earned doctorate in anatomy and proven teaching and administrative skills. Salary negotiable, depending upon qualifications and experience. Send detailed curriculum vitae to: Personnel, L.A. College of Chiropractic, P.O. Box 1166, Whittier, CA 90609–1166. Equal Opportunity Employer.

POSITIONS OPEN



Assistant professor in the in residence series, Department of Laboratory Medicine, University of California, San Francisco. Duties encompass research, service, and teaching. Minimum requirements include M.D. degree, appropriate training, experience in hematopathology or hematology. California medical licensure. Ninety percent of effort is to be devoted to basic science research efforts within the broad scope of hematology. The incumbent is required to have independent research support, including at least partial salary for a minimum of 3 years. Ten percent of the incumbent's time will be devoted to service and teaching related to either hematopathology or transfusion medicine.

Send curriculum vitae to: Laurence Corash, M.D., Chairman Hematology Search Committee, Department of Laboratory Medicine, University of California, San Francisco, San Francisco, CA 94143–0100. Telephone: 415-476-5750. The University of California, San Francisco, is an Equal Opportunity/Affirmative Action Employer. Minority, women, handicapped, and veteran candidates are encouraged to apply.

ENVIRONMENTAL SCIENCE

New England College invites applications for an environmental scientist at the **ASSISTANT PROFESSOR** level. Candidates should have a background in atmospheric studies and monitoring of air pollutants, and at least one degree in environmental science. Teaching responsibilities will include both introductory (including nonmajors) and advance courses in environmental science, including laboratories. The position will be available 1 July 1991. The college is a small institution with a commitment to and a strong tradition of excellence in teaching.

Send letter of application, résumé, and three references to:

Dr. Laurence I. Taylor, Academic Dean Office of Academic Affairs New England College 7 Main Street Henniker, NH 03242–3293

New England College especially encourages applications from women and minority candidates and is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR, NEUROPHYSIOL-OGY. A tenure-track position is available for an individual, with Ph.D., whose research in molecular/cellular neurobiology or regulation of excitable tissues will complement a strong intercollege program in Neuronal Growth and Development. The successful candidate is expected to be on site no later than spring 1992, teach systemic physiology or pharmacology, and establish an extramurally supported research program. Salary is negotiable; start-up funds are available. Application deadline is 20 May 1991, but the search may be extended if a suitable candidate is not identified. A letter of application should include current and long-term research interests and teaching experience or interests. Also provide curriculum vitae, two representative publications, transcripts, and names, addresses, and telephone numbers of four individuals who were asked to provide references. Send to: Dr. D. I. Ishii, Physiology Department, Colorado State University, Fort Collins, CO 80523. CSU is an Equal Opportunity/Affirmative Action Employer. Women and ethnic minorities are strongly encouraged to apply. E.O. Office: 314 Student Services Building.

NEW OPPORTUNITIES FOR MOLECULAR GENETICISTS

The Center for Human Genetics at Boston University School of Medicine now offers two new positions for Ph.D. molecular geneticists at the ASSISTANT OR ASSOCIATE PROFESSOR rank. Established investigators preferred with expertise in gene mapping, cloning, in situ hybridization, sequencing, immunogenetics, or use of novel techniques applicable to complex genomes. Interaction with over 20 molecular biologists/geneticists in other departments and many more in Boston. Send curriculum vitae to: Aubrey Milunsky, M.D., D.Sc., Director, Center for Human Genetics, Boston University School of Medicine (BUSM), 80 East Concord Street, Boston, MA 02118. BUSM is an Equal Opportunity/Affirmative Action Employer.

FOREST ECOLOGIST DEPARTMENT OF FOREST SCIENCE COLLEGE OF AGRICULTURE AND LIFE SCIENCES TEXAS A&M UNIVERSITY (TAMU)

ASSISTANT OR ASSOCIATE PROFESSOR OF ASSISTANT OR ASSOCIATE PROFESSOR OF FOREST SCIENCE. Twelve-month, tenure-track ap-pointment consisting of 60% research and 40% teaching. Salary commensurate with qualifications and experience. Available September 1991. Closing date: 1 May 1991 or until suitable candidate is found. A Ph.D. is required and at least one degree in forestry is preferred. Applicant must have a sound understanding of forest ecological principles at the tree stand and ecosystem level. Beprinciples at the tree, stand, and ecosystem level. Re-search responsibilities will include development of a research responsibilities will include development of a research program of national stature in an area of quan-titative ecology. Applicant will be expected to compete for extramural grant and contract support. Research opportunities include, but are not limited to: ecosystem and stand level dynamics, quantitative silviculture, and ecological modeling. Position provides unusual opportu-nity for collaborative efforts with scientists in related disciplines within a strong research university. Start-up support available. Successful applicant will be required to contribute to undergraduate and graduate departmental teaching programs. Position requires an individual with interest in students and a willingness to participate in service interaction with forestry and other natural re-source agencies and organizations. Department occupies modern teaching and research facilities. Greenhouses and controlled environment facilities recently added. Field sites readily available through cooperative arrangements with industry and government. Interested persons should submit a letter of application with curriculum vitae, copies of recent major publications, and names of three references to: Dr. Mike Messina, Chair Search Committee, Department of Forest Science, Texas A&M University, College Station, TX 77843–2135. Tele-phone: 409-845-2547. TAMU is an Affirmative Action/ Equal Opportunity Employer.

Established Bone Marrow Transplant Program seeks an individual for appointment at the ASSISTANT/ ASSOCIATE PROFESSOR level in the Division of Research Immunology/Bone Marrow Transplantation of the Childrens Hospital Los Angeles. The Bone Marrow Transplant Program is involved in both the basic science and clinical aspects of bone marrow transplantation for children with immunological, oncological, hematolog-ical, and genetic diseases. The individual will be expected to engage in the clinical activities of the Bone Marrow Transplant Program and to establish an externally funded research program in the areas of immunology, hematology/oncology, genetics, or infectious disease. Individuals will receive an appropriate academic appointment in the Department of Pediatrics of the University of Southern California School of Medicine. Interested individuals should send their curriculum vitae and a summary of their research interests to: Robertson Parkman, M.D., Head, Division of Research Immunology/Bone Mar-row Transplantation, Childrens Hospital Los Ange-les, 4650 Sunset Boulevard, Box #62, Los Angeles, CA Dood Sunset Boulevard, Box #62, Los Angeles, CA 90027.

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HUMAN NEUROMUSCULAR PHYSIOLOGY AND MICRONEUROGRAPHY

The John B. Pierce Laboratory, devoted to research and education in health and the environment, and affiliated with Yale University, seeks an ASSISTANT FEL-LOW (analogous to assistant professor) with experience in human motor control and microneurographic recording techniques to join an ongoing research program relating CNS behavior to changes in muscle properties during fatigue. Evidence of current or potential research funding is highly desirable. Applicants with a doctoral degree in a relevant specialty should send curriculum vitae, a statement of research plans, representative publications, and the names of three references by 1 May 1001 to 1991 to:

Human Motor Control Search Committee The John B. Pierce Laboratory 290 Congress Avenue New Haven, CT 06519–1403

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POSITIONS OPEN

HUMAN ANATOMY

The expanding Biology Department of Gannon University is seeking a well-qualified candidate to fill a tenure-track position at the ASSISTANT/ASSOCI-ATE PROFESSOR level.

Responsibilities include teaching an advanced course in human anatomy, histology, and/or embryology, and possibly neuroscience.

Requires: Ph.D., advanced background in human/ gross anatomy (with experience in advanced human dissection), and strong commitment to undergraduate and graduate teaching. Position available August 1991 with the possibility of

teaching in June and July.

Application: send letter of application noting teaching and research interests, curriculum vitae, and three letters of recommendation by 15 April 1991 to:

> Director of Personnel Gannon University University Square Erie, PA 16541

Gannon University is a comprehensive coeducational Catholic teaching university. Enrollment in associate, baccalaureate, and graduate degree programs exceeds 4500 students on the main campus in downtown Erie, Pennsylvania, the suburban Villa Maria campus near Presque Isle, and seven extension centers throughout northwestern Pennsylvania.

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Our issue of 26 April 1991 will be distributed to scientists attending the 1991 ASM Meeting in Dallas, Texas. Deadline for submission of line classified ads: 11 April 1991.

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Research position in academic Department of Pathology. The Department of Pathology at Stanford Univer-sity School of Medicine seeks candidates for appointment at the level of ASSISTANT OR ASSOCIATE PRO-FESSOR. Individuals must have an established record of scholarly productivity with scientific articles in peerreviewed journals and evidence that these articles reflect significant contributions of the candidates in the design and conduct of the studies. There also must be proof of scientific independence and the ability to obtain research funding. Of special interest are candidates with estab-lished credentials in the area of molecular biology including as it relates to medicine. Preference will be given to ing as it relates to medicine. Preference will be given to individuals who can contribute to clinical service obliga-tions, particularly in clinical pathology. Applicants should send their curriculum vitae and names of refer-ences to: Klaus G. Bensch, M.D., Professor and Chairman, Department of Pathology, Stanford Uni-versity Medical School, Stanford University Medical Center, Stanford, CA 94305. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. applications from such candidates

GENERAL BIOLOGIST

The Department of Biology, Villanova University, seeks a broadly trained biologist to fill a 1-year, nonten-ure-track position for the 1991–92 academic year at the ASSISTANT PROFESSOR level. The successful candidate may be expected to teach one or more of the following undergraduate courses: animal physiology, neurobiology, and participate in general biology courses for nonmajors. Candidates should have the Ph.D. degree. Screening of applicants will begin 2 weeks after the appearance of this advertisement. Applicants should send curriculum vitae, a statement of teaching interests, official undergraduate and graduate transcripts, and should have at least three letters of recommendation sent to:

Dr. Joseph A. J. Orkwiszewski Department of Biology Villanova University Villanova, PA 19085

Villanova University is an Augustinian-related Roman Catholic institution and is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

NUTRITIONAL BIOCHEMIST. The Department of Food Science and Human Nutrition, University of Hawaii–Manoa, invites applications for an 11-month, tenure-track ASSISTANT OR ASSOCIATE PRO-FESSOR. Requirements include a Ph.D. in nutritional biochemistry, biochemistry, or closely related field. For assistant professor, one or more years of postdoctoral experience required. For associate professor, all mini-mum requirements for assistant plus 4 years at the assistant level, or equivalent. Also required is demon-strated research capability in cellular or molecular nutrition and evidence of teaching ability. Responsibilities include teaching graduate and undergraduate courses, advising students, and developing a competitively funded research program. Annual salary ranges from \$37,860 to \$56,052 for assistant; \$47,904 to \$70,920 for associate. Applicants should submit a letter of application, curriculum vitae, official transcripts of undergraduate and graduate academic work, description of teaching experi-ence, and three letters of recommendation by the closing date of 30 May 1991 to: Dr. Nancy E. Johnson, Chairperson, Department of Food Science and Hu-man Nutrition, 1800 East-West Road, Henke 224, University of Hawaii at Manoa, Honolulu, HI 96822. An Equal Opportunity/Affirmative Action Employer.

REPRODUCTIVE BIOLOGIST. A tenure-track ASSISTANT PROFESSORSHIP is available for a reproductive biologist, with Ph.D., whose research interests complement those of faculty in the Animal Reproesis complement those of faculty in the Animal Repro-duction and Biotechnology Laboratory. Preference will be given to those in neuroendocrinology, reproductive endocrinology, or developmental biology. The successful candidate is expected to be on site no later than spring 1992, teach systemic physiology or pharmacology, and establish an extramurally supported research program. Salary is negotiable; start-up funds are available. Appli-cation deadline is 20 May 1991, but the search may be extended if a suitable candidate is not identified. A letter extended if a suitable candidate is not identified. A letter of application should include current and long-term research interests and teaching experience or interests. Also provide curriculum vitae, transcripts, and names, addresses, and telephone numbers of four individuals who were asked to provide references. Send to: Dr. G. E. Seidel, Search Committee Chairman, Department of Physiology, Colorado State University, Fort Collins, CO 80523. CSU is an Equal Opportunity/Affirmative Action Employer. Women and ethnic minorities are strongly encouraged to apply. E.O. Office: 314 Student Services Building.

ASSISTANT PROFESSOR OF CLINICAL PATHOLOGY DEPARTMENT OF PATHOLOGY COLUMBIA UNIVERSITY

Nontenure-track position available immediately to join an expanding research team involved in the study of the function of the *c-myc* gene in the control of proliferation and differentiation. Candidates should have an M.D. or Ph.D. and interest and extensive experience in the field of gene regulation.

Please send a description of research interests, curriculum vitae, and names and telephone numbers of three references to:

Dr. Riccardo Dalla-Favera Division of Cellular and Molecular Biology Department of Pathology Columbia University 630 West 168th Street New York, NY 10032

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MICROBIOLOGY/IMMUNOLOGY

The School of Podiatric Medicine at Barry University seeks applicants for ASSISTANT OR ASSOCIATE **PROFESSOR** of microbiology. Requirements: Ph.D. with preparation in microbiology, infectious disease, immunology; commitment to teaching podiatric medical students; preferred minimum: 5 years of full-time teaching/research experience. Responsibilities include lecture, laboratory, and student advising. Send résumé, tran-scripts, and three letters of recommendation to: Chet Evans, D.P.M., F.A.C.F.S., Dean, Barry University School of Podiatric Medicine, 11300 N.E. 2nd Avenue, Miami Shores, FL 33161.

1516



EXECUTIVE DIRECTOR Center for Process Analytical Chemistry University of Washington

Candidates are sought for an appointment as **Executive Director** of the Center for Process Analytical Chemistry (CPAC) at the University of Washington. Applicants should have a broad knowledge of science and engineering and be highly qualified for independent research in some area of process analytical chemistry. A Ph.D. degree is an appropriate field is required (only exceptional relevant experience will substitute). Applicants must also show evidence of a solid background in an industrial research or plant environment, as well as extensive managerial experience. In addition, excellent writing and communication skills will be required.

Research at CPAC focuses on generic problems in four major areas: sensors/ instrumentation, sampling, multivariate data analysis including spectral pattern recognition, and optimization/control/intelligence. The main thrust of the program is in the area of new types of sensors that can not only provide direct chemical information about the components of a chemical system, but furthermore, that are integrated with sophisticated data processing and intelligence capabilities to permit real-time process optimization, control, or other functions, such as crisis alerting, etc.

The Executive Director will have overall management and administrative responsibility for the Center. Functions and responsibilities include: chief CPAC representative to industry, government and university leadership; responsible for long-range planning, major facilities planning and acquisition, development and implementation of CPAC policies and procedures, and oversight of intellectual property issues.

The position will be open July 1, 1991. Applications (or nominations), including a *curriculum vitae*, statement of research interests, a letter highlighting the special skills and experience that you could contribute to the development and success of CPAC, and three letters of recommendation, should be sent to: **Prof. Bruce R. Kowalski, Codirector, CPAC, BG-10, University of Washington, Seattle, WA 98195.** (For a more detailed position description, please contact: **John Shipman, (206) 685-2254.)** E.O.E.



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> Molecular Biosystems, Inc. Human Resources Department 10030 Barnes Canyon Road San Diego, CA 92121

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National Institutes of Health Public Health Service Department of Health and Human Services

DIRECTOR Division of Legislative Analysis

The National Institutes of Health (NIH) invites nominations and applications for the position of Director, Division of Legislative Analysis, Office of Science Policy and Legislation, Office of the Director. This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from the ES-1 to ES-4 pay level per annum (\$87,000 to \$100,500). A one year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The Director, Division of Legislative Analysis is responsible for providing executive leadership and management in the comprehensive and continuing analysis of Congressional activities affecting NIH, the development of new legislation to enable the agency to better perform its mission, and Congressional liaison matters.

For more information, contact Dr. Paul Thibault at (301) 496-2400. The following forms are required: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. These must be submitted to:

> Dr. Paul G. Thibault National Institutes of Health Office of the Director Personnel Office Building 31, Room 1C-27 9000 Rockville Pike Bethesda, Maryland 20892



Applications must be received no later than April 9, 1991.

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

ASSISTANT PROFESSOR, BIOCHEMISTRY

The Department of Biochemistry invites applications for a tenure-track position at the assistant professor level available for the fall of 1991 in the area of mechanistic aspects of biochemical problems. The successful applicant will be expected to develop a competitive basic research program and to participate in teaching of graduate level courses. Applicants should submit, prior to 15 April 1991, curriculum vitae, a concise description of current research activities and career goals, and three letters of reference to: Dr. Roger McMacken, Department of Biochemistry, The Johns Hopkins University (JHU), School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, MD 21205. JHU is an Affirmative Action/Equal Opportunity Employer.

HISTOLOGY/NEUROANATOMY

The School of Podiatric Medicine at Barry University seeks applicants for ASSISTANT OR ASSOCIATE **PROFESSOR** of histology. Requirements: Ph.D. with preparation in histology with background in neuroanatomy/neurosciences; commitment to teaching podiatric medical students; preferred minimum: 5 years of fulltime teaching/research experience. Responsibilities include lecture, laboratory, and student advising. Send résumé, transcripts, and three letters of recommendation to: Chet Evans, D.P.M., F.A.C.F.S., Dean, Barry University School of Podiatric Medicine, 11300 N.E. 2nd Avenue, Miami Shores, FL 33161.

TEMPORARY PROFESSOR AND INSTRUCTOR

Applications are invited for 1-year appointments beginning 15 August 1991: A VISITING PROFESSOR to teach upper level courses and to participate in collaborative research. Area of research and teaching interest is open. Rank and salary will be commensurate with experience. An INSTRUCTOR to teach comparative anatomy and introductory biology and zoology. This is a full-time instructional position. Salary will be commensurate with experience. Submit curriculum vitae and names of three references by 30 April 1991 to: Dr. John Rawls, T. H. Morgan School of Biological Sciences, University of Kentucky, Lexington, KY 40506–0225.

VERTICAL MARKETING MANAGERS

Wolfram Research, Inc., developer of *Mathematica*, seeks professionals to develop marketing programs to effectively penetrate engineering and science markets. Positions entail technical presentations, customer problem-solving, and the ability to travel. Qualifications include a postgraduate degree in respective field and familiarity with technical products like *Mathematica*. For consideration, send résumé to: Wolfram Research, Inc., P.O. Box 6059, Champaign, IL 61826–6059. *Affirmative Action/Equal Opportunity Employer.*

CHAIRPERSON DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY LOUISIANA STATE UNIVERSITY MEDICAL CENTER, SHREVEPORT

Applications and nominations are invited for the position of **PROFESSOR AND HEAD** (chairperson) of the Department of Biochemistry and Molecular Biology at Louisiana State University Medical Center (LSUMC), Shreveport. The department currently consists of nine faculty, eight fellows, and 23 doctoral students and is responsible for teaching freshman medical students, maintaining state-of-the-art research programs in molecular biology, and training doctoral students. The department is well equipped, well funded, and will expand now and with the opening of the ten-story Biomedical Research Institute which will focus on research in molecular biology, cardiovascular sciences, and neurobiology. We seek candidates with an outstanding record of research achievement, proven leadership skills, and a commitment to training medical and doctoral students. Candidates should have a Ph.D. and/or M.D. and a record of scientific excellence as evidenced by publications and grant awards. Candidates should submit curriculum vitae, a summary of research interests, and at least three letters of reference to: Dr. Dennis J. O'Callaghan, Chair of Search Committee, Department of Microbiology and Immunology, LSUMC, 1501 Kings Highway, Shreveport, LA 71130.

LSUMS is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGY. Broadly trained biologist to teach primarily nonmajor courses in a correctional institution for men. Courses offered are in the day and the evening. Position may also include teaching, in area of specialization, one or two courses per year for majors on main campus. Ph.D. with specialization in vertebrate physiology, genetics, animal behavior, or evolution preferred. Position is nontenure with renewable contract yearly. Salary commensurate with education and experience. Review of materials will begin immediately and continue until position is filled. Submit letter of application, curriculum vitae, and names and telephone numbers of three references to: Norman Smith, Dean of Continuing Studies, Wilmington College, Wilmington, OH 45177. Equal Opportunity Employer encouraging women and minorities to apply.

The Department of Veterans Affairs Medical Center, Nashville, Tennessee, is actively recruiting for an ASSO-CIATE CHIEF OF STAFF for Research and Development Service. Incumbent will direct a research program funded in excess of \$4 million annually. The R&D Service is closely affiliated and physically connected with the Vanderbilt University School of Medicine. Applicants should have a strong, independently funded research program, a national scientific reputation, and, preferably, an M.D. degree. Send letter and curriculum vitae to: Dr. Achilles A. Demetriou, Chairman, Search Committee, Department of Veterans Affairs Medical Center, 1310 24th Avenue, South, Nashville, TN 37212–2637, Telephone: 615-327-4751, ext. 5356. Equal Opportunity Employer.

MATHEMATICAL BIOLOGY UNIVERSITY OF UTAH

The Departments of Biology and Mathematics at the University of Utah invite applications for a new interdisciplinary **TENURE-TRACK POSITION** in mathematical biology. We seek a person who combines excellence in research with a genuine commitment to teaching at the undergraduate and graduate levels. The initial teaching responsibility will be to work with members of the mathematics and biology departments to develop an innovative core course in mathematical biology for lower-division undergraduates in the life sciences. The person who fills this position will be expected to maintain a research program that adds to the university's existing strength in mathematical biology.

Applicants should submit curriculum vitae, a statement of research and teaching interests, and four letters of recommendation to: **R. H. Ward, Department of Biology, University of Utah, Salt Lake City, UT 84112. Telephone: 801-581-4466**, for additional information. Review of applications will begin 5 April 1991 and will continue until the position is filled. *Applications from minority candidates and women are strongly encouraged. The University of Utah is an Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF BRITISH COLUMBIA HEAD, DEPARTMENT OF PHYSIOLOGY

The Faculty of Medicine, University of British Columbia (UBC), invites applications and nominations for the position of head of the Department of Physiology. We seek an academic leader to be responsible for

We seek an academic leader to be responsible for directing and developing the teaching and research programs of the department. The department has 18 fulltime faculty members and attracts research support of \$1,840,000 annually. Candidates should have a proven record of scholarly activity, a strong research background, and a commitment to undergraduate and graduate medical education. Starting date will be 1 July 1991. Salary will be commensurate with experience and qualifications.

UBC encourages qualified women and minority applicants. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Applications, accompanied by a detailed curriculum vitae and the names of three references, should be directed by 15 April 1991 to:

Dr. M. J. Hollenberg Dean, Faculty of Medicine Room 317, Instructional Resources Centre University of British Columbia 2194 Health Sciences Mall Vancouver, British Columbia V6T 1W5, Canada

POSITIONS OPEN

DEAN, University of South Florida (USF) College of Medicine. The University of South Florida College of Medicine is seeking applicants for the position of dean. The dean is responsible for the education, research, and clinical programs conducted at the University of South Florida College of Medicine. The college is one of three in the state of Florida. USF opened in 1960 and the College of Medicine began in 1971. USF is the 35th largest university in the nation with more than 30,000 students and is located in an expanding metropolitan area of more than 2 million people. The Health Sciences Center also includes a College of Public Health and a College of Nursing. It has approximately 475 faculty and 96 students in each class. Applicants should have an M.D. degree or equivalent; should have considerable academic, administrative, and leadership skills; and should meet standards for appointment at the full professor level. Applicants should send their curriculum vitae and the names of five references to: Allan L. Goldman, M.D., Chairman, Dean Search Committee, University of South Florida College of Medicine, Box 19, 12901 Bruce B. Downs Boulevard, Tampa, FL 33612. USF is an Equal Opportunity/Affirmative Action Emplover.

INSTITUTE DIRECTOR. Applicants are sought for directorship of the James A. Baker Institute for Animal Health, College of Veterinary Medicine, at Cornell University. The Baker Institute has a distinguished history of accomplishment in animal health research, with continuing emphasis on studies of canine diseases. With eight senior staff, excellent laboratory, and animal facilities, the institute is well equipped for biological research. The successful applicant will have proven leadership in research and teaching and will hold faculty appointment in the college at the rank of professor. The director is expected to maintain an active research program. Important duties include faculty development and graduate education and support of activities which enhance public and private support of the institute. Veterinary qualifications and/or experience in the field of animal health desirable. Send letter of interest, curriculum vitae, and names and addresses of three references to: Dr. Fred Quimby, Department of Pathology, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853. Review of applications will begin immediately. Cornell University is an Affirmative Action/Equal Opportunity Employer.

ENDOWED CHAIR DIABETES RESEARCH

The Department of Medicine, Baylor College of Medicine, invites applications for the Rutherford Chair Professorship for Diabetes Research and Director of the Diabetes and Endocrine Research Center. The applicant must have established a nationally recognized program in diabetes-related research. It is expected that the individual will possess leadership and administrative abilities necessary to direct the development of an aggressive institution-wide effort in diabetes research utilizing resources from multiple clinical and basic research departments. A letter of interest or nomination, curriculum vitae, and the names of at least three references should be sent to: Glenn R. Cunningham, M.D., Chair, Search Committee, Research Service 151, 2002 Holcombe, VA Medical Center, Houston, TX 77030.

ASSOCIATE DEAN FOR BASIC SCIENCES AND RESEARCH

The Texas College of Osteopathic Medicine (TCOM) invites nominations and applications for the position of associate dean for Basic Sciences and Research. TCOM is a state-supported medical school, affiliated with the University of North Texas. Our research grants and contracts were in excess of \$3.5 million for 1989–1990. We now seek an eminent scientist/teacher who will lead the college to a higher level of national and international prominence in its programs. The Associate Dean for Basic Sciences and Research is responsible for all research programs in the College and for all teaching and service programs in the Basic Sciences Division. Applications should be sent before 1 July 1991 to: Michael Emmett-Oglesby, Ph.D., Search Committee Chairman, Departiment of Pharmacology, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107–2690. FAX: 817-735-2610. *TCOM is an Equal Opportunity/Affirmative Action Employer.*

University of Minnesota

Department of Pediatrics and Institute of Human Genetics

Martin Lenz Harrison Chair in Developmental Biology

The University of Minnesota Medical School invites applications and nominations for the Martin Lenz Harrison Endowed Chair. The Institute of Human Genetics and the Department of Pediatrics are seeking a highly qualified, internationally recognized, mammalian developmental molecular biologist, who will recruit and direct a group of investigators with interests in mammalian developmental biology. Individuals with interests in other areas of vertebrate developmental biology will also be considered. This position will be a tenured full Professor (M.D. and/or Ph.D.) in the Department of Pediatrics and the appropriate basic science department, with membership in the Institute of Human Genetics.

To support this program, substantial financial and space commitments are available. Laboratory space for the Chair and additional faculty will be in the Institute of Human Genetics. Presently, the research laboratories of 9 faculty members from 4 departments are located within the Institute. Areas of ongoing research include molecular immunology, molecular neurogenetics, oncogenesis, control of gene expression, and hematopoiesis.

Please send nominations and inquiries to:

Dr. Harry T. Orr Chair, Search Committee University of Minnesota Institute of Human Genetics Box 206 UMHC Harvard Street at East River Road Minneapolis, MN 55455

The last date for receipt of applications is June 30, 1991.

The University of Minnesota is an equal opportunity educator and employer.

(2) Assistant Professorships — The Department of Veterinary Microbiology, College of Veterinary Medicine, University of Missouri-Columbia has 2 full-time tenure-track Assistant Professorships open immediately. The Department focuses on contemporary immunologic technology for controlling infectious diseases of veterinary, zoonotic, and comparative medical importance. The Department collaborates with campus researchers in molecular/cell biology, medicine, agriculture, and biological sciences.

Position 1 — Requires a Ph.D. immunologist. D.V.M. degree is preferred. The position will also involve development of a competitive research program in immunology and instruction of graduate and professional (D.V.M.) students.

Position 2 — Requires a Ph.D. microbiologist or parasitologist with special interest and experience in molecular immunology to participate in graduate teaching and interdisciplinary immunologic research. The successful candidate will be expected to establish a competitive research program and obtain extramural funding.

Applications will be reviewed beginning April 15, 1991, and will be accepted until suitable candidates are identified. Salaries negotiable.

Send curriculum vitae, names and addresses of 3 references, and a statement of professional goals to:

Dr. John N. Berg, Chair, Search Committee Department of Veterinary Microbiology 104 Connaway Hall University of Missouri-Columbia Columbia, MO 65211 Phone: 314-882-6550

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We provide competitive compensation, extensive benefits and paid relocation. Submit resume including salary expectations, in confidence, to: Human Resources Department-MAT, Life Technologies, Inc., PO. Box 9418, Gaithersburg, MD 20898. Or fax to: 301-670-1394. An equal opportunity employer promoting a drug-free workplace.

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FACULTY POSITIONS IN BIOCHEMISTRY and

CELL BIOLOGY

St. Jude Children's Research Hospital

St. Jude Children's Research Hospital, a private research institute, is engaged in a major expansion of its facilities and scientific activities. A new research building to be completed in early 1991 will provide 240,000 square feet of new laboratory space which will house the institute's basic science programs. As part of this expansion, new faculty positions are now available in the Departments of Biochemistry and Cell Biology. Although preference will be given to applicants who have recently completed postdoctoral training and are seeking positions at the level of Assistant Member, more senior investigators with appropriate research interests and qualifications will be considered for positions of higher faculty rank. Candidates with programs focusing on the regulation of cell growth, differentiation and transformation, the biochemistry and molecular biology of signal transduction, and mechanisms of gene regulation are particularly encouraged to apply. Opportunities exist for collaborative interactions with ongoing basic research programs in Virology and Molecular Biology, Immunology, and Pharmacology, as well as with clinical investigators in Hematology/Oncology and Infectious Diseases. In addition to new facilities and excellent start-up funds, salaries are nationally competitive and include a generous benefits package. A strong institutional commitment to its faculty ensures stability in program development and continuity of research activities

Applicants should submit a curriculum vitae, a letter summarizing their research accomplishments and goals, and the names of three references to either: Dr. James N. Ihle

Or Or

Dr. Charles Sherr St. Jude Children's Research Hospital 332 N. Lauderdale Memphis, TN 38105 USA

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At the Medical Research Division of the American Cyanamid Company, we're meeting the challenges of a new decade and the next century by building upon our strengths and creating an environment that fosters a more dynamic Research and Development organization. As a leader in the research and development of therapeutic compounds, our drugs have been instrumental in the treatment of infectious diseases, cancer, cardiovascular and central nervous system diseases. We currently have two openings for Research Scientists.

Microbial Physiology

An opening is available in the Microbial Physiology De-partment of the Infectious Disease Research Section for an individual to participate in the discovery of novel natural products of medical and agricultural importance. Candidates should have a diverse background in microb-ial physiology, genetics and biochemistry. Specific expe-rience in microbial fermentations, the development of microbiological and biochemical assays, applications of

laboratory robotics, and the use of computers for data management is highly desirable. This position requires a



Ph.D. in Microbiology/Biochemistry with 3-5 years of postdegree experience. (Dept. MG)

Cardiovascular Research

The Lipid Regulation Group of the Cardiovascular Research Department has an opening for a Postdoctoral Scientist with a strong background in molecular genet-ics/biology and biochemistry to work on the molecular regulation of metabolism. As part of this effort you will clone, express and characterize receptors involved in the control of weight and blood glucose. Candidates for this position should possess a Ph.D. in Biochemistry or Cell Biology. (Dept. JD)

We are located at the Lederle Laboratories campus of American Cyanamid, a 580-acre campus-like setting in Rockland County, only 25 miles north of New York City. Salaries are very competitive and include comprehensive benefits. For consideration, send resume/c.v. with the names and telephone numbers of three references including the department code for the position of your choice to: Professional Employment Representative, Medical Research Division, Lederle Laboratories, Pearl River, NY 10965. An Equal Opportunity Employer M/F.

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Associate Director. **Cell Biology**

Direct the activities of three scientists conducting applied and basic research on intracellular protein trafficking, cell surface receptors and the mechanisms of cell-cell interactions. A PhD in Cell Biology and 7-10 yrs' practical experience studying the biology of cellular interactions plus prior management experience required.

Post Doctoral Fellow

In this 2-year appointment, work in conjunction with our colleagues at MIT to study the effects of tissue culture environmental parameters on resulting glycoforms. Perform tissue culture, purification and analyze recombinant glycoprotiens. A PhD with a back-ground in cell biology, carbohydrate analysis and glycoprotein synthesis is required to qualify for this unique opportunity.

Research Scientist

Responsible for initiating preclinical in-vitro and in-vivo immunological safety studies for our therapeutic products, and for developing assays to assess patient immune reactivity to these products. Requires a PhD and 2-3 yrs' experience in cellular immunology, immune complex clinical research, or animal hypersensitivity studies with at least 1 yr in assessing adverse immune reactions.

Research Associate

Responsible for generating polyclonal and monoclonal antibodies to therapeutic proteins. Involves maintenance and characterization of resultant hybridomas using immunological techniques, and purification and characterization of monoclonal antibodies. Requires a BS with 2-3 yrs' experience using tissue culture techniques.

Genzyme rewards success with an excellent compensation and benefits package, including 3 weeks' vacation, tuition reimbursement, a 401(k) plan with a company match, and extensive insurance coverages. Please forward your resume to: Human Resources, Genzyme Corporation, Dept. S322, One Mountain Road, Framingham, MA 10701. An equal opportunity employer.

MANAGER, EMISSIONS AND CONTROL STATIONARY SOURCE

National trade association seeks a professional to assume responsibilities in its Health, Industrial, and Planning Department. Position requires work with industry committees on issues dealing with Clean Air Act imple-mentation, including analysis of proposed regulations and development and communication of industry positions. Successful candidate will possess:

• Degree in science or engineering • Experience with EPA and state rule-making, air permit requirements, paint and other control technology guidance development

• Excellent oral and written communication skills Position offers competitive salary commensurate with

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P.O. Box 11170 Detroit, MI 48211

ASSOCIATE DIRECTOR UNIVERSITY OF NEBRASKA, LINCOLN BIOLOGICAL FIELD STATION

Seek associate director to coordinate all operations associated with the active summer teaching program of field-based courses and significant individual investigator research activity. Permanent position requires master's with major in a biological field science. Must have ability to supervise operational activities and coordinate re-search/teaching programs. Excellent interpersonal skills search/teaching programs. Excellent interpersonal skills essential. Microcomputer experience preferred. Submit letter of application, curriculum vitae, and three refer-ences postmarked by 19 April 1991 (or until suitable candidate is found) to: Search Committee, 348 Manter Hall, School of Biological Sciences, University of Nebraska-Lincoln, Lincoln, NE 68588–0118. Tele-phone: 402-472-2720, FAX: 402-472-2083. Affirmative Action Construction Employee Action/Equal Opportunity Employer.

EVERGLADES NATIONAL PARK

The South Florida Research Center, a research and resource management organization within the Ever-glades, seeks applicants for **PROGRAM MANAGERS** in plant ecology, wildlife ecology, and marine ecology. These positions are permanent, full-time research and resource management positions, which report to the research director.

Each program manager will be responsible for directing a small staff of research project leaders, resource managers, and technicians. Topics are usually applied in nature, related to preservation and restoration of the Everglades ecosystem. Incumbents will also serve as technical consultants on resource issues in park and public arenas.

Applicants should have extensive research and resource management experience and demonstrated abilities in communication and administration. Applicants should contact the Personnel Officer, Everglades National Park, P.O. Box 279, Homestead, FL 33030, or telephone: 305-247-6211 ext. 206, for application procedures.

CYTOPATHOLOGIST

The Division of Anatomic Pathology of the Depart-ment of Pathology and Laboratory Medicine of the University of Pennsylvania has an opening for a JUN-IOR STAFF POSITION within the Section of Cyto-(AP)-certified with at least 3 years of training in anatomic pathology, have interest/experience in graduate/under-graduate teaching, and a record of publications. Demon-strated interest and academic scholarship in subspecialty and flow cytometry is necessary, and familiarity with modern diagnostic techniques is expected. Academic rank commensurate with experience and scholarship. Candidates should be qualified for an unrestrictive medical license in Pennsylvania. Send curriculum vitae, bibliography, and names of

three references to:

Prabodh K. Gupta, M.D. Director, Cytopathology and Cytometry Section F.6.037 Founders Pavilion University of Pennsylvania Medical Center 3400 Spruce Street Philadelphia, PA 19104–4283

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

POSITIONS OPEN

THE UNIVERSITY OF CALGARY RETINAL NEUROSCIENTISTS

The University of Calgary Faculty of Medicine Lions' Sight Centre invites applications for full-time academic positions from scientists working in the biochemistry or neurobiology of the vertebrate retina. Candidates should have a Ph.D. or M.D. with at least 2 years of postdoctoral experience, and an established record of productive and fundable research in any of the following: develop-mental biology of the retina, electrophysiology of retinal cells with emphasis on retinal network function or information-processing, or biochemistry of retina or pigment epithelium with emphasis on membrane receptors.

A renewable 5-year scholarship award will be available upon successful application to the Alberta Heritage Foundation for Medical Research. Salary and rank will be commensurate with experience. The successful candidate will be appointed to an appropriate department and will be a member of the Lions' Sight Centre. Interdisciplinary collaborations will be encouraged, and 75% of time protected for research.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including women, aboriginal people, visible minorities, and people with disabilities. Please send curriculum vitae, summary of research

interests, and the names of three references by 15 May 1991 to:

Dr. W. K. Stell Director, Lions' Sight Centre The University of Calgary 3330 Hospital Drive, N.W. Calgary, Alberta T2N 4N1, Canada

CAREER SCIENTIST (TENURE-TRACK FAC-ULTY). Position with primary appointment in the De-partment of Anesthesiology and possible joint appoint-ment in a basic science department. Candidate should possess a Ph.D., M.D., or equivalent degree with post-doctoral experience and demonstrated ability to attract extramural research funding. Primary research interests should be in the areas of molecular pharmacology, physiology, or biochemistry with direct or indirect applicability to anesthesiology, critical care medicine, or pain management. Generous laboratory space and start-up funds provided. Academic rank will be determined by qualifications. Established investigators are especially encouraged to apply. Please send a description of research interests, curriculum vitae, and names and telephone numbers of three references to: P. R. Housmans, M.D., Ph.D., Mayo Medical School, Rochester, MN 55905 by 1 May 1991. Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.

FACULTY POSITIONS DEPARTMENT OF NEUROSCIENCE THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

Applications are invited for full-time, tenure-track faculty positions. Preference will be given to applicants with broad interests in cellular, molecular, and systems neuroscience that complement those of the current fac-ulty. Applicants should have a Ph.D. or M.D. and appropriate postdoctoral training. Faculty members are expected to establish active independent research programs and participate in teaching graduate and medical students. Please send curriculum vitae, a brief description of current and future research interests, and arrange to have three letters of recommendation sent by 1 July 1991 to: Chair, Neuroscience Search Committee, The Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205. An Equal Opportunity/Affirmative Action Employer.

LECTURER IN BIOLOGY

Position available at Boston University Marine Program, Woods Hole, Massachusetts. Applications are invited from persons with a Ph.D. in biology to conduct research and to provide instruction in sensory physiolo research and to provide instruction in sensory physiolo-gy. Successful applicant must possess strong background in electrophysiology and anatomy of invertebrate chem-ical senses as well as computer programming. Also responsible for training graduates and undergraduates in laboratory techniques. Send curriculum vitae and three references by 26 April 1991 to: Dr. Jelle Atema, Boston University Marine Program, MBL, Woods Hole, MA 02543.

POSITIONS OPEN

CNS PHARMACOLOGIST

The Department of Pharmacology at the Northeastern Ohio Universities College of Medicine invites applica-tions from individuals with strong research credentials in tions from individuals with strong research credentials in any aspect of CNS pharmacology for a **TENURE**-**TRACK POSITION** available July 1991. Rank and salary commensurate with experience. Senior applicants are encouraged to respond. Candidates must have a Ph.D. in pharmacology with postdoctoral training and the demonstrated ability to conduct independent re-work for the senior applicants are the search. Some teaching experience is desirable since the position requires participation in teaching of medical and graduate students. Excellent laboratory facilities and start-up funds are available. Successful applicant will interact with present faculty whose research interests include: opiate analgesia, genetics of alcoholism, behavinclude: oplate analgesia, genetics of alcoholism, benav-ioral pharmacology, and molecular biology of substance abuse. Send curriculum vitae including names of three (3) references by 20 April 1991 to: Dr. Martin D. Schechter, c/o The Office of Human Resources, Northeastern Ohio Universities College of Medicine, P.O. Box 95, Rootstown, OH 44272. An Affirmative Action/Equal Opportunity Employer.

ENTOMOLOGIST U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE

The Medical and Veterinary Entomology Research Laboratory, Gainesville, Florida, seeks a research entomologist to study the ecology and control of filth breeding flies in rural and urban environments. Successful candidate will: (i) characterize the ecology, dispersal, and nuisance/economic threshold level(s) for house flies in caged-layer poultry operations; (ii) select, evaluate, and utilize predators and parasites as a component of IPM for house flies; (iii) develop and evaluate fly population dynamics models; and (iv) design, implement, and eval-uate integrated/whole-systems management strategies for flies. Ph.D. with knowledge of applied quantitative ecological methods, experimental design, statistical analysis, and the use of biological, cultural, and other control methodologies in IPM systems for filth breeding flies. Salary commensurate with qualifications and experience. For further information, contact: **Dr. Donald Barnard** at 904-374-5930. For information on application pro-cedures and forms, contact: USDA, ARS, Special Ex-amining Unit, at 301-344-3960. This announcement will be open from 29 March 1991 through 18 April 1991. ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

FACULTY APPOINTMENT YALE UNIVERSITY SCHOOL OF MEDICINE

The Department of Anesthesiology invites applica-tions from Ph.D. or M.D. candidates for appointment at the ASSISTANT PROFESSOR level. Candidates should have specific research training and demonstrated experience in vascular pharmacology. Suitably qualified candidates will be encouraged to develop association with the Cardiobiology Program of the Yale Center for Molecular Medicine.

Curriculum vitae, statement of research interests, three letters of reference should be sent by 30 April 1991 to: Paul Barash, M.D., Professor and Chairman, Department of Anesthesiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510.

Yale University is an Affirmative Action Employer and provides Equal Opportunities to all applicants.

INSTRUCTOR. The Department of Medicine, Division of Nephrology at Case Western Reserve University, has an opening for a nontenure-track position. Applicants should possess an M.D. and have completed nephrology fellowship with a minimum of 2 years of postdoctoral experience in physiology or medicine, with emphasis on cellular and molecular biological aspects of the mesangial cell, and research experience with elucida-tion of G-protein-medicated signal transduction pathways using antisense RNA. Send curriculum vitae, description of research goals, and names of three references to: Michael J. Dunn, M.D., Professor of Medicine, Chief, Division of Nephrology, 2074 Abington Road, Room 8124, Lakeside Building, Cleveland, OH 44106.

SENIOR SCIENTIST Molecular Biology/Immunology

Pharmacia P-L Biochemicals, Inc. is the international headquarters for research, production and marketing of molecular and cellular biology reagents for Pharmacia LKB Biotechnology. Our Research & Development Department has an immediate opening for a Senior Scientist.

The successful candidate will possess a PhD. in molecular biology, immunology, cell biology or a related field with experience in several of the following areas: gene cloning and expression, monoclonal antibody production and assay (ELISA and western blotting), protein purification or cell culture. The Scientist will be expected to maintain a program for the development of methods and products for life science research. Supervision of other scientific staff is expected, and strong interpersonal skills are required.

We offer a competitive salary and a company-paid benefit package. For consideration, send resume and salary requirements in confidence to:

> Sandra Stetter Manager, Human Resources Pharmacia P-L Biochemicals, Inc. 2202 North Bartlett Avenue Milwaukee, WI 53202

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BIOPROCESS RESEARCH SCIENTIST

The Fermentation Group of Bioprocess Research and Development of the Upjohn Company, located in Kalamazoo, Michigan, currently has an opening for a research scientist. As part of a multi-disciplinary team. this scientist will research, develop and support enzymatic and biological processes for commercial production of specialty chemicals, new and existing steroid intermediates, enzymes and antibiotics. This position requires a Ph.D. broadly trained in Microbiology or Biochemistry with emphasis in microbial physiology and biochemistry. Experience in and knowledge of enzymatic synthesis of chemicals, microbial bioconversion, fermentation and industrial microbiology are highly desirable. Excellent interpersonal skills as well as written and verbal communication skills are necessary.

For confidential consideration, please forward a letter of application, CV/resume, transcripts, two letters of recommendation and two sample publications by May 1, 1991 to: The Upjohn Company, Corp. Recruiting/ Position 5751-CA, 7000 Portage Road, Kalamazoo, MI 49001 USA. Refer to position 5751-CA in your letter. An Equal Opportunity Employer M/F.

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Scientists

Genentech, Inc. is the leading biotechnology research and pharmaceutical production company with 3 marketed products. To continue our success, we are seeking Scientists and Senior Scientists for the following positions in our Cell Biology department.

Cell Biology/Immunology

Using your broad knowledge of cell biology/immunology, you must be able to conduct independent research as well as work collaboratively. This requires a Ph.D. with at least 3 years of experience developing in vitro and in vivo models to examine the biology of new therapeutics.

Cell Analysis

For this position, qualified candidates must have at least 5 years' experience managing a Cell Analysis laboratory which utilizes flow cytometry/image analysis and both new drug discovery and basic cell biology. The ideal candidate will have extensive experience in analytical cytology as well as a broad knowledge of molecular and cell biology.

Biochemical Pharmacology

In this position, you must have extensive experience in devising and implementing strategies suitable for high capacity screening and a broad knowledge of developing bioassays, immunoassays and receptor binding assays. A Ph.D. with at least five years' experience in biochemical pharmacology.

All of these positions require exceptional communication and managerial skills.

Our progressive company offers an exceptional compensation and benefits package and the opportunity to make a significant contribution to our organization. For immediate consideration, please send your resume, indicating position of interest, to Genentech, Inc., Human Resources Dept. YDS, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment.

Genentech, Inc.



Schering-Plough, a \$3+ billion, research-driven leader in the health care industry, has an exciting opportunity with exceptional challenges in our Physical Analytical Research and Development department. Successful candidate will possess a PhD in Biochemistry/Analytical Chemistry along with experience with HPLC, protein chemistry, protein purification, protein and peptide characterization.

We offer a competitive salary and benefits package. Position is a **one year assignment** with opportunity to renew. Interested candidates should forward their resume to: Ms. P. Valendo, Schering-Plough Corporation, 2000 Galloping Hill Road., K6, E-17, Kenilworth, NJ 07033. We are an equal opportunity employer.

What you have in mind, we put into action.

Schering-Plough

"Three positions available at the University of Amsterdam-Holland, Faculty of Medicine, Amsterdam Center of Virology, Meibergdreef 15, 1105 AZ Amsterdam, the Netherlands"

post-doc biologist/immunologist for a period of approximately 3 years

Tasks: * Running a research project concerning characterization of primary HIV isolates from cells and plasma of individuals participating in natural history studies and antiviral drug trials. * Participating in research projects concerning the pathogenesis of HIV *in vivo* and the role of the humoral immune response in modulating the course of HIV-infection.

Requirements: * PhD or equivalent in Biology/Immunology * Experience in cell culture of lymphocytes, monocytes, etc. * Preferably experience in Virology, in particular animal retroviruses.

post-doc molecular biologist/molecular geneticist for a period of approximately 3 years

Tasks: * Running a research project concerning the development and evaluation of molecular techniques allowing to study the epidemiology of HIV strains circulating in the Amsterdam cohort-studies. * Participating in research programs concerning the world-wide spread of HIV strains, virus typing efforts and role of HIV variations in the pathogenesis of HIV.

Requirements: * PhD or equivalent in Molecular Biology/Molecular Genetics * Experience in RNA and DNA technology, sequencing and PCR.

post-doc molecular biologist/immunologist for a period of approximately 3 years

Tasks: * Running a research project concerning the characterization of Dutch, European and African HIV-1 strains by using serological techniques. Production of monoclonals by genetic engineering.

Requirements: * PhD or equivalent in Molecular Biology/Immunology * Experience in serological techniques, rDNA techniques * Preferably experience in Virology.

"For more information on all positions: Prof Dr. Jaap Goudsmit, phone (31-20) 5664853" Closing date: April 12, 1991.

Research Scientists, Toxicologist

RHONE-POULENC RORER, an international, world-class research-based pharmaceutical company has two immediate openings for Research Scientists, Ph.D. Toxicologist, in our new U.S. Operations Pre-Clinical Safety Laboratory. Specific requirements for these positions are listed below:

Our Research Scientists, Toxicologist positions require individuals who can become involved in all phases of preclinical drug safety studies required for IND and NDA submissions; i.e., planning, designing, conducting and interpreting various studies. Incumbents will become knowledgeable in acute, subacute and chronic toxicity testing. Ph.D. in Toxicology or related field or DVM required. Board certification desirable. One (1) year post-doctoral training preferred.

These positions require individuals who possess strong negotiation skills and excellent written and oral communications skills as well as strong leadership qualities.

Interested candidates should submit their curriculum vitae, including at least three (3) references to: Rhone-Poulenc Rorer, 640 Allendale Drive, King of Prussia, PA 19406. Attn: Director Human Resources — Position No. #JS-LB2.

Rhone-Poulenc Rorer is an equal opportunity employer. We offer competitive compensation and benefits and many opportunities for personal and professional growth. M/F/V/H





Let the free Science product information service put you in touch with the vendors whose products you will need.

Simply write us a letter stating the specifics about your proposed lab and the instruments and supplies you need. We will do the rest. Write to:

SCIENCE Magazine New Lab Service Department 1515 Broadway New York, NY 10036



University of London ROYAL POSTGRADUATE MEDICAL SCHOOL Hammersmith Hospital CHAIR OF MEDICINE

Applications are invited for the established Chair of Medicine in the Royal Postgraduate Medical School, in succession to Professor Sir Colin Dollery who has been appointed Dean of the School from 1 October 1991. The person appointed, in addition to acting as Head of the academic Department of Medicine, will be Director of Service for Medicine to the Hammersmith and Queen Charlotte's Special Health Authority.

Informal enquiries about this post should be addressed to the present Dean of the Royal Postgraduate Medical School, Professor D N S Kerr (telephone 081 740 3200), from whom further particulars are available. Letters of application should be accompanied by a full curriculum vitae and an outline of the applicant's research proposals (ten copies) together with the names and addresses of three referees, and should be sent to the Deputy Secretary, Royal Postgraduate Medical School, Du Cane Road, London W12 ONN. The closing date for the receipt of applications is 19 April 1991.

Geisinger Clinic



Position available for an individual with three years of postdoctoral experience in biochemistry, molecular biology, pharmacology or cell biology. The successful applicant will clone and express novel forms of adenylyl cyclase (see Science 244:1558-1564). Emphasis will be placed on determining those structural features of adenylyl cyclase subtypes that are responsible for mediating unique physiological responses.

Competitive salary and fringe benefits are available. Send curriculum vitae with the names and telephone numbers of three references to: Dr. John Krupinski, Weis Center for Research, Geisinger Clinic, Danville, PA 17822-2610. Equal Opportunity Employer M/F/H/V.





The Nuclear Chemistry Division of the Lawrence Livermore National Laboratory has a number of postdoctoral positions available for highly qualified scientists in the field of Radio and Nuclear Chemistry, Computer Science, Mass Spectrometry, and related disciplines. Areas for fundamental research include:

Environmental Radiochemistry Physical-Inorganic Chemistry Isotope Geochemistry and Hydrology Radio and Nuclear Chemistry Global Climate Change and Paleoclimatology Detection and Measurement of Radioactivity

Postdoctoral positions are one-year appointments, renewable for a second year. The Nuclear Chemistry Division offers a wide variety of excellent research and computational facilities with instrumentation for a broad range of physical, analytical, and radiochemical measurements as well as extensive capabilities for data analysis and computer modeling. Postdoctoral staff members are expected to work independently and to publish research results in a timely manner.

A recent PhD in Chemistry, Physics, Computer Science, or other physical science is required. Research experience and interest in the above areas are preferred, but proposals for new research areas will be considered. Applicants must show evidence of scientific maturity and potential for leadership in research.

For full consideration please submit a resume to: **Barbara Bull, P.O. Box 5510, Dept. A91126,Livermore, CA 94550.** Equal Opportunity Employer. U.S. citizenship desired but not required.

University of California



Social Science Research Council Human Dimensions of Global Environmental Change

The SSRC anticipates adding a position as program officer for the Committee for Research on Global Environmental Change. This Committee focuses on the human dimensions of long-term environmental changes that occur at the level of continents or larger. Training and research on the environment are desirable but not mandatory in the applicant's record. More importantly, this person should be a social scientist trained at the doctorate level for research in economics, geography, political science, sociology, or related fields; international in orientation and experience; capable of learning this interdisciplinary subject matter; and able to work with both social and natural scientists. We would also expect this person to assist the Council in collateral program development, e.g. in health, and epidemiology, peace and security, development or resource economics, guantitative modeling and methodology, or other areas.

This full-time position involves preparing and negotiating grant proposals for expansion of this program; assisting in the design of research programs and research consortia; planning seminars, workshops, and conferences; administering possible fellowship and grant competitions; supervising support staff; contributing to the Council's overall program; and maintaining relationships with researchers and academic and research institutions throughout the world.

Applicants must hold the Ph.D. in a relevant field. Writing skills are essential. Administrative experience and demonstrated fund-raising ability are desirable. The Council seeks applications from scholars with several years of teaching, research, and/or administrative experience, although it may also consider recent recipients of the Ph.D. Salaries are competitive with those at U.S. universities. The person appointed should be able to take up the position on or before September 1, 1991.

To apply, before June 1, 1991 send (a) a letter of application, (b) a curriculum vitae, and (c) three letters of reference to:

Global Change Search Social Science Research Council 605 Third Avenue New York, NY 10158

An Equal Opportunity Employer

The Animal and Plant Health Inspection Service (APHIS), an agency of the U.S. Department of Agriculture (USDA), has **IMMEDIATE VACANCIES** in the disciplines listed below. These individuals will participate in a team approach to evaluate environmental risks associated with program activities, including all aspects of agricultural pest and disease management and control. Familiarity with the principles of environmental risk analysis using the procedures of NEPA and ESA are desirable, but not required.

Disciplines being sought: agronomist, ecologist, entomologist, plant pathologist, plant physologist, toxicologist, and wildlife biologist.

All positions are with the Environmental Documentation Unit at APHIS headquarters in Hyattsville, Maryland, a suburb of Washington, D.C. These positions are full-time, 2-year term appointments, with potential for extensions or conversion to permanency. Salary range is \$37,294 to \$57,560, depending on qualifications. Qualifications will be determined using a combination of education and experience. Excellent communication skills are desired.

To obtain copies of the vacancy announcements, contact: Environmental Documentation at 301-436-8565, or at the following address:

USDA, APHIS, BBEP, ED Federal Building, Room 828 6505 Belcrest Road Hyattsville, MD 20782

The filing period for these positions closes 15 April 1991, and applications must be postmarked no later than this date.

The federal government is an Equal Opportunity Employer.

MOLECULAR EVOLUTIONARY BIOLOGIST PRINCETON UNIVERSITY DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

The Department of Ecology and Evolutionary Biology at Princeton University plans to appoint a molecular evolutionary biologist. Rank is open. The appointment can begin any time between July 1991 and September 1992. The closing date for applications is 15 April 1991. Applicants should send curriculum vitae and arrange for three letters of reference to be sent to: Dr. Henry S. Horn, Search Committee, Department of Ecology and Evolutionary Biology, Guyot Hall, Princeton University, Princeton, NJ 08544–1003.

An Equal Opportunity/Affirmative Action Employer.

Applications are invited for PRODUCT SPE-CIALIST position. Candidate will have a molecular biology background (laboratory experience). Individual shall be familiar with DNA sequencing, blotting, PCR techniques, and some computer experience. Will initially work at Santa Clara, California, office. Salary commensurate with experience. Some travel required. Send résumé to: Mr. Michael Caracozza, Applied Imaging Corp., Robinson Plaza 3, Suite 140, Pittsburgh, PA 15205.

POSTDOCTORAL POSITION. Available immediately to study molecular mechanisms involved in cell transformation by growth factors and oncogenes. Research is focused on characterization of the Jun oncoprotein with respect to structural and functional properties required for transformation as well as identification and characterization of specific Jun-regulated target genes which may be involved in oncogenesis. Applicants should have experience in molecular biology and cell culture techniques. If interested, contact: Dr. Timothy Bos, Department of Microbiology and Immunology, Eastern Virginia Medical School (EVMS), P.O. Box 1980, Norfolk, VA 23501. EVMS is an Equal Opportunity Employer.

POSTDOCTORAL POSITION IN MOLECU-LAR BIOLOGY. The Laboratory of Receptor Biology has an opportunity to study the molecular biology, or prostatic cancer. Experience with cell biology, recombinant DNA technology, and growth factors is preferred. Ongoing studies include the interactions of growth factors and inhibitors, and induction of differentiation. Interested candidates should send their curriculum vitae with names of three references to: Dr. John Mendelsohn, Department of Medicine, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Telephone: 212-639-5868. An Equal Opportunity/Affirmative Action Employer. **POSITIONS OPEN**



United States Department of Agriculture

VETERINARY MEDICAL OFFICER/MICRO-BIOLOGIST, National Animal Disease Center, Ames, Iowa. ARS is seeking a veterinary medical officer or microbiologist to join the paratuberculosis project in the Leptospirosis/Mycobacteriosis Research Unit. Investigations will be initiated, planned, and conducted to characterize the protein and antigenic component's of Mycobacterium paratuberculosis, the causative agent of Johne's disease of cattle. Genes coding for protein antigens will be cloned and characterized. Candidate must have knowledge or experience in bacteriology and molecular biology. Ph.D. is desirable. Must be a U.S. citizen. Salary is commensurate with experience (\$31,116 to \$57,650). For information on the research program and/or position, contact: Dr. Carole Bolin, 515-239-8325. For information on application procedures/forms, contact: Janie Carr, 301-344-1258. Applications in response to this advertisement should be marked 1N036. Applications must be postmarked by 19 April 1991. Mailing address:

> USDA, Agricultural Research Service Personnel Operations Branch Northern Section Building 419, BARC-East Beltsville, MD 20705 An Equal Opportunity Employer.

POSTDOCTORAL POSITION IN MOLECU-LAR BIOLOGY. Available immediately to develop program to humanize and modify murine monoclonal antibodies. Experience in cloning, sequencing, and mammalian cell expression required, working knowledge of immunogenetics desirable. Send curriculum vitae to: Dr. Roberto Ceriani, John Muir Cancer and Aging Research Institute, 2055 North Broadway, Walnut Creek, CA 94596.

An Equal Opportunity Employer.

POSTDOCTORAL POSITION. Available immediately to study the regulation of signal transduction in cardiovascular system and gene expression in hypertension [Biochem. Pharmacol. 37, 3017 (1989); J. Biol. Chem. 264, 9491 (1989); Hypertension 13, 789 (1989); J. Biol. Chem. 265, 8566 (1990)]. Experience in receptor and/or molecular biochemistry or pharmacology preferred. To apply, please send curriculum vitae and three letters of references to: Dr. Madhu B. Anand-Srivastava, Department of Physiology, University of Montreal, P.O. Box 6128, Station A, Montreal, Quebec H3C 3/7, Canada.

CANCER RESEARCH POSITIONS AVAIL-ABLE. POSTDOCTORAL through ASSISTANT PROFESSOR level. To study the role of transcription factors, lipid-derived second messengers, and protein kinase C in the control of cell growth and differentiation. Experience in molecular biology and/or biochemistry required. For further information contact: Dr. Larry W. Daniel, Department of Biochemistry, Wake Forest University Medical Center, Winston-Salem, NC 27103. Telephone: 919-748-3623 or FAX: 919-748-7671. Affirmative Action/Equal Opportunity Employer.

TWO POSTDOCTORAL POSITIONS. Available immediately for a new NIH project to study mechanisms of P2 receptor-mediated mucin release or regulation of mucin gene expression in cultured cells. Experience in protein biochemistry or molecular biology desired. Send a résumé and names of three references to: K. C. Kim, Ph.D., Department of Pharmacology and Toxicology, School of Pharmacy, University of Maryland at Baltimore, 20 North Pine Street, Baltimore, MD 21201.

POSTDOCTORAL POSITION

Postdoctoral associate position in *Drosophila* molecular neurobiology available fall of 1991. Research concerns *Drosophila* genes involved in the expression of biological rhythms. Experience in molecular biology and/or *Drosophila* genetics is essential. Submit curriculum vitae and names of three references to: **Dr. F. Rob Jackson, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545.**

An Equal Opportunity/Affirmative Action Employer, M/F/H.

POSITIONS OPEN

POSTDOCTORAL POSITIONS. Available in the laboratory of Dr. Rom, Chief, Division of Pulmonary and Critical Care Medicine. M.D. or Ph.D. with background in molecular or cellular biology interested in studying the immune response to tuberculosis and HIV infection, and role of growth factors in Kaposi's sarcoma. Contact: Ms. Maha Singh, Professional Recruiter, New York University Medical Center, 550 First Avenue, New York, NY 10016.

POSTDOCTORAL POSITION. Available immediately to study the immunobiology of interactions between the human blood fluke, *Schistosoma mansoni* and its snail intermediate host, *Biomphalaris glabrata*. Experience in molecular biology desirable. Send résumé and names of at least three references to: W. O. Granath, Biological Sciences, University of Montana, Missoula, MT 59812. Telephone: 406-243-2975. Applications accepted until position is filled. An Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITION. Open in studies on molecular and cell biology of malaria. Ongoing studies concern the structure/function of parasite membranes during intra-erythrocyte maturation and the molecular events involved in induction of gametocytogenesis. Contact: Ross B. Mikkelsen, Medical College of Virginia (MCV), Box 58, MCV Station, Richmond, VA 23298–0058. Virginia Commonwealth University, Medical College of Virginia, is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN MOLECU-LAR PHARMACOLOGY. To study mechanisms of neuromodulation of GABA, glycine, and glutamate receptors. Experience with whole cell or patch-clamp techniques is desirable. The laboratory integrates the use of electrophysiological, biochemical, and molecular biological techniques to study neurotransmitter receptors. Salary: \$19,000 to \$26,000. Send curriculum vitae and the names and telephone numbers of three references to: Dr. David Farb, Chairman, Department of Pharmacology, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118–2394. FAX: 617-638-4329.

POSTDOCTORAL POSITION

Research position involving studies of the polyamine dependency of GI mucosal growth. Applicants should have experience in HPLC detection of polyamines, Northern blot analysis of ODC mRNA, and measurement of mucosal growth and have at least 5 years of prior postdoctoral research experience. Reply to: Dr. Edward R. Seidel, Department of Physiology, East Carolina University, School of Medicine, Greenville, NC 27858-4354. An Equal Opportunity/Affirmative Action Employer. Federal law requires proper documentation of identity and employability at the time of employment. It is required that this documentation be included with your application.

POSTDOCTORAL ASSOCIATE PLANT GENE MOVEMENT

The major thrust for this position is to move resistance genes into Arachis hypogaea. This may involve moving plant genes from a ploidy group different from commercial peanut or moving the viral coat protein gene into the host peanut. Familiarity with RFLP's is necessary. This 2-year, full-time temporary position is available 1 July 1991. The salary is \$28,000. Send résumé, the names and addresses of three references, and curriculum vitae to: Dr. James Demski, Department of Plant Pathology, 1109 Experiment Street, Griffin, GA 30223. Equal Opportunity/Affirmative Action Institute.

POSTDOCTORAL POSITION

To study insulin regulation of neuropeptide gene expression by in situ hybridization and immunocytochemistry. Experience with molecular biology techniques is desirable. The candidate will join a group studying the regulation of food intake and body weight by the CNS, and the role of insulin/IGFs in CNS function. Send curriculum vitae and the names of three references to: Dr. Denis G. Baskin, Division of Endocrinology/Metabolism, Mail Stop 151, VA Medical Center, 1660 South Columbian Way, Scattle, WA 98108. Telephone: 206-764-2138. FAX: 206-764-2598. U.S. citizenship required. Equal Opportunity Employer. Minorities are encouraged to apply.

SCIENCE, VOL. 251

REGENERON

Regeneron seeks to apply recent advances in the understanding of neuronal growth and regeneration to the development of novel therapeutic products for degenerative and traumatic neurological disorders. Key projects focus on the discovery of novel neurotrophic growth factors and their receptors, and on the assessment of the biological roles and therapeutic potentials of such factors. **Regeneron** offers an exciting, collegial environment in which state-of-the-art skills in molecular and cellular biology are brought to bear on outstanding problems in neurobiology and medicine. Research positions for Ph.D. scientists are currently available in the following areas:

Eukaryotic Gene Expression with relevant research experience, preferably in an industrial setting. The work involves the use of existing vectors for the expression of recombinant genes in mammalian and insect cells, the development of novel vectors, and the study of major factors that affect gene expression, such as transcriptional and translational control and cell trafficking.

Protein Purification/Process Development with experience on purification of recombinant proteins, preferably in an industrial setting. The work involves the purification and study of recombinant proteins. Experience with additional aspects of Process Development and/or Production is desirable.

Membrane Protein/Receptor Biochemistry with postdoctoral experience. Ongoing studies focus on the identification, isolation and characterization of receptors and membrane proteins from natural and recombinant sources, and the signal transduction pathways activated by these receptors.

Molecular Neurobiology with specialized skills in recombinant DNA technology, as well as an interest in applying those skills to the discovery and characterization of novel neurotrophic factors, receptors and signal transduction pathways.

Regeneron's modern facility offers suburban living, and ready access to the cultural and business centers of New York City. Please send your resume indicating the relevant position, in confidence, to: Ms. Carol Deaken, **Regeneron**, 777 Old Saw Mill River Rd., Tarrytown, NY 10591-6707

REGENERON Pharmaceuticals, Inc.

Get your research into the hands of those who need it most.

The ultimate goal in pharmaceutical research is realized when a treatment reaches the patient. At Syntex, we've never lost sight of that goal. That's why we're committed to transforming basic research into clinical reality. The result is products in diverse therapeutic categories, including anti-viral, cardiovascular, and analgesic. And nearly 50 new Syntex compounds are currently in development.

We're acutely aware that therapeutic breakthroughs start with an investment in research, and Syntex has spent \$270 million on research and development of new drugs and medical systems in 1990. At 18% of sales, this is among the highest in the industry.

Our dedication to research creates an ideal environment for talented and motivated individuals. If you'd like to explore employment opportunities at Syntex, contact us about the following.

Inflammation Biologist

Direct drug discovery projects in inflammation research in the areas of phospholipases and eicosanoid metabolism, kinin receptors and tissue proteases. A PhD in Biochemistry or related field, plus at least 6 years of directly applicable scientific experience which has included some supervision of personnel.

Biochemical Pharmacologist

Provide expertise in radioligand binding technology, computation of data and receptor biochemistry. Experience in neurotransmitter release and other biochemical/functional assays in brain slices and cultured systems essential. Requires a PhD in Neuropharmacology or Neuroscience with at least 2 years of postdoctoral experience.

Neurochemist/Pharmacologist

Responsible for conducting basic research to support the pharmacological experimentation for the neuronal and other growth factors. Experience with neurodegenerative and regenerative disease models both animal models in vivo and in tissue culture systems. Requires a PhD in Neurochemistry with at least 2 years of postdoctoral experience.

Syntex, located on the San Francisco Peninsula, offers a competitive compensation and relocation package which includes an incentive bonus plan, an on-site health club and childcare facility. For immediate consideration, please send your resume to: Syntex, Professional Staffing, Dept. KH, 3401 Hillview Avenue, Palo Alto, CA 94303. We are an equal opportunity employer.



MASS SPECTROSCOPIST

The Bristol-Myers Squibb Pharmaceutical Research Institute has an opportunity in its Analytical Research and Development Department for a Research Investigator in Mass Spectrometry. This position will involve the development of methods for the identification and characterization of low level impurities and degradation products using tandem LC/MS.

The successful candidate will be a member of a dynamic analytical research team using state-of-theart spectroscopic and chromatographic techniques in the crucial stages of the drug development process. Applicants should have a PhD in Analytical Chemistry or related discipline with significant experience in the use of LC/MS. Knowledge and experience in the use of modern triple sector quadruple mass spectrometry is a plus.

Bristol-Myers Squibb offers excellent salaries, comprehensive benefits and a working environment conducive to professional growth. For prompt, confidential consideration, forward your curriculum vitae with personal references to: **Dept. of Analytical Research & Development, PRI, Dept. 812, BRISTOL-MYERS SQUIBB COMPANY, Industrial Division, P.O. Box 4755, Syracuse, New York 13221-4755.** An equal opportunity employer, M/F/H/V.



Bristol-Myers Squibb Company

Postdoctoral Fellowship Cardiovascular Research

Genentech, Inc., a leader in biotechnology research, currently has an immediate opportunity for a Postdoctoral Researcher in our Cardiovascular Research department.

Your projects will include studying the regulation of endothelial cell growth and angiogenesis by known growth factors as well as the identification of novel angiogenic factors. Requires a PhD or MD with experience in cell biology, protein chemistry or molecule biology.

Our extensive benefits package includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities, free health club membership and an employee stock purchase plan. For immediate consideration, please send your resume to Yvonne Davino, Genentech, Inc., Human Resources Dept. SYNF, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.



DU PONT MERCK

PRINCIPAL INVESTIGATOR Cardiovascular Diseases Research

The Cardiovascular Diseases Research group of the DuPont Merck Pharmaceutical Company is seeking a talented Cardiovascular Pharmacologist/ Physiologist interested in new drug discovery and development. A candidate for this important new position must hold a PhD Degree in Cardiovascular, Renal or Pulmonary Pharmacology or Physiology and have 3-5 years of post doctoral in vivo laboratory research experience. Excellent verbal and written communications skills are required.

The successful candidate will design and staff a new laboratory to evaluate the cardiovascular, pulmonary and renal effects of potential clinical candidates. This individual will interact directly with the multi-disciplinary discovery teams and will prepare the necessary IND/NDA documentation. This highly visible position will seek to interface the discovery and development aspects of new drug research while providing an opportunity for independent research.

The Du Pont Merck Pharmaceutical Company research laboratories are located near Wilmington, Delaware. Our modern research facilities and large interdisciplinary research staff provide a stimulating environment. The mid-Atlantic location offers an attractive life-style with easy access to a wide range of academic, cultural and recreational activities.

The Du Pont Merck Pharmaceutical Company

A partnership of the Du Pont Company and Merck & Company, Inc.

Interested parties should send their resumes and references to: Employee Relations Dept., E400/2425, The DuPont Merck Pharmaceutical Company, Wilmington, DE 19880-0400.

An Equal Opportunity Employer M/F/H/V. US Citizenship or Permanent Visa required and meet other appropriate IRCA requirements.

NATIONAL INSTITUTES OF HEALTH

CELLULAR AND MOLECULAR BIOLOGIST IN VASCULAR-IMMUNE SYSTEMS AND HIV-1 GENE REGULATION

The Laboratory of Tumor Cell Biology of the Division of Cancer Etiology, National Cancer Institute is accepting applications for a permanent position for a medical doctor with research experience. The position has a salary range of \$54,694 - \$67,996.

The successful candidate will be expected to:

- 1. Conduct original research in the area of AIDSassociated malignancies (Kaposi's Sarcoma and B cell lymphoma) and HIV-1 gene regulation with emphasis on the investigation of the mechanism of action of HIV-1 regulatory gene products and cytokines on vascular cells and immune cells, using techniques of cellular and molecular biology.
- Serve as Project Officer for extramural contract(s) to test the effectiveness of the use of antisense compounds in blocking the action of HIV-1 regulatory genes and cytokine genes.
- 3. Provide expert consultation to the Program in matters involving the study of AIDS-associated Kaposi's sarcoma, B cell lymphoma and HIV-1 regulatory genes.

Candidates with the following qualifications will be given preference:

- 1. M.D. (M.D. and Ph.D. are preferred) with background in immunology or other subject where training was focused on AIDS and AIDS-related malignancies.
- 2. Postdoctoral research experience in HIV-1 gene regulation and the interaction of cytokines with vascular and immune systems.
- 3. Strong interest in developing a research program which utilizes techniques of cellular and molecular biology to impact the areas of the role of retroviruses, particularly HIV-1, in the pathogenesis of tumors.
- 4. Broad knowledge of HIV-1 gene function and regulation, cytokines and their regulation, AIDS and Kaposi's sarcoma.
- 5. Ability to communicate effectively both orally and in writing.
- 6. Relevant publications in related scientific journals.

Applicant must be found to be eligible on a Civil Service Register. *If interested, please send a curriculum vitae by April 15, 1991 to:*

Ms. Patricia Stephenson, AO, BCP National Institutes of Health Building 37, Room 1A07 9000 Rockville Pike Bethesda, MD 20892



U.S. Citizenship Required NIH is an Equal Opportunity Employer

RESEARCH SCIENTISTS

Amgen is an innovative leader in the discovery, development and marketing of human therapeutics through applications of biotechnology. As a result of our continued commitment to research, we have immediate opportunities for Research Scientists in our Pharmaceutics and Drug Delivery Program:

SYNTHETIC MEDICINAL CHEMISTRY Dept. #579

This individual will participate in the syntheses and characterization of novel protein conjugates and cell permeation enhancing molecules. The interaction of these agents with membrane components and their cellular processing is also an integral part of this research effort.

Candidates must have a Ph.D. in Medicinal, Organic or synthetic Bio-organic Chemistry and experience in the synthesis of peptide and protein conjugates. A background in analytical methods development is desirable.

PROTEIN PHARMACEUTICS AND DELIVERY Dept. #580

The successful candidate will be responsible for the design and evaluation of novel delivery systems intended for noninvasive administration of therapeutic proteins. Among the various routes to be investigated, nasal, pulmonary and oral are the most prominent. Mechanistic evaluation of transport and permeation enhancement processes as well as inhibition of specific proteolytic degradation steps will be the primary focus of this research group.

Candidates should have a Ph.D. in Pharmaceutics, Pharmacokinetics or Pharmacology and experience in drug absorption, distribution and metabolism studies. A background in analytical methods development is desirable.

Amgen offers a stimulating and challenging environment on the leading edge of biotechnology as well as an excellent compensation and benefits package, including equity offerings. If you have the necessary skills and qualifications and would like to be a part of an organization that places a high priority on its human resources, please send a resume, in confidence, to:

AMGEN, INC. Recruitment, Dept. # (please specify) Amgen Center Thousand Oaks CA 91320-1789

AMGEN

Equal Opportunity Employer

TWO POSTDOCTORAL OR RESEARCH AS-SOCIATE POSITIONS. In the areas of cell biology and cell physiology. One is for studies on regulation of cell cycle, especially the role of intracellular Ca^{2+} . The other is for studies on functions of astrocytes and their role in CNS pathologies. Send curriculum vitae and three letters of reference to: Dr. Eric Gruenstein, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, OH 45267–0524. An Equal Opportunity Employer.

LYME DISEASE: TWO POSTDOCTORAL ECOLOGIST POSITIONS. For 1- to 3-year integrated management of Lyme disease hosts. Requires ability to learn and use wide range of organisms and techniques and to interact with landowners and Lyme victims. Study sites include barrier beach and large island nature preserve. Send curriculum vitae with addresses of three references and letter explaining qualifications to: P. Dooley, Seatuck Foundation, Inc., Box 31, Islip, NY 11751.

POSTDOCTORAL POSITION

Postdoctoral position in molecular neurobiology to study the development and regulation of inhibitory neurotransmitter systems in *Drosophila*. Experience in molecular biology, immunocytochemistry, and/or *Drosophila* genetics is essential. This NIH-funded position begins in the fall of 1991. Submit curriculum vitae and names of three references to: **Dr. F. Rob Jackson**, c/o **Personnel Office**, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545.

An Equal Opportunity Employer, M/F/H.

SENIOR RESEARCH FELLOW OR POST-DOCTORAL FELLOW. To investigate pharmacology, mechanisms of dependence liability and abuse potential of phencyclidine (PCP) and PCP-like compounds in the rat employing methods in psychopharmacology, computer spectral analysis of EEG, and drug self-administration. Ph.D. in pharmacology, experimental or biopsychology required. Position and salary commensurate with qualifications. Send curriculum vitae, reprints, and references to: J. Edward Moreton, Ph.D., Professor, Department Pharmacology and Toxicology, University of Maryland School of Pharmacy, Baltimore, MD 21201. Affirmative Action/Equal Opportunity Employer, M/F/H/V.

NIH TRAINING GRANT POSTDOCTORAL TRAINEES in cardiovascular bioengineering, biophysics, and physiology. Experimental and/or theoretical studies from molecular-cellular to organ-system levels. U.S. citizen or permanent resident with Ph.D., M.D., or equivalent doctorate. Underrepresented minorities and women are encouraged to apply. Send curriculum vitae and three reference letters by 15 May 1991 to: Dr. Shu Chien, Department AMES-Bioengineering, University of California, San Diego, La Jolla, CA 92093–0412. University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Available immediately to work towards the development of cancer "vaccine" using defined tumor-associated antigens. The effects of these antigens on cellular and humoral immune responses are being examined in animal models. Candidates will be expected to provide expertise in T cell cloning and various T cell functions. Institute located on the beautiful Elliott Bay is affiliated to the University of Washington and has state-of-the-art research facilities. Send curriculum vitae and list of references to: Manager of Human Resources, The Biomembrane Institute, 201 Elliott Avenue West, Seattle, WA 98119.

TRANSPLANTATION IMMUNOBIOLOGY

The Transplant and Immunogenetics Laboratory at Oregon Health Sciences University is recruiting a recent graduate of a Ph.D. program in immunology, who has had at least one postdoctoral position, to conduct research in human immunobiology as it relates to organ transplantation. A recruitment package of salary, space, and start-up funds is available. The individual should be self-supporting within 3 years. Contact: D. J. Norman, M.D., Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201.

POSITIONS OPEN

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL RESEARCH INVESTIGATOR

Position currently open for a Ph.D. in biochemistry or molecular biology with some postdoctoral training in molecular genetics to conduct research on global and operon-specific regulation of bacterial genes during anaerobic metabolism, and structure/function analyses of their protein products. Opportunities are available to gain some teaching experience for career development. Send curriculum vitae, summary of research experience, and names of three referees to: Professor P. Datta, Department of Biological Chemistry, University of Michigan, Ann Arbor, MI 48109–0606. A nondiscriminatory, Affirmative Action Employer.

POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

Position is open for candidate with a strong background in biochemistry, immunology, and/or molecular biology. The research group is studying the mechanism(s) of HIV entry into CD4 and non-CD4 cells with particular emphasis on a receptor for gp41. Excellent opportunities for collaboration and independent approaches. Starting salary: \$22,050. Send curriculum vitae; names, addresses, and telephone numbers of three references; and brief statement of current research interests to: Dr. Lee Henderson, Donald Guthrie Foundation, Sayre, PA 18840. Telephone: 717-882-4656.

NIH-SPONSORED POSTDOCTORAL FELLOWSHIPS IN MOLECULAR AND CELLULAR ENDOCRINOLOGY

Positions are available in a number of laboratories at Harvard Medical School studying basic mechanisms of hormone action. For information and application procedures contact: Dr. Eva J. Neer, Program Director, Harvard Medical School, Thorn Building, Room 1128, 20 Shattuck Street, Boston, MA 02115. Harvard University is an Affirmative Action/Equal Opportunity Employer. Applications from women and underrepresented minorities are strongly encouraged.

POSTDOCTORAL RESEARCH ASSOCIATE. To work on a quantitative, neural network theory of hippocampal function. Should have a background in theoretical analysis using probability and entropy measures; neural network experience desirable but not necessary. Position funded for 5 years, available summer of 1991. Salary negotiable. Send curriculum vitae and three references to: W. B. Levy, Neurosurgery Research, University of Virginia, Health Sciences Center, Box 420, Charlottesville, VA 22908. Equal Opportunity/ Affirmative Action Employer.

RESEARCH COORDINATOR. Requirements are Ph.D. or equivalent in medicinal or organic chemistry with 2 years of laboratory experience, ability to synthesize and characterize DNA-binding molecules, experience with molecular modeling, grant and manuscript writing ability, and ability to supervise laboratory personnel. Salary: \$28,000. Send curriculum vitae and names of three references by 5 May 1991 to: Mr. Bernie Childerston, P.O. Box 94600, Lincoln, NE 65509. Refer to Job Order No. 520-262. The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer.

SENIOR RESEARCH ASSOCIATE IN BIO-CHEMISTRY. Study hemeproteins and other proteins in vivo and in vitro in terms of their structure, properties, and function and their reactions with anesthetics, cryoprotectants, and toxic materials such as carbon monoxide, cyanide, nitric oxide, and azide in areas of medical interest. Isolate and/or purify hemeproteins (e.g., cytochrome c oxidase, hemoglobins, and myoglobins), red cells, and heart tissue and perform infrared and ultraviolet/visible spectral studies. Study secondary structure using second derivative analysis of amide bands and use infrared microscopy to establish the components of single cells and other areas within biological tissue. Independently plan and carry out experiments, interpret results, and report them in publications. Ph.D. required in biochemistry. Salary: \$28,000 per year. Mail resumé to: Colorado Department of Labor and Employment, 600 Grant Street, Suite 900, Denver, CØ 80203– 3528 and refer to Order No. CO3195401.

POSITIONS OPEN

The University of California, Los Angeles (UCLA), office of International Studies and Overseas Programs (ISOP) and the UCLA Center for International and Strategic Affairs (CISA) are pleased to announce a competition for a 1-year **POSTDOCTORAL FEL-LOWSHIP** in the area of international environmental cooperation, to begin 1 September 1991. Applicants should have received their doctoral degree in any of the natural or social sciences, within 5 years prior to September 1991. The fellow will help to organize and will present a paper at a conference in May 1992 on "International Environmental Cooperation." Application deadline is 12 April 1991. For applications and further information, contact: **ISOP/CISA Postdoctoral Fellowship Committee**, **LISA Postdoctoral Fellowship Committee**, **LISA Postdoctoral Fellogence 213-825-0604. FAX: 213-206-3555.**

COLUMBIA UNIVERSITY CENTER FOR RADIOLOGICAL RESEARCH POSTDOCTORAL RESEARCH SCIENTIST

Position available immediately for recent Ph.D. with training in cell biology and/or molecular genetics to work on a project involving the molecular characterization of mutageneisis induced by radiation and chemicals. Send curriculum vitae, reprints, and names of three references to: Dr. Tom K. Hei, Center for Radiological Research, Columbia University, 630 West 168th Street, New York, NY 10032.

An Affirmative Action/Equal Opportunity Employer.

BIOCHEMIST/MOLECULAR ENDOCRINOL-OGIST. Positions available at RESEARCH ASSIST-ANT PROFESSOR, RESEARCH ASSOCIATE, and POSTDOCTORAL levels for studies related to biochemistry of reproduction. Project areas include structure-function studies on FSH and receptor (including peptide synthesis), hormone binding inhibitors, mechanism of hormone action. Stable funding. Please forward curriculum vitae, summary of research skills, experience, and names of three references to: Leo E. Reichert Jr., Ph.D., Department of Biochemistry A-10, Albany Medical College, Albany, NY 12208.

MOLECULAR BIOLOGY OF METASTASIS

The Divisions of Molecular Biology and Surgical Research, Henry Ford Hospital, will provide a career opportunity for a molecular biologist, M.D. Ph.D. or Ph.D., with an interest and expertise in metastasis. The successful applicant will be expected to expand the existing program and develop his/her own program. The applicant should be prepared to collaborate with both molecular biologists and tumor biologists in determining the molecular mechanisms of metastasis. The appointment will be to **SENIOR RESEARCH ASSOCIATE** level. Experience with cloning and retroviral constructs is essential. Salary is commensurate with experience. Send curriculum vitae, salary requirements, and names, addresses, and telephone numbers of three references to:

S. David Nathanson, M.D. Surgical Research, E&R 4044 Henry Ford Hospital 2799 West Grand Boulevard Detroit, MI 48202

POSTDOCTORAL RESEARCH APPOINT-MENTS are occasionally available with individual faculty members of: The Department of Biomedical and **Environmental Health Sciences, School of Public Health, University of California, Berkeley, CA 94720**. Appointments are normally made for a year, with the possibility of renewal for a second year. Highly qualified persons are invited to apply for positions to be assumed at the time of, or shortly after, the completion of doctoral studies. A single application should be addressed to the faculty member with whom the applicant prefers to be associated. (In the event that no position is available with the faculty members with similar research interests.) Arrangements should be made for one confidential letter of reference to be sent by the person best able to judge the applicant's research achievements and potential. Applications should include a résumé; a brief statement of research experience, interests, and goals; and the names and addresses of two additional references. The University of California is an Equal Opportunity/Affirmative Action Employer.

SCIENTISTS (Senior Level)

The Division of AIDS of the National Institute of Allergy & Infectious Diseases is seeking senior level scientists in VIROLOGY and PHARMACOLOGY for the Clinical Sciences Section of its Treatment Research Program (TRP).

The Treatment Research Program plans and directs a major extramural research program that examines and evaluates potential therapeutic interventions for HIV disease and its related conditions in clinical trials. The Clinical Sciences Section functions as the primary scientific resource for the TRP, providing comprehensive guidance and expert leadership in immunology, virology and pharmacology by defining the clinical research agendas of the Immunology, Virology, and Pharmacology Committees of the AIDS Clinical Trials Group, developing and initiating innovative extramural research to support the clinical trials, providing direction and oversight for the quality assurance of immunologic, virologic and pharmacologic study parameters, and serving as scientific liaison with academic and industry-based investigators.

Candidates must have a PhD, with postdoctoral experience in biomedical research and direct experience using a wide variety of virologic or pharmacologic assays, data analysis techniques, knowledge of HIV disease and its associated opportunistic infections and malignancies, and research project administration. U.S. citizenship required. Please send a curriculum vitae to:

Dr. Jon Kagen 6003 Executive Boulevard Room 212N Rockville, MD 20892 (301) 496-0700



NIH is an Equal Opportunity Employer

Toxicologist/ Physiologist

Synergen, Inc., a growing protein-based biopharmaceutical company in Boulder, Colorado, seeks a toxicologist with broad knowledge of pharmacology and physiology. This position will be responsible for setting up animal models to test preclinical efficacy of cytokines, binding proteins, and neurotrophic factors. This position will also be involved with writing protocols and monitoring and interpreting contracted toxicology studies. Requirements include training in physiology and toxicology, firsthand experience in animal toxicology studies and in other in vivo rodent experimentation. Educational requirements are a Ph.D. or DVM/Ph.D. and post doc or 2-3 years' industry experience. Synergen offers competitive salaries, generous benefits and the financial stability required for future development. Please send a CV or resume to: Director of Recruitment, Box TP, 1885 33rd Street, Boulder, CO 80301. Synergen is an Equal Opportunity Employer.



THE U.S. DEPARTMENT OF ENERGY SPONSORS

GLOBAL CHANGE DISTINGUISHED POSTDOCTORAL FELLOWSHIPS

Research opportunities in technical areas related to the interdisciplinary science elements of global change: climate and hydrologic systems, biogeochemical dynamics, ecological systems and dynamics, Earth system history, human interactions, solid Earth processes, and solar influences.

- * U.S. citizens and permanent resident aliens
- Doctoral degree within last three years
- Tenable at various university and federal laboratories, including those of DOE & NASA
- * Stipends: \$35,000
- * Deadline: May 1, 1991

For application materials contact: Global Change Postdoctoral Fellowships Science/Engineering Education Division Oak Ridge Associated Universities P.O. Box 117 Oak Ridge, TN 37831-0117 (615) 576-4805

RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology research at 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, gene expression, gene isolation or RFLP programs.

PROJECT LEADER ALFALFA TRANSFORMATION — This permanent staff position will be responsible for developing transformation technology appropriate to alfalfa and for incorporation and evaluation of agronomic genes into alfalfa. Collaboration with other laboratories in the Transformation Group and the Alfalfa Breeding Department is expected. This research area is well supported with complementary expertise in vector construction and DNA/protein analysis. A Ph. D. or equivalent in cell or molecular biology, or a related field is required with an additional 1-2 years of relevant research experience. A good working knowledge of cell and molecular biology is required as well as demonstrated research accomplishment in previous positions

RESEARCH ASSOCIATE ALFALFA TRANSFORMATION — The Alfalfa Transformation Research Associate will be an integral part of the alfalfa transformation effort. The successful applicant will be expected to perform transient and stable transformation experiments in alfalfa, develop technology as necessary to achieve efficient transformation of genes important to alfalfa breeding, and actively support field tests of transgenic alfalfa. Active collaboration with others in the Transformation Group, Biotechnology Research and Alfalfa Departments is expected. A MS or BS degree or equivalent in appropriate science area plus 1-2 years laboratory experience, preferably with genetic transformation in dicots required.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity/Affirmative Action Employer. Send resume including the names of three references and the position for which you are applying to:



PIONEER HI-BRED INTERNATIONAL, INC. Plant Breeding Division Department of Biotechnology Research Attn: Jo Ann Jorgensen 7300 N.W. 62nd Avenue • P.O. Box 38 Johnston, Iowa 50131



The University of Missouri-Kansas City, the University of Kansas and Marion Merrell Dow Foundation have established a Scientific Education Partnership dedicated to developing a regional center of excellence in modern biological and biomedical research related to diseases and treatment of the aging population.

A key element of the Partnership is the awarding of Post Doctoral Fellowships in basic research as follows:

- Molecular immunobiology
- Protein structure and function
- Neuroscience
- Molecular genetics
- Molecular pharmacology
- Developmental molecular biology

Individuals with background and interest in areas of basic science identified above are encouraged to apply.

Appointments will be for 2 years at a stipend of \$30,000 (year 1) and \$35,000 (year 2). The deadline for applications is May 1, 1991.

Applicants should send a resume, three (3) letters of recommendation and a statement of research interest/ career goals to:

Anthony J. Hancock, PhD Director, Scientific Partnerships Marion Merrell Dow Inc. P.O. Box 8480 Kansas City, MO 64114-0480

MARION MERRELL DOW FOUNDATION THE UNIVERSITY OF KANSAS UNIVERSITY OF MISSOURI-KANSAS CITY

POSITIONS OPEN



POSTDOCTORAL RESEARCH ASSOCIATES

ARS is seeking applicants for two postdoctoral re-search associate positions at the Regional Poultry Re-search Laboratory, East Lansing, Michigan, in areas of: (1) developing transfected/transfect chickens expressing MHC and other immunogenic genes; and (2) character-ization and Marek's disease virus genes. A Ph.D. within the past 3 years in molecular biology or related disci-plines is required. Temporary appointments, not to exceed 2 years; benefits available. Salary commensurate with experience (\$31,116 to \$37,294). Please send cur-riculum vitae or SF-171 and names of three references to: Dr. Larry Bacon (for position 1) and to: Dr. Lucy Lee (for position 2), USDA/ARS, Regional Poultry Re-search Laboratory, 3606 East Mount Hope Road, East Lansing, MI 48823 or call: 517-337-6828. For application materials, please call: A. Hegarty, 301-344-1542. Applications must be marked 1N033 and must be received by 30 June 1991.

ARS is an Equal Opportunity Employer.

CELL ANALYSIS SPECIALIST

The Cell Analysis Facility, Department of Immunology, University of Washington, has an immediate opening for a technical specialist in flow cytometry/image analysis. Re-sponsibilities include the operation and maintenance of a dual laser FACStar Plus, FACScan, and fluorescence mi-croscope. The successful candidate will also participate in the development of new methods and instrumentation for cell analysis. A bachelor's degree is required. Experience in flow cytometry is highly desirable. Training in the physical sciences and experience with computers (MS-DOS and UNIX) are essential. Send résumé including recent expe-rience, long-term goals, and references by 8 April 1991 to: David M. Coder, Director, Cell Analysis Facility, De-partment of Immunology, I 264 Health Sciences Building SL-05, University of Washington, Seattle, WA 98195. An official application will be forwarded to each applicant. The University of Washington is a Eurol each applicant. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ENGINEER/ SCIENTIST ASSOCIATE IV

The Department of Petroleum Engineering at The University of Texas at Austin seeks an experienced NMR imaging specialist to run an NMR imaging laboratory for core analysis and other applications. Position requires a doctoral degree in engineering, physics, or chemistry. Competitive applicants should have experience in the use Competitive applicants should have experience in the use of nuclear magnetic resonance (NMR) spectroscopy and imaging systems. A thorough familiarity with modern FT-NMR spectroscopy and advanced imaging tech-niques and experience in the design and implementation of new NMR experiments are preferred. Duties will include supervising the operation of the in-house SIS 85/310 (2 tesla, 85 MHz, 31-cm horizontal bore) imag-ing spectrometer, training other users, running special-ized experiments, consulting with users in experimental design and interpretation. overseeing maintenance, and ized experiments, consulting with users in experimental design and interpretation, overseeing maintenance, and collaborating with faculty members in NMR imaging research. Monthly salary is \$2729 or more based on qualifications. Submit résumé and three letters of recom-mendation to: Dr. Ekwere J. Peters, Department of Petroleum Engineering, The University of Texas at Austin, Austin, TX 78712. Telephone: 512-471-1224. FAX: 512-471-9605. The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION. Available immediately to study electrophysiology and pharmacology of axon-Schwann cell in-teractions in both vertebrate tissue culture and intact systems. Successful candidate must have a Ph.D., M.D., systems. Successful candidate must have a Ph.D., M.D., or equivalent and strong background in microelectrode techniques. Preference given to those with whole-cell patch-clamp experience. Send curriculum vitae and names of three references to: Edward M. Lieberman, Ph.D., Department of Physiology, School of Medi-cine, East Carolina University, Greenville, NC 27858. An Equal Opportunity/Affirmative Action Employ-er. Federal law requires proper documentation of identity and employability at the time of employment. It is requested that this documentation be included with your application.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHI

The James A. Baker Institute for Animal Health at Cornell University offers NIH-sponsored research fellowships for individuals holding a D.V.M., M.D., or equivalent degree, who are U.S. *citizens or permanent residents*. Opportunities for research training leading to the Ph.D. degree are available in infectious diseases,

the Ph.D. degree are available in infectious diseases, immunology, virology, arthritis, and reproductive biology. Fellowship awards include a stipend (\$17,000 to \$31,500, dependent on experience) and travel allowance, plus tuition and fees. Successful candidates will be award-ed a fellowship for up to 3 years. The Baker Institute is an integral part of the College of Veterinary Medicine at Cornell University and has a distinguished history of research accomplishments in animal health research. Minority candidates are encouraged

animal health research. Minority candidates are encouraged to apply. Applications are accepted at any time. Applica-tion forms and additional information may be obtained from: Dr. J. A. Appleton, James A. Baker Institute for Animal Health, College of Veterinary Medicine, Cor-nell University, Ithaca, NY 14853. Cornell University is an Equal Opportunity/Affirmative Action Educator and Employer.

CORNELL UNIVERSITY

UNIVERSITY OF ROCHESTER SCHOOL OF MEDICINE AND DENTISTRY

NIMH POSTDOCTORAL RESEARCH FEL-LOWSHIPS in psychoneuroimmunology. Interdepart-mental/multidisciplinary program provides experience in immunology for fellows trained in the behavioral or neurosciences and neuroscience training for fellows neurosciences and neuroscience training for fellows trained in immunology. Emphasizes research. Fellows work with faculty from the Departments of Psychiatry, Neurobiology and Anatomy, and Microbiology and Im-munology on brain, behavior, and immune system inter-actions. Ph.D. and M.D. candidates *must be U.S. citizens* or permanent residents. Two-year minimum. Submit goals, or permanent restaents. Two-year minimum. Submit goals, description of research interests, curriculum vitae, and names of three references to: Robert Ader, Department of Psychiatry, University of Rochester Medical Cen-ter, Rochester, NY 14642. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE

The Division of Molecular Virology and Immunology, Department of Microbiology, of the Georgetown Uni-versity Medical Center seeks candidates for a research versity Medical Center seeks candidates for a research position at the research associate level. Program emphasis is on the molecular biology of the human immunodefi-ciency virus. We require either a person with an M.S. or recent Ph.D. with training in oligonucleotide synthesis, plasmid preparation and minipreps, sequence analysis, computer data entry, and other molecular biology tech-piques. niques. Salary and academic appointment are commen-surate with experience and training. Send letter of appli-cation and curriculum vitae to:

Dr. John L. Gerin Division of Molecular Virology and Immunology 5640 Fishers Lane Rockville, MD 20852

An Affirmative Action/Equal Opportunity Employer.

MEDICAL TECHNOLOGIST. For medical labo-ratory in Cincinnati, Ohio, to administer and evaluate laboratory technology tests including bacteriology, mycobacteria. Performs chemical, microscopic, serologic, hematologic, immunohematologic, parasitic, and bacte-riologic tests to provide data for use in treatment and diagnosis of disease; receives specimens for laboratory or obtain such body materials as urine, blood, pus, and tissue from patient and make quantitative and qualitative chemical analysis; cultivates, isolates, and identifies pathogenic bacteria parasites and other microorganisms; stains, and mounts tissue sections for study b pathologist; performs blood tests for transfusions, stud-ies morphology of blood and crossmatches that of donor and recipients to ascertain compatibility. Required: B.S. in life sciences or M.D. with 1 year of experience in job described. Salary: \$30,000 per year; 40 hours per week, 9 am. to 5 p.m.; Monday to Friday; 0 hours overtime. Must have proof of legal authority to Vinday, o hours occlutily in United States. Send résumé in duplicate (no calls) to: J. Davies, J.O. #1099763, Ohio Bureau of Employ-ment Services, P.O. Box 1618, Columbus, OH 43216.

SCIENCE, VOL. 251

RESEARCH SCIENTIST

The Gillette Company has a challenging opportunity for a research scientist with expertise in biological sciences at its research facility in Gaithersburg, MD. The successful candidate will have a Ph.D. in biochemistry. Some post-doctoral experience in pharmacology/skin physiology is a plus.

This entry-level position is in our Physiology Department and will be involved in research as applied to the personal care products for The Gillette Company.

Gillette Research Institute is located in a new facility, outside of Washington, D.C., in an area rich in government, private, and academic scientific laboratories. We offer an excellent compensation and benefits package. Qualified candidates interested in this opportunity should forward a resume to:



Gillette Research Institute Personnel Department 401 Professional Drive Gaithersburg, MD 20879

Equal Opportunity Employer

Join Wyeth-Ayerst Laboratories, one of the world's largest pharmaceutical research and development groups. Now is your opportunity to become an integral member of our fast-paced, innovative team at our research facility in Princeton, NJ.



We're currently seeking a senior level synthetic organic chemist to conduct drug discovery efforts in the Immunoinflammatory Section of the Medicinal Chemistry Department. The position will be responsible for the design and synthesis of novel therapeutic agents for the treatment of transplantation rejection and autoimmune diseases.

The ideal candidate should have a Ph.D. in Organic or Medicinal Chemistry with experience in the synthesis and manipulation of complex organic molecules. Good communication skills and the ability to work with interdisciplinary discovery teams is highly desirable. Postdoctoral experience is preferred, but is not essential.

We offer an excellent compensation and benefits package. Forward resume and salary requirements to: Wyeth-Ayerst Research, Personnel Manager, Position #347, CN 8000, Princeton, NJ 08643-8000. An Equal Opportunity Employer, M/F/H/V. Principals only.



Veterinary Medical Officer

GS-14 Salary Range \$52,406 - \$57,650

The Division of Toxicology Research and Testing (DTRT), an operating component of the National Toxicology Program (NTP), is seeking applicants for a permanent position as Staff Pathologist in the Chemical Carcinogenesis Branch (CCB). The CCB sets priorities, designs, conducts, evaluates and reports long-term toxicity and carcinogenicity evaluations in rodents on chemicals of environmental concern. A majority of the studies are performed in laboratories under contract to the NTP but has limited in-house research capabilities for short-term and longterm studies. The NTP disseminates the results of its long-term and short-term studies to other government agencies and the scientific community through the publication of NTP Technical Reports and by publications in the scientific literature. The selectee will assist in the pathology quality assurance reviews of DTRT long-term toxicity and carcinogenicity studies, will be in charge of the Pathology Working Group peer review process and depending on his/her background will assist in study design and in the evaluation and reporting of the studies. The selectee will interact with chemists, toxicologists, pathologists and with other discipline leaders within DTRT and with scientists from government regulatory agencies, private industry and consumer groups on the pathology, design, or evaluation of NTP longterm toxicity and carcinogenicity studies on environmental chemicals and their potential to be hazardous for man. The selectee will also be expected to participate in studies that will aid in our understanding of rodent carcinogenicity studies and their relevance for hazard identification for man. The incumbent must possess a DVM, Sc.D, MD, with residence training and/or PhD in pathology. Board certification (ACVP) is desirable. U.S. Citizenship is required.

For additional information, contact Norma Daye or Lisa Fletcher at 919/541-7811. To apply, submit curriculum vitae and the names of three references **by April 30, 1991** to:

Norma L. Daye (HNV28) NIEHS Personnel Office P.O. Box 12233 Research Triangle Park, NC 27709

An Equal Opportunity Employer



ARS is seeking a permanent, full-time SOIL SCIEN-TIST/AGRICULTURAL ENGINEER for the Cropping Systems and Water Quality Research Unit, Columbia, Missouri. Goal of the research will be to discover new knowledge of the basic processes affecting infiltration and soil erosion on cropland soils and to transfer this knowledge to developing erosion prediction technology. Knowledge of infiltration and soil erosion theory, mathematical modeling and erosion prediction, and cropping and management effects on infiltration and soil erosion are required. Ph.D. is desirable. *Must be a U.S. citizen*. Salary is commensurate with experience (range: \$37,000 to \$52,000). For information on the research program and position, contact: Dr. E. Eugene Alberts, 314-875-5331. For information on application procedures/ forms, contact: Beverly Webert, 301-344-1858. Applications in response to this advertisement must be marked 1N031 and postmarked by 15 April 1991. USDA/ARS is an Equal Opportunity Employer.

RESEARCH TECHNICIAN. Requires B.S. and 2 years of animal research experience. Duties include data analysis, HPLC, electrophoresis, drug administration, surgery, and brain process. Salary: \$10.60 per hour; 40 hours per week, 8:00 a.m. to 5:00 p.m. Apply to: Employment Security Commission, 516 North Mangum Street, Durham, NC 27702 or your local Job Service Office. Refer to Job Order # NC30-0/068, DOT Code 090.227-010. U.S. citizenship or work authorization in United States is required.

JUNIOR SCIENTIST. For biochemistry research. Requirements: B.S. in organic/pharmaceutical chemistry plus 1 year of experience as junior scientist or research assistant. Special requirements: (i) From either education or experience, 6 months of experience in each of the following (may be concurrent): (a) solid phase synthesis of peptides including peptide cleavage and deblocking by hydrolysis; (b) quantitative determination by amino acid composition of peptides and proteins by HPLC methods; (c) application of spectroscopic methods (NMR, UV, IR, MS) as relating to structural analysis of organic compounds; (d) quality control of synthetic peptide mixtures by HPLC analysis. (ii) Basic knowledge of neuroreceptor biochemistry gained through introductory coursework (one course minimum) in both biochemistry and pharmacology. Salary: \$21,636 per year. Send résumes to: Dick Hewetson, #1-78, MDJT, 390 North Robert Street, Room 124, St. Paul, MN 55101.

RESEARCH SCIENTIST. To research, study, and develop improved microorganisms to develop lysine, tryptophan, threonine, lactic acid, gluconic acid, and bacitracin products and continue development of alpha amylase and glucoamylase products; utilize classical/mutation techniques and genetic engineering to study microorganisms and their properties and to produce com-plete understanding of our products' biochemical processes; utilize classical mutation and genetic engineering techniques including conjugation, mutagenesis, gene cloning, DNA hybridization and purification, cell fractionation, centrifugation, transmission electron micro-scope (TEM); plan and conduct analytical and/or exper-imental studies to prove/disprove validity of ideas; initiate new areas of investigation leading to new technologies in agricultural industry; develop complex pro-cedures and prepare design criteria for special test equipment; design specialized equipment capable of culturing microorganisms to provide adequate means to generate sufficient quantities of these microorganisms. Ph.D. degree in microbiology required as well as 3 years of experience in job offered or 3 years of experience as pre-or postdoctoral research scientist. Must have conducted research on aerobic and anaerobic extramophiles including characterization of new organisms from naturally occurring hyperhalophic fermentation including sulfatereducers and ferment carbohydrates and chitin. Research must also have involved designing a medium containing 4-nitrodiphenyl ether for detecting the diphenyl ether 4-nitrodiphenyl ether for detecting the diphenyl ether cleaving of bacterial colonies on agar resulting in cloning and characterization of a diphenyl ether cleavage gene from Erwina sp. Must have proof of legal authority to work permanently in the United States. Forty hours per week, 9:00 a.m. to 5:00 p.m., \$50,000 per year. Apply or send résumé to: Job Service of Iowa, 2740 South 17th Street, Clinton, IA 52732. Refer to Job Order IA-1100008. Employer-paid ad.

POSITIONS OPEN

RESEARCH SCIENTIST, FORMULATIONS DEVELOPMENT. Manages the development of new and improved formulations for experimental and com-mercial pesticides from the laboratory bench through field testing and scale-up in the pilot plant and manufac-turing facilities. Provides technical support to formula-tions development of herbicide, fungicide, and insecticide products and provide necessary technical recommendations for improvements and cost effective-ness of these products. Provides technical direction for the determination of pesticide formulations product development strategies in overseas location, consistent with business/commercial requirements. Develops new, innovative, and cost-effective technologies which are adaptable to local conditions to improve product competitive-ness in the marketplace including: EW (oil in water emulsion) techniques for the development of low melt-ing point products, techniques of formulating nonaque-ous suspension of glyphosate and related products, and novel methods for seed coating technology. In conjunction with discovery research, toxicology, and analytical and formulation manufacturing support sections, ensures the proper integration of formulation development activities into overall research and development plans. Must have bachelor's in chemistry. Experience required is 2 years in job offered or 2 years in pesticide formulations or as a development chemist. Additionally, experience must involve the application of EW (oil in water emulsion) techniques for the development of low melting point products, techniques of formulating nonaqueous suspension of glyphosate and related products, and novel methods for seed coating technology. Monday to Friday, 40 hours per week, 9:00 to 5:00; salary: \$40,000 per year; Research Triangle Park, North Carolina, location. Must have proof of legal authority to work in the United States. Apply to: Job Service, 516 North Mangum Street, Durham, NC 27701, or your nearest Job Ser-vice Office. Job Order No. NC 3001515; DOT Code 022.061-010.

STAFF X-RAY CRYSTALLOGRAPHER. The Department of Chemistry, Princeton University, has an opening for a small molecule crystallographer on its professional technical staff. Responsibilities include the operation, maintenance, and administration of the x-ray crystallographic facility, the determination of structures, and the training of graduate students in techniques of structure analysis. Equipment includes a Nicolet R3m diffractometer with LT capability, a desktop Eclipse computer (SHELXTL software), and a departmental MicroVAX (SHELXTL Plus). A Ph.D. in chemistry or equivalent experience in x-ray crystallography is required. Salary and rank dependent upon qualifications and experience. Send résumé and three letters of recommendation to: Professor Robert Pascal, Jr., Department of Chemistry, Princeton University, Princeton, NJ 08544. Princeton University is an Equal Opportunity/ Affirmative Action Employer.

COURSES AND TRAINING

CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND PHYSICAL SCIENTISTS

A 1-week intensive COURSE sponsored by the Massachusetts Institute of Technology (MIT), 17 to 21 June 1991, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director. Basic principles of cardiovascular physiology, cardiovascular medicine, diagnostic and therapeutic technologies. Contact: Director of the MIT Summer Session, 617-253-2101.

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS

Fellowships available to residents of North America with Ph.D., M.D., or comparable degree and less than 1 year of postdoctoral laboratory experience by application date for beginning training in basic biomedical research. The 3-year award consists of a stipend of \$22,000 for the first year, with increments of \$1,000 for each of the next 2 years; \$2,000 per annum research allowance; travel to fellowship location; annual meeting. Application deadline: 15 August 1991; fellowships activate the following July. For application forms, write or telephone: The Helen Hay Whitney Foundation, 450 East 63rd Street, New York, NY 10021. Telephone: 212-751-8228.

COURSES AND TRAINING

FUNDAMENTAL NEUROBIOLOGICAL APPROACHES TO DISEASE: BRAIN MECHANISMS IN NEUROPSYCHOLOGY 19 TO 24 MAY 1991

The Neurosciences Institute will sponsor an intensive, week-long course emphasizing the disease process as an object for biological research. The purpose is to introduce scientists to the basic physiology and pathology of selected human syndromes affecting behavior and to the opportunities they provide for solving fundamental biological problems. The course program will review both clinical phenom-

The course program will review both clinical phenomena and pertinent areas of basic neuroscience in a format that includes lectures, clinical case presentations, and small group discussions. Instructors will include Ursula Bellugi, Hans-Joachim Freund, Joachim Fuster, Patricia Goldman-Rakic, Charles Marsden, Marek Marsel Mesulam, Mortimer Mishkin, Fred Plum, Michael Posner, Marcus Raichle, Vilayanur S. Ramachandran, Larry Squire, Thomas Thach, Larry Weiskrantz, Robert Wurtz, and Semir Zeki.

Applications are invited from scientists with advanced training and experience in neuroscience or related biological sciences. Participants' expenses will be reimbursed by the institute.

For application forms or further information, please write to: Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 1230 York Avenue, New York, NY 10021 or telephone: 212-570-8975.

MEETINGS

THE PYRROLES OF PHOTOSYNTHETIC ORGANISMS (an international interdisciplinary conference). University of California, Davis, California, 4 to 9 August 1991. Topics will include: aminolevulinic acid formation in bacteria and chloroplasts, biliprotein genes in cyanobacteria, biosynthesis of plastidic C-type cytochromes, role of envelope in biogenesis, recent advances in enzymology of magnesium chelation, regulation of chlorophyll-protein complex formation, and taxonomic and evolutionary aspects of aminolevulinate biosynthesis. For information, contact: Paul A. Castelfranco, Department of Botany, University of California, Davis, CA 95616. Telephone: 916-752-0626 or -7247. FAX: 916-752-4754.

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