Science is a weekly, peer-reviewed journal publishing research in every field of science. Submitted manuscripts should be intelligible to readers in a variety of disciplines and should be brief and clearly written. Manuscripts may be sent to either our Cambridge or Washington office; they will be delivered to the office that will be handling them by overnight shipment if necessary. Most submitted manuscripts undergo a two-tier review process. They are first sent to the Board of Reviewing Editors, which judges them on interest and overall suitability. The top 35% of manuscripts are then sent to referees for in-depth review. All manuscripts are acknowledged; those that are not reviewed in depth are returned quickly so the author may seek publication elsewhere. When the review process is complete, the manuscript and reviewers’ comments are discussed by the editors at a weekly meeting. Manuscripts are evaluated in terms of their technical merit as well as their merit in relation to other papers under consideration. Upon acceptance, authors agree to transfer copyright of the paper to Science, submit sequence and crystallographic data in the appropriate databases, and provide materials or methods needed to verify the paper’s conclusions to other investigators under appropriate conditions. Accepted manuscripts are copyedited for clarity, after which authors receive one set of proofs and a re-print order form. Papers are scheduled for publication after Science has received corrected proofs.

Categories of Signed Papers

General Articles (3000 to 5000 words) review new developments in one field that will be of interest to readers in other fields; describe a current research problem or a technique of interdisciplinary significance; or discuss some aspect of the history, logic, or administration of science. Many general articles are solicited by the editor, but unsolicited articles are welcome. Both types of article undergo review.

Research Articles (up to 4000 words) contain new data representing a major breakthrough in a field. Articles and Research Articles should include a note giving the authors’ names, titles, and addresses; an abstract (50 to 100 words); an introduction, and sections with brief subheadings. A maximum of 40 to 50 references is suggested. Figures and tables together with their legends should occupy about one printed page for General Articles and Research Articles.

Reports (up to 2500 words) are expected to contain important research results. Reports should include an abstract (no more than 100 words) and an introductory paragraph. A maximum of 30 references is suggested. Figures and tables together with their legends should occupy no more than one of the pages.

Policy Forums provide a platform for scientists to present in-depth discussions of policy issues relevant to science. When possible, Policy Forums representing opposing sides are presented in the same issue.

Perspectives analyze recent advances in fast-breaking fields and express opinions as to the impact the developments will have on future research. Perspectives should be one or two published pages.

Letters are pertinent to material published in Science or to problems of general interest to scientists and may be reviewed by outside consultants. Letters selected for publication are intended to reflect the range of opinions received. The author of the paper in question is usually given an opportunity to reply. Preference is given to short letters (250–500 words).

Technical Comments (up to 500 words) may criticize articles or reports published in Science within the previous 6 months or may offer useful additional information.

Book and Software Review selections are made by the editors. Instructions and length specifications accompany items to be reviewed when they are sent to the reviewers, who are chosen by the editors.

Manuscript Preparation

Use double-spacing throughout the text, figure legends, and references and notes, and leave margins of at least 2.5 cm. Put your name on each page and number the pages starting with the title page.

Titles and subheadings are descriptive clauses, not complete sentences or questions. Titles should be no more than 76 characters for general articles and 114 characters for research articles and reports.

Abstracts should convey the main point and outline conclusions.

Figures and tables should be provided on separate pages and should be cited in numerical order within the text. For each figure, submit four high-quality prints, laser prints, or original drawings no larger than 22 x 28 cm. On the back of each, write the first author’s name and figure number and indicate the correct orientation. Photocopies, transparencies, slides, and negatives are not acceptable. Lettering in Helvetica is preferred. Protein or nucleotide sequences may be reduced, so make sure the original is clear. A sequence that will occupy the full width of the printed page is 130 characters and spaces; one that will occupy two columns is 84 characters and spaces. Color artwork will be charged at $600 for the first color figure or figure part and $300 for each additional figure or part. There is an additional charge for color figures in reprints.

Acknowledgments, including funding information, should be brief and should be at the end of the references and notes.

For the complete Information for Contributors, see the 1 January 1993 issue.
POSITIONS OPEN

The Department of Anatomy, College of Medicine, Michigan State University, invites applications for a tenure-track ASSISTANT PROFESSOR position. Applicants must have a Ph.D. or equivalent degree. We are seeking candidates with demonstrated research expertise in neurobiology/Cell biology who would be able to establish an active research program and be a complement to current faculty research programs in these general areas. The successful candidate should be qualified to teach Human Gross Anatomy and Neuroscience to preclinical students in medical education. Prior teaching experience in a medical school basic science curriculum is preferred. Salary will be commensurate with experience and University/College guidelines. Interested candidates should send curriculum vitae, reprints, statement of current and future research plans and names of three references to: Dr. Donald A. Oroco, Chair, Department of Anatomy, Michigan State University, East Lansing, MI 48824. Late submissions will be considered if a suitable candidate pool is not identified by the deadline. Applicants should reference the academic position number HMB685. The disabled have the right to request and receive reasonable accommodation. Women and minorities are encouraged to apply.

MSU is an Affirmative Action/Equal Opportunity Institution.

FACTOR Y POSITION
APPLIED/ENVIRONMENTAL MICROBIOLOGY

The Department of Biology at Georgia State University invites applications for a tenured-track position. The appointment will start on or after September 1, 1995. The individual expected to be at the ASSISTANT PROFESSOR level, however, appointment at a higher level will be considered for candidates with appropriate credentials. Applicants should have a Ph.D. in related fields and at least two years of postdoctoral experience. Preference will be given to those candidates with experience in the application of molecular approaches to study biology. Responsibilities will include participation in teaching and research in undergraduate, M.S. and Ph.D. programs. The successful candidate will be expected to interact closely with other faculty in molecular biology, chemistry and geochronology. Salary will be commensurate with experience. Applications, including curriculum vitae, reprints, statement of research plans and three letters of reference should be sent to: Chair of Search Committee, Department of Biology, Georgia State University, P.O. Box 4010, Atlanta, GA 30302-4010. Deadline for receipt of applications is May 15, 1995. Georgia State University, a unit of the University System of Georgia, is an Equal Opportunity Educational Institution and an Equal Opportunity/Affirmative Action Employer.

DEAN, COLLEGE OF PHARMACY, UNIVERSITY OF UTAH

A distinguished educator/scientist is sought to provide educational, scientific and fiscal leadership for the college and the chief administrator of the college, reporting directly to the Vice President for Health Sciences. The College of Pharmacy is research-intensive and committed to excellence in professional and graduate education. Applications will be accepted until June 1, 1993, or until a suitable candidate has been identified. Please send curriculum vitae and names, addresses and telephone numbers of three or more references to: Jean K. Devemport, Ph.D., Chair, of Search Committee, University of Utah College of Pharmacy, Salt Lake City, Utah 84112. The University of Utah is an Equal Opportunity/Affirmative Action Employer; applications from qualified female/multiracial candidates are encouraged.

The Gladstone Institute of Cardiovascular Disease and the University of California at San Francisco/San Francisco General Hospital are seeking a molecular scientist (M.D. or M.D./Ph.D.) at the level of ASSISTANT PROFESSOR. Research experience in the field of molecular medicine (e.g., genetic therapy or homologous recombination) is required. Gladstone and UCSF are Equal Opportunity/Affirmative Action Employers; minorities are encouraged to apply. Applications should send curriculum vitae and the name of at least three references to: Gordon J. Strewler, M.D., Veterans Administration Medical Center, 4150 Clement Street, 111-N San Francisco, CA 94121

ASSISTANT PROFESSOR IN ORAL PATHOLOGY

Applications are invited for a full-time, tenure-track position in the Department of Northwest- ern University Dental and Medical Schools at the rank of Assistant Professor. The candidate must hold a D.D.S. or equivalent degree, and be Board-certified or Board-eligible in General Oral and Maxillofacial Pathology. The candidate is expected to have a graduate degree with rigorous research training and experience sufficient to maintain a stable research program. She will be expected to participate in teaching of pathology, to take part in teaching of graduate students in our established Life Sciences Graduate Program, and to participate in an oral biology service. Sterile work and experience is necessary. Interested candidates are requested to send curriculum vitae and three references no later than May 31, 1993 to: Professor and Chairman, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008.

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.

CELLULAR AND MOLECULAR BIOLOGIST

The Department of Biology invites applications for a tenured PROFESSORSHIP (head of the laboratory) in cellular and molecular biology. The laboratory consists of a professor, this position, and two assistant professors. We wish to recruit an individual with an outstanding record in their interest of research. Teaching advanced undergraduate and basic core courses. No discrimination by nationality or religion. Salary determined by government rule and methods depending on research and teaching experience. Japanese or English proficiency required. Expected to hold the position at least three years (renewable every three years). Submit curriculum vitae, reprints, statement of research interests, and three letters of recommendation by July 15, 1993. Dr. Toshiaki Iwaga, Department of Biology, Faculty of Science, Kyushu University, 33, Fukuoka 812, Japan.

INTER AMERICAN UNIVERSITY OF PUERTO RICO—Position in higher education. Inter American University of Puerto Rico (IAU), a private non-profit institution, invites applications for the following position: Full-time ASSISTANT PROFESSOR OF OPTOMETRY. The candidate must be able to lecture in Spanish, possess a Doctoral degree in Optometry with a major in Visual Sciences. Teaching load is 15 credit hours. Starting salary is $33,300 per year. DEADLINE: May 15, 1993. Send resume and academic credentials to: Inter American University of Puerto Rico • School of Optometry • Human Resources Office • P.O. Box 191048 • San Juan, PR 00919, An Equal Opportunity/Affirmative Action Employer (M/F/H/V).

BIOLOGICAL SCIENCES INSTRUCTOR

The Department of Natural Sciences, School of Liberal Arts and Sciences, Stephens College, Columbia, Missouri, seeks BIOLOGICAL SCIENCES INSTRUCTOR for a nine-month, tenured-track, teaching and advising appointment. Position begins August 1993. Responsibilities include teaching both lecture and lab sections for anatomy and physiology, genetics, and microbiology (alternate year offerings), and each year, sections in biological concepts and natural sciences for non-majors. Advising and research involving undergraduates is expected. Ph.D. required. Strong commitment to women's education essential. Salary commensurate with qualifications and experience. Submit letter of application stating teaching philosophy and professional goals, curriculum vitae, three letters of recommendation, and transcripts of all undergraduate and graduate studies to: Charles Laun, Chair, Biology Search Committee, Campus Box 2072, Department of Natural Sciences, Stephens College, Columbia, MO 65215. Review of applications will begin April 27, 1993, and will continue until position is filled. Affirmative Action/Equal Opportunity Employer.

Technology Policy: TENURE-TRACK FACULTY at any level to teach and do research on technical innovation, technology transfer, manufacturing, or similar issues. Research must not treat technology as a black box. Reference: Ph.D. in engineering and demonstrated modern social science research skills. Send resume to: Professor M. Granger Morgan, Head, Department of English Public Policy, Carnegie Mellon, Pittsburgh, PA 15213, USA. CMU is an Affirmative Action/Equal Opportunity Employer.
DIRECTOR, SCHOOL OF FOREST RESOURCES, PENN STATE. The Pennsylvania State University seeks applications for the position of Director, School of Forest Resources. The director is the school’s administrative officer and program leader, and reports to the Dean of the College of Agricultural Sciences. Qualifications include a Ph.D. degree plus a significant period of professional work and/or academic experience in a natural resource field; experience or in-depth knowledge of university teaching, research, and extension functions; and administrative and program leadership experience, or strong evidence of the potential for such leadership. The School offers baccalaureate programs in Forest Science, Wildlife and Fisheries Science, and Wood Products at the University Park Campus, and two-year associate degree programs in Forest Technology and Wildlife Technology at the Mont Alto and DuBois campuses, respectively. Graduate programs leading to the M.S., M.F.R., M.Agr., and Ph.D. in Forest Resources and the M.S., M. Agr. and Ph.D. in Wildlife Fisheries Science are also available at University Park. In addition, the School is developing a new undergraduate major in natural resources management. Currently the faculty number 31 at University Park with 7 additional faculty at the DuBois and Mont Alto campuses. Enrollment in the School’s programs at the University Park is currently 300 undergraduates plus an estimated 115 undergraduates at Commonwealth Campuses and 75 graduate students. Construction of an addition to the campus will begin July 1 and will continue until a suitable candidate is selected. Submit a complete resume with documentation of academic training and professional experience along with the names, addresses and telephone numbers of five suggested references to: DR. J.R. STAUFFER, CHAIR, DIRECTOR SEARCH COMMITTEE, 2E FERGUSON BUILDING, SCHOOL OF FOREST RESOURCES, THE PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, PA 16802. An Affirmative Action/Equal Opportunity Employer. Women and Minorities Encouraged to Apply.

A DYNAMIC MISSION

At the Glaxo Inc. Research Institute, Our Priority is Progress.

In Research Triangle Park, NC, the inspirational Sir Paul Girolami Research Center houses the new Glaxo Inc. Research Institute. Here, professional excellence teams with scientific leadership in a unified mission: to advance the progress of drug discovery and development. The result is an environment of exceptional challenge...and unsurpassed reward.

The following openings are available within our DEPARTMENT OF CELLULAR BIOCHEMISTRY. Interests of this group range from theory and practice of receptor-ligand interactions, to signal transduction mechanisms, to the molecular biology of receptors. The successful candidates will join our highly collaborative research team focused on G-protein coupled receptors and their second messenger systems. These individuals will assist in developing a research program based on the molecular pharmacology of G-protein coupled receptors and their signalling systems.

SENIOR SCIENTIST

Selected individual will be responsible for developing an independent research program on the molecular biology of receptors, and take part in both exploratory projects as well as those relating to compound development.

Background must include a Ph.D. in Molecular Biology, Pharmacology, Biochemistry, or a similar discipline, with a minimum of 2 years postdoctoral experience, preferably in the molecular pharmacology of G-protein coupled receptors. Previous experience in isolation and cloning of receptors, in vitro hybridization, or site-directed mutagenesis would be beneficial.

Please refer to Job # ASC912808 on all resumes.

POSTDOCTORAL SCIENTIST

The selected individual will be responsible for developing a research project on signal transduction mechanisms of G-protein coupled receptors, taking advantage of our state-of-the-art facilities, and open, collaborative environment, while becoming acquainted with research opportunities in the pharmaceutical industry.

Qualified candidate must be a recent Ph.D. graduate with a solid background in Biochemical Pharmacology. Previous experience with second messenger systems would be beneficial.

Please refer to Job # ASC911709 on all resumes.

At Glaxo, pride in our people is reflected in excellent salaries and a flexible benefits package, as well as in such amenities as an on-site fitness center and a work setting in which you will take pride. Research Triangle Park, NC offers an academically enriched quality of life complete with cultural and recreational advantages. For confidential consideration, send your resume to include salary history, indicating the position title and referring to the appropriate Job # listed above, to: Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, please.) An Equal Opportunity Employer M/F/D/V.

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POSITIONS OPEN

FACULTY POSITION: The Department of Biology of Monmouth College, Monmouth, Illinois, invites applications for a tenure-track position for the fall of 1993. Candidates should have a strong interest in ECOLOGY and be prepared to teach ecology, general zoology and embryology or anatomy. Supervision of senior level courses is expected and provides continuing research opportunities. Experience either as a student or in teaching in a liberal arts institution is highly desirable. Applications, including curriculum vitae, three letters of recommendation, and undergraduate/graduate transcripts should be sent by May 10, 1993, to: Dr. William B. Julian, Vice President of Academic Affairs, Monmouth College, Monmouth, IL 61462. Applications will be considered until the position is filled. An Equal Opportunity/Affirmative Action Employer.

Cell Biology of Aerodigestive Tract—ASSISTANT PROFESSOR: Applications are invited for a position to develop an interdisciplinary research program at Long Island Jewish Medical Center (LIJ) and Albert Einstein College of Medicine on epithelial mesenchymal interactions in normal development and neoplastic processes in the upper aerodigestive tract. Applicants should have a doctoral degree and postdoctoral training in cell biology, extracellular matrix biology and/or molecular biology. Success in this position is contingent upon grants awarded to LIJ and Albert Einstein College of Medicine, salary, technical support and laboratory space will be provided for up to five years. Additionally, you will be expected to develop an externally funded research program. Send curriculum vitae with publication list, and names and addresses of three references to: Dr. Thomas Van De Water, Department of Otolaryngology and Pediatrics at the Albert Einstein College of Medicine, Salary, technical support and laboratory space will be provided for up to five years. Additionally, you will be expected to develop an externally funded research program. Send curriculum vitae with publication list, and names and addresses of three references to: Dr. Thomas Van De Water, Department of Otolaryngology and Pediatrics at the Albert Einstein College of Medicine, Salary, technical support and laboratory space will be provided for up to five years. Additionally, you will be expected to develop an externally funded research program. Send curriculum vitae with publication list, and names and addresses of three references to: Dr. Thomas Van De Water, Department of Otolaryngology and Pediatrics at the Albert Einstein College of Medicine, Salary, technical support and laboratory space will be provided for up to five years. Additionally, you will be expected to develop an externally funded research program.

DEAN OF FACULTY

The Division of Academic Affairs invites applications for the position of Dean of Faculty. Candidates must have experience in the academic enterprise with a commitment to the scientific basis of chiropractic. Candidate should have prior leadership experience and Ph.D. or D.C. with significant experience in administration or teaching. D.C. candidates should possess or be eligible to sit the New York State licensing examination. Applications will be accepted until the position is filled. Send curriculum vitae and 3 letters of reference to: David A. Herd, D.C., Chair Search Committee, F.O. Box 800, Seneca Falls, NY 13148.

New York Chiropractic College is an Affirmative Action/Equal Opportunity Employer.

CHAIR, DIVISION OF PHARMACETEUTICS, SCHOOL OF PHARMACY, UNIVERSITY OF NORTH CAROLINA. The School of Pharmacy at the University of North Carolina at Chapel Hill invites applications for the position of Chair of the Division of Pharmacuetics. The Division Chair is responsible for providing administrative leadership to the research and teaching programs of the Division. Candidates must have a Ph.D. in pharmaceutical sciences, an active research program and an understanding of the dynamics of the profession of pharmacy and its education. Salary is based on division of Health Affairs of the University of North Carolina, and is in close proximity to the Research Triangle Park, a large research-intensive conglomerate of various industries and institutes. The University is an Equal Opportunity/Affirmative Action Employer. Interested individuals should submit curriculum vitae and names of three references to: Dean, Biomedical Sciences, School of Medicine, University of North Carolina at Chapel Hill, NC 27599-7560.

TENURE-TRACK PHARMACOLOGIST

The Department of Veterinary and Comparative Anatom y, Pharmacology and Physiology, College of Veteri nary Medicine, Washington State University solicits applications for a tenure-track position in pharmacology. Rank and salary will be commensurate with qualifications. Duties include teaching veterinary and graduate pharmacology and developing a research program. Qualifications include a D.V.M./Ph.D., D.V.M. or Ph.D. in pharmacological sciences. The candidate must have a commitment to excellence in teaching, and teaching experience is required. Relevant areas of research include, but are not limited to, alcohol and drug abuse, cardiovascular pharmacology, molecular biology, neuroscience, pharmacokinetics and pharmacodynamics. Written applications must include curriculum vitae, description of teaching experience and research interests and a list of three references to be contacted on your behalf. Applications and inquiries should be addressed to: Dr. Peter Kalivas, Chair, Pharmacology Search Committee, Department of VCAPP, Washington State University, Pullman, WA 99164-6520. Application deadline is June 1, 1993, or until position is filled. Washington State University is an Equal Opportunity/Affirmative Action Educator and Employee. People of color, women, persons of disability, Vietnam-era disabled veterans and/or persons between the ages of 40 and 70 are encouraged to apply.

SUPERVISORY CHEMIST

Applications are invited for CHIEF, CHEMICAL LABORATORY DIVISION (GM-15), U.S. Army Dugway Proving Ground, Utah. The incumbent will direct and manage the operation of the Chemical Laboratory Division. The incumbent will supervise employees engaged in conducting methodology studies and applied research in all areas of chemical defense. Incumbent is also responsible for the development and implementation of programs, e.g., safety, chemical agent surety, and hazardous waste handling. U.S. citizenship and top secret clearance are required. Salary: $18,566 to $36,600. Contact: Mr. Michael Wilde, Civilian Personnel Office, Dugway Proving Ground, Dugway, UT 84023-5000, Telephone: (801) 831-2818, Monday to Thursday, 7:00 a.m. to 5:30 p.m. MDT for information and application packet. An Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL BIOLOGIST

Applications are invited for a tenure-track position at the ASSISTANT or associate professor level, beginning fall 1993 in the Biology Department at Elizabethan College, a small, liberal arts college in southeastern Pennsylvania. The department is seeking someone to supervise a newly established environmental science program and teach related courses, such as aquatic ecology and ecotoxicology, and a research methods and a general microbiology course. A strong background in environmental science is required. Experience in the general biology program may be necessary. The candidate should have a Ph.D. in Microbial Ecology/Environmental Microbiology or a related field, a commitment to research and teaching, and a desire to develop a research program with undergraduate students. Grant writing experience is desirable, but not necessary. Applicants should submit a letter of application, curriculum vitae, description of research interests, copies of transcripts and three letters of recommendation to: Dr. Jack King, Department Chair, Elizabethan College, 125 College Drive, Archdale, NC 27260. The position will be filled as applications are received. Closing date: May 15, 1993. Trinity College is an Equal Opportunity Employer.

ASSISTANT PROFESSOR, EXPERIMENTAL PATHOLOGY

The Department of Comparative and Experimental Pathology has a tenure-track position open for an experienced pathologist or immunologist. Applications from candidates already employed and continuing their research beginning on or after September 1, 1993, are encouraged. Applicants should have a Ph.D. degree or D.V.M./Ph.D. degrees and a record of accomplishment in research. Individuals with molecular research programs focused on virology/ viral pathogenesis, cytokine pathobiology, cellular immunology or molecular biology are encouraged to apply. Excellent departmental research resources are available in the Health Science Center and in the Institute of Food and Agricultural Sciences. The successful candidate will be expected to develop an on-going research program and to participate with other faculty in the graduate education programs in experimental pathology and infectious diseases. Applicants should submit a letter of intent, curriculum vitae, and the names of three references before July 1, 1993, to: Dr. William L. Castelman, Chairman, Department of Comparative and Experimental Pathology, College of Veterinary Medicine, P.O. Box 10145, University of Florida, Gainesville, FL 32610-0145.

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

ASSISTANT PROFESSOR, EXPERIMENTAL PATHOLOGY

The Department of Comparative and Experimental Pathology has a tenure-track position open for an experienced pathologist or immunologist. Applications from candidates already employed and continuing their research beginning on or after September 1, 1993, are encouraged. Applicants should have a Ph.D. degree or D.V.M./Ph.D. degrees and a record of accomplishment in research. Individuals with molecular research programs focused on virology/ viral pathogenesis, cytokine pathobiology, cellular immunology or molecular biology are encouraged to apply. Excellent departmental research resources are available in the Health Science Center and in the Institute of Food and Agricultural Sciences. The successful candidate will be expected to develop an on-going research program and to participate with other faculty in the graduate education programs in experimental pathology and infectious diseases. Applicants should submit a letter of intent, curriculum vitae, and the names of three references before July 1, 1993, to: Dr. William L. Castelman, Chairman, Department of Comparative and Experimental Pathology, College of Veterinary Medicine, P.O. Box 10145, University of Florida, Gainesville, FL 32610-0145.

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

INVERTEBRATE ZOOLOGIST

DEPARTMENT OF ORGANISMIC AND EVOLUTIONARY BIOLOGY

HARVARD UNIVERSITY

The Department seeks a broadly based invertebrate zoologist whose work addresses the organismic and evolutionary biology of living invertebrates (exclusive of insects). The appointment will be to a TENURED PROFESSORSHIP. We are especially interested in individuals whose research experience and interests extend to the Southeast Asia, by 1 June 1993, curriculum vitae, a statement of research and teaching interests, and the names and address of three references to: Professor Farish A. Jenkins, Jr. Chairman, Invertebrate Zoology Search Committee Department of Organismic and Evolutionary Biology Harvard University Cambridge, MA 02138

Harvard University is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority groups.

ASSOCIATE DIRECTOR—HEMOSTASIS RESEARCH AND DEVELOPMENT: Plan, organize, manage, and control company-wide research and development programs in the area of technical education and support to customers and to distribution and sales personnel in the hemostasis market segment; manage the hemostasis Research and Development Group in product support, quality improvement, and new product development of clot-based technology; direct development of enzyme immunoassays, coagulation assay systems, and hemostasis reagents; interface with Manufacturing Managers and Quality Assurance Directors to ensure smooth transition from product development to routine production in the hemostasis and coagulation, and thrombosis research. Applicants should possess Ph.D. degree in Biochemistry, one year of experience in the position, or 4 years of experience as a Research Scientist. Experience in position or related occupations is preferred. Experience in the following: isolation and characterization of human blood coagulation/fibrinolyis proteins; development of poly/multimolecular antibodies against coagulation; and development of new enzyme immunoassays, coagulation assay systems, and recombinant proteins. Forty hours per week; 9:00 a.m. to 5:00 p.m.; $87,000 per year. Must have legal authorization to work in the United States. Send resumes to: Job Service of Florida, 701 S.W. 27th Avenue, Room 47, Miami, FL 33135–3014; Attention: Ms. Rosanne Roberts, Allen Employment Office, Miami, FL 33127-5300. Fax: 305-448-0275. No Callbacks. An Employer Paid AD.
ANNOUNCEMENT:
AVAILABILITY OF GRANTS FOR BASIC
GLYCOSCIENCE STUDIES

Mizutani Foundation for Glycoscience announces the availability of research grants for basic researches in glycoscience. The suggested proposals for this year are the studies of glycoconjugates; namely, their biochemistry, organic chemistry, biophysics, molecular biology, immunology, and medical significance.

Mizutani Foundation for Glycoscience is a non-profit, private organization devoted for the advancement of glycoscience. The foundation was established on October 1, 1992 with the funds donated by Mr. Masakane Mizutani, Chairman of Seikagaku (Biochemical) Corporation, Tokyo, Japan.

Note 1: For the current year (4/93–3/94) the research “year” is effective only from October 93 through March 94, a 6-month period in total.

Qualification: An applicant must (a) have a Ph.D. or M.D. degree, or their equivalent, in a field related to the proposed study, (b) be a member of a research institute where he or she can carry out the proposed project, and (c) have a documented capability to do independent research in the field of glycoscience.

Grant: As much as 10,000,000 yen (including overhead) may be requested for a research proposal per annum. As a rule, the grant will be approved for one (1) year, but certain proposals, depending on the merit of ongoing research, may be granted a further one year extension, provided application for such extension is made before the end of the ongoing funding period.

Please see Note 1 above for definition of current year.

The total money available for the grant is approximately 100,000,000 yen per annum. However, the cash to be allocated for new research proposals and the number of proposals to be funded may vary each year.

The approved grant will be awarded to the research institution to which the principal investigator is affiliated. No budget will be included in the grant for the stipend of the principal investigator or collaborators. There are certain other regulations as specified in the application form.

Selection: The research proposals will be reviewed and evaluated by the committee of specialists appointed by the foundation for the originality, scientific merit, and feasibility. The potentiality of the principal investigator and the research environment will also be considered.

Application form: The official application form may be obtained by sending a letter or fax (in English, no phone call please) to the North American office of Mizutani Foundation for Glycoscience: Department of Biochemistry, Meharry Medical College, 1005 David Todd Jr. Blvd., Nashville, TN 37208, USA (Fax: 615-327-6442).

Deadline: The deadline for application is June 30, 1993 at the Tokyo office of Mizutani Foundation for Glycoscience: Sen-4 Kaikan, Suite SF, 3-1-11 Nihonbashihoncho, Chuo-ku, Tokyo 103, Japan (Fax: 03-3246-1265).
STA FELLOWSHIP PROGRAM

Postdoctoral Fellowships in Japanese National Laboratories

Introduction
The Science and Technology Agency (STA), an administrative organ of the Government of Japan, established the STA Fellowship Program in 1988 in order to offer opportunities for promising young foreign researchers in the fields of science and technology to conduct research at Japan's national laboratories and public research corporations (excluding universities and university-affiliated institutes).

The Program is also a response to calls from the international community of science and technology for greater international cooperation through the exchange of promising researchers.

Since Oct. 1, 1989, the Program has been managed by the Research Development Corporation of Japan (JRDC), a statutory organization under the supervision of STA, in cooperation with the Japan International Science and Technology Exchange Center (JISTEC). JRDC also has the strong support and cooperation of the Responsible Organizations listed in Table 1.

Fellowship Qualifications
The fellowships are open to young PhD holders of under 35 in principle, from universities, research councils, government research laboratories and industry. Any science or engineering discipline will be considered except military R & D.

Applicants should be of sufficient good health to pursue research activities in Japan.

Have sufficient language ability to pursue research activities in Japan, Japanese language ability is preferable, but English is sufficient in most cases. With the agreement of the host research institute, other languages may suffice.

Tenure and Field of Research
The tenure will be from 6 months to 2 years, to be decided upon through negotiation between the candidate and the host institute. The field of research will also be decided upon through negotiation between the candidate and the host institute, the results of research activities produced during the tenure will be subject to the regulations of the host institute.

Research field include: Mathematics; Physics; Geology; Electricity; Electrons; Information Engineering; Mechanics; Engineering Works; Architecture; Erosion Control; Landscaping; Chemistry; Metals; Resources Engineering; Medical Science; Pharmaceuticals; Agricultural Technology; Farming; Forestry; Fisheries; others in the Natural Science.

FELLOWSHIP AWARDS
Fellowships include round-trip air tickets (economy class; not available for dependents) and the following allowances:

1) Living allowance: 270,000 a month
2) Family allowance: 50,000 a month
3) Housing: Apartments will normally be provided to awardees. The apartment floor area is 40m² for awardees unaccompanied by their family and 60m² for awardees to stay with their family in other than metropolitan areas such as Tokyo. If an awardee prefers to use a larger apartment because of the family size or otherwise 100,000 maximum per month may be paid as housing allowance; any shortfall is to be borne by the awardee.
4) An initial international settling-in allowance: 200,000
5) An annual allowance of up to 115,000 for travel within Japan related to research activities.
6) Medical insurance (N.B. not available for dependents)

Assistance for Fellows
If they wish, Fellows may take advantage of the following assistance:

1) Free Japanese language courses for Fellows whose host research institutes are in Tsukuba area. Fellows whose institutes are located elsewhere are entitled to reimbursement of reasonable amounts for language tuition at a private school. (N.B. not available for dependents);
2) Since most apartments in Japan are unfurnished, basic furniture and electric appliances will be provided free of charge to Fellows;
3) Counseling on problems relating to such aspects of daily life as children’s schooling, medical care and shopping, is available for Fellows living in Tsukuba area.

APPLICATION PROCEDURE FOR STA FELLOWSHIP (Fig 1)
Applicants possessing the nationality or citizenship or permanent resident status of a country listed in Table 1 should:

1) Contact the Responsible Organization in their country to obtain an application form and information about the host research institutes.
2) Communicate with host research institutes of interest to ascertain their suitability for the applicant’s area of specialization. This should be done using the attached Form 1.
3) After agreeing with the prospective host institute on the subject of research, the length of tenure and starting date for the Fellowship, the applicant should obtain from the institute a formal letter of acceptance expressing its willingness to serve as a host.
4) Submit the completed application form and the letter of acceptance to the Responsible Organization concerned. The Responsible Organization will then screen applicants, and submit its recommendations for Fellowship candidates to JRDC through JISTEC, accompanied by a complete dossier on the candidates.
5) JRDC will then conduct a further screening and notify successful applicants by sending a Letter of Award through JISTEC. The Responsible Organization and the host research institute concerned will also be informed in this respect.
Fig. 1 Procedural Flow from Contact to Receipt of Award

Table 1 RESPONSIBLE ORGANIZATIONS

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact</th>
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<tr>
<td>AUSTRALIA</td>
<td>THE AUSTRALIAN ACADEMY OF SCIENCE</td>
<td>NEW ZEALAND</td>
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<tr>
<td></td>
<td>Ms. Bonnie Baud</td>
<td>MINISTRY OF RESEARCH, SCIENCE AND TECHNOLOGY</td>
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<tr>
<td></td>
<td>International Exchange Officer</td>
<td>Ms. Lisa Goodman</td>
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<td></td>
<td>GPO Box 783, Canberra ACT 2601</td>
<td>International Science Office</td>
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<tr>
<td></td>
<td>Tel: 61-6-247-3966</td>
<td>P.O. Box 5336, Wellington</td>
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<td></td>
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<td>Tel: 64-4-472-6400</td>
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<tr>
<td>AUSTRIA</td>
<td>FEDERAL MINISTRY FOR SCIENCE AND RESEARCH</td>
<td>_NRWAY</td>
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<tr>
<td></td>
<td>Ms. Susanna Peterka</td>
<td>THE ROYAL NORWEGIAN COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH</td>
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<td></td>
<td>Administrative Officer, International Affairs</td>
<td>(NTNF)</td>
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<tr>
<td></td>
<td>Minoriteplatz 5, A 1014 Vienna</td>
<td>Ms. Else Boon</td>
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<tr>
<td></td>
<td>Tel: 43-222-531-20-6794</td>
<td>Advisor</td>
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<td>P.O. Box 70, Tåsen 0801 Oslo 8</td>
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<td>Tel: 47-2-237685</td>
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<td>Fax: 47-2-181139 or 47-2-184137</td>
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<tr>
<td>CANADA</td>
<td>NATURAL SCIENCE AND ENGINEERING RESEARCH COUNCIL</td>
<td>SWEDEN</td>
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<td></td>
<td>Ms. Eileen P. Garvey</td>
<td>MINISTRY OF RESEARCH, SCIENCE AND TECHNOLOGY</td>
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<td></td>
<td>Program Officer, Japan Programs</td>
<td>Ms. Leena Holappa</td>
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<td></td>
<td>200 Kent Street, Ottawa, K1A 1H5</td>
<td>Administrative Program Officer</td>
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<tr>
<td></td>
<td>Tel: 1-613-947-0190</td>
<td>Liljeholmsvägen 32, S-117 86, Stockholm</td>
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<td></td>
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<td>Tel: 46-8-775-4000</td>
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<td>Fax: 46-8-19-68-26</td>
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<tr>
<td>GERMANY</td>
<td>ALEXANDER VON HUMBOLDT-STIFTUNG</td>
<td>SWISS NATIONAL SCIENCE FOUNDATION</td>
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<td></td>
<td>Dr. Michal Meier</td>
<td>Dr. Benno G. Frey</td>
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<td>Department Sponsorship Abroad</td>
<td>Head of the Fellowship Section</td>
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<td></td>
<td>Jean-Paul-Str. 12, D-5300 Bonn 2</td>
<td>Wilthainweg 20, CH-3012, Bern</td>
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<tr>
<td></td>
<td>Tel: 49-226-833-101</td>
<td>Tel: 41-31-27-22-22</td>
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<tr>
<td></td>
<td>Fax: 49-226-833-199</td>
<td>Fax: 41-31-23-30-09</td>
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<td>FINLAND</td>
<td>THE ACADEMY OF FINLAND</td>
<td>UNITED KINGDOM</td>
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<td>THE ROYAL SOCIETY</td>
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<td></td>
<td>International Affairs</td>
<td>Ms. Vida Cody</td>
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<td></td>
<td>P.O. Box 57, SF-00551 Helsinki</td>
<td>Head of Japan Exchanges</td>
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<tr>
<td></td>
<td>Tel: 358-0-7758-316</td>
<td>6 Carlton House Terrace, London SW1Y 5AG</td>
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<td></td>
<td>Fax: 358-0-7758-299</td>
<td>Tel: 44-71-839-5561</td>
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<td>Fax: 44-71-930-2170</td>
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<tr>
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<td>CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE</td>
<td>UNITED STATES</td>
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<td></td>
<td>Ms. Françoise Aubjeuault</td>
<td>NATIONAL SCIENCE FOUNDATION</td>
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<td></td>
<td>Chief of Asia Division, Mission of International Relations</td>
<td>Ms. Janice M. Cassidy</td>
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<td></td>
<td>15 Quai Anatole-France, 75700 Paris</td>
<td>Japan Programs</td>
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<td></td>
<td>Tel: 33-1-47-53-12-43</td>
<td>Division of International Programs</td>
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<td></td>
<td>Fax: 33-1-47-53-18-70 or 33-1-47-53-00-55</td>
<td>1800 G Street, NW, Washington, D.C. 20550</td>
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<td>Tel: 1-202-653-5962</td>
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<tr>
<td>ITALY</td>
<td>MINISTERO DELLA RICERCA SCIENTIFICA E TECHNOLOGICA</td>
<td>COMMISSION OF THE EUROPEAN COMMUNITIES</td>
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<td>Ufficio Relazioni Internazionali</td>
<td>Mr. Mario Merla</td>
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<td></td>
<td>Dr. Maria Enrica Danubio</td>
<td>Directorate-General for Science, Research and Development</td>
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<td></td>
<td>Head of Bilateral Activities</td>
<td>DG XII-G-3</td>
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<tr>
<td></td>
<td>International Relation Office</td>
<td>200 Rue de la Loi, 1049 Brussels, Belgium</td>
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<td></td>
<td>Lungotevere Thaon di Revel 76, 00100 Roma</td>
<td>Tel: 32-2-295-39-90</td>
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<td>Tel: 39-6-3232642</td>
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<td>Fax: 39-6-3221584</td>
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<td>NETHERLANDS</td>
<td>STICHTING VOOR DE TECHNISCHE WETENCHAPPEN (STW)</td>
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<td>Dr. C. A. M. Mommers</td>
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<td>Program Officer</td>
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<td></td>
<td>Postbus 9021, 3502 GA Utrecht</td>
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<td>Van Vollenhovenlaan 661, Utrecht</td>
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<td>Tel: 31-30-923275</td>
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<td>Fax: 31-30-961536</td>
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Further information regarding the STA Fellowship and host institute is available from the responsible organizations, or JRDC. (See below)

Research Development Corporation of Japan (JRDC)
Address: 5-2, Nagata-cho 2-chome, Chiyoda-ku, Tokyo 100, Japan
FACULTY POSITION
MICROBIAL PATHOGENESIS
The Department of Microbiology and Immunology at Eastern Virginia Medical School is seeking outstanding candidates for the new tenure-track FACULTY POSITION in the area of Microbial Pathogenesis beginning July 1994. Individuals using molecular strategies and approaches to studying bacterial pathogenesis are preferred. The successful applicant must have an independent, established and funded research program as well as experience in teaching medical and graduate students. Competitive salary, space, and start-up packages will be provided. The Department of Microbiology and Immunology consists of full-time research faculty in areas of molecular biology, cell biology, bacteriology, virology, cellular immunology and tumor immunology. In addition, the department is associated with a strong clinical research program in infectious disease. Send curriculum vitae, a statement of research interests, relevant reprints and the names of four references by August 15, 1993, to: Dr. Richard Stenberg, Chairman, Search Committee, Department of Microbiology and Immunology, Eastern Virginia Medical School, P.O. Box 1880, Norfolk, VA 23501. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION
POSTDOCTORAL POSITION
A postdoctoral position is available immediately for the study of adaptive immunity. The successful candidate will study the interaction between the CD4 T-helper cell and the B cell and the role of cytokines and costimulatory molecules in the induction of immune responses. Send curriculum vitae and names of three references to: Dr. John Oostendorp, Department of Microbiology and Immunology, Eastern Virginia Medical School, P.O. Box 1880, Norfolk, VA 23501. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION
POSTDOCTORAL POSITION IN BEHAVIORAL GENETICS
A postdoctoral position is available immediately for the study of behavioral genetics. The successful candidate will use quantitative and molecular approaches to study the genetics of complex traits. Send curriculum vitae and names of three references to: Dr. Robert R. Plomin, Department of Psychology, University of Virginia, Charlottesville, VA 22903. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION
POSTDOCTORAL POSITION IN BEHAVIORAL GENETICS
A postdoctoral position is available immediately for the study of behavioral genetics. The successful candidate will use quantitative and molecular approaches to study the genetics of complex traits. Send curriculum vitae and names of three references to: Dr. Robert R. Plomin, Department of Psychology, University of Virginia, Charlottesville, VA 22903. An Equal Opportunity/Affirmative Action Employer.
The National Institute of General Medical Sciences is seeking applications for the Pharmacology Research Associate (PRAT) Program at the National Institutes of Health (NIH). The PRAT program is a 2 year postdoctoral training program, providing research opportunities in such areas as signal transduction, receptor pharmacology, AIDS research, neurobiology/neuropsychopharmacology, chemistry, behavioral pharmacology, metabolism, cell biology, and gene expression and regulation. Those selected for the program may choose from among more than 100 intramural laboratories of the institutes which comprise the NIH.

The program is intended for recently trained, highly qualified scientists who wish to address problems of pharmacological interest. Research proposals are not required for application. Applicants must be U.S. citizens or permanent residents. Deadline for receipt of applications for positions beginning in July of 1994 is June 1, 1993. For more information and application material, please write to:

Program Assistant
Pharmacology Research Associate Program
National Institute of General Medical Sciences
Westwood Building, Room 919
5333 Westbard Avenue
Bethesda, MD 20892

NIH is an Equal Opportunity Employer

BS/MS Protein Scientists

The field of pharmaceuticals and healthcare is more rewarding than ever as new products create a healthier world population. As one of the leaders in this dynamic industry, Pfizer Inc, a Fortune 100 company, is committed to continuing its remarkable growth.

In bringing science to life, our international research-based company uses advanced techniques to generate new products, new areas of revenue and career opportunities that self-directed, talented people will find stimulating and rewarding.

Currently, our Protein Technologies Group in the Department of Molecular Genetics and Protein Chemistry has three positions available for qualified candidates experienced in protein purification. Additional experience in the preparation of proteins for X-ray crystallographic or NMR-based structural studies; protein analytical methods (N-terminal sequencing, amino acid analysis); or biophysical characterization of proteins and peptides would be desirable.

The primary R&D facility for Pfizer Inc is located in a southeastern Connecticut shore community, giving easy access to the well known academic and cultural centers of the Northeast and offers the attractions of a New England lifestyle.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacations, educational assistance, 401k plan, pension plan, relocation assistance and more.

To learn how you can be part of the future of Pfizer, send your resume to: Mr. Kym Goddu, Employee Resources Associate, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.
Immunex Corporation, a Seattle-based biopharmaceutical company focused on the research, development, manufacture and marketing of products to treat cancer and autoimmune disease, is a world leader in cytokine research (see references). Two year Post Doctoral positions will be available in Research and Process Science beginning in January 1994. Successful candidates will be highly motivated Ph.Ds who are able to work in a collaborative environment and have a significant research track record.

**PROCESS SCIENCE**

We are encouraging applications from scientists with interests in the following areas:

**Mammalian Cell Culture**: Investigate gene expression at the molecular and cellular level; transcriptional and post-transcriptional regulation of gene expression; protein targeting; continuous cell culture and perfusion technologies.

**Analytical Biochemistry**: Development of rapid high resolution methods for in-process monitoring of product; peptide mapping and glycosylation analysis.

**Process Integration/Monitoring**: Integration of fermentation and recovery for continuous production; real-time monitoring; computer control systems for data uptake and analysis; process automation and biosensors.

**Microbial Fermentation/Expression**: Development/optimization of novel microbial systems for the expression of recombinant proteins; expression using continuous/immobilized cell fermentation technology; computer-based fermentation monitoring and control; novel bioreactor technology; automation.

**Purification**: Continuous purification; fluidized beds; novel chromatography media; affinity peptides; displacement chromatography; membrane separations.

**Protein Drug Delivery/Formulation**: Liquid formulation development; sustained release; new stability-indicating methods; targeted delivery.

**RESEARCH**

Positions are available in the departments and disciplines of Molecular Biology, Biochemistry, Protein Chemistry, Transgenics/Gene Targeting, Immunology, Experimental Hematology, Cell Biology and Biophysics.

- Research activities will be oriented toward the molecular basis of immune regulation and cytokine action, particularly the cloning of novel cytokines, cytokine receptors and other immunoregulatory molecules, the identification of virally-encoded immune modulators, analysis of the biological activities of these molecules, the signal transduction pathways by which they act and investigations of the structural basis of ligand-receptor interactions. A significant effort will be devoted to the study of in vitro and in vivo models of normal and abnormal immune regulation and hematoipoiesis as a means to identify novel immunoregulatory molecules and to characterize their biological activities.

**REFERENCES:**


Immunex Corporation offers a fast-paced, stimulating environment, a competitive salary and an excellent benefits package. We are located in downtown Seattle in full view of Puget Sound and the Olympic Mountains, close to many recreational and cultural activities. For consideration, please send or fax three letters of reference, your curriculum vitae and a brief statement of your research interests (specifying Job #7290230) to:

**IMMUNEX CORPORATION**, Attn: Human Resources, 51 University Street, Seattle, WA 98101, Fax: (206) 623-4572. For information on opportunities at IMMUNEX, call our Job Line: (206) 389-4060.
The National Institute on Drug Abuse (NIDA) invites applications for the position of Director, National Institute on Drug Abuse (NIDA). This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from the ES-1 to ES-6 pay level per annum (currently $92,000 to $115,700). Physicians may be eligible for a Physician’s Comparability Allowance up to $20,000 per annum. A one year probationary period must be served by the individual selected if not currently in the career Senior Executive Service.

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

Applicants must possess a strong background and accomplishments in the development, management and direction of addiction research programs.

Applicants are required to submit an Application for Federal Employment (SF-171), available at all Federal Job Information Centers and Federal Personnel Offices. Resumes are not acceptable applications. Additionally, applicants may send a curriculum vitae and a bibliography. The vacancy announcement with mandatory/desirable qualifications requirements can be obtained by calling (301) 443-9593. Application material must be sent to the following address:

National Institute on Drug Abuse
Personnel Management Branch
Attn: Ms. Marge Hutton, Parklawn Building, Room 10-21
5600 Fishers Lane, Rockville, Maryland 20857

Fixed material cannot be accepted. Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the PHS Commissioned Corps may submit a resume to the above address.

APPLICATIONS MUST BE RECEIVED NO LATER THAN MAY 17, 1993.

Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, sex, national origin, political affiliation, marital status, handicapping condition, age, or membership or nonmembership in an employee organization.

NIDA is an Equal Opportunity Employer.
POSTDOCTORAL FELLOW
Applications are invited for a postdoctoral position to study the regulation of gene expression by steroid hormones in reproductive tissues. Applicants should have training in a role for a MyD2-related gene and/or a strong interest in studying the molecular basis of endocrine regulation. Please send curriculum vitae and the names and addresses of three references to: Dr. Indrani Basu, The Population Council, Center for Biomedical Research, 1230 York Avenue, New York, NY 10021.

POSTDOCTORAL FELLOWSHIP IN REINAL CELL PHYSIOLOGY
(biochemistry/signaling/biophysics/molecular biology)
In excellent multi-investigator program related to hyperpertension. Training opportunities exist in the areas of epithelial cell culture, immortalization of primary cells, electrophysiology, epithelial transport, imaging, various aspects of signaling, cell fractionation and receptor analysis. Stipend/salary range $20,000 to $35,000, depending on experience. Requirements: evidence of relevant research experience and ability to work independently as documented by publications in high-impact journals. American citizenship or permanent residency. Send curriculum vitae to: Ulrich Hopfer, M.D., Ph.D., Department of Biochemistry, Case Western Reserve University School of Medicine, Cleveland, OH 44106-4970; FAX: 216-368-5586; Email: uch@po.CWRU.edu. CWRU is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP AT MARITAL SCHOOL BRIGHAM AND WOMEN'S HOSPITAL
Position available immediately to investigate the molecular and genetic basis of mesoderma1 pattern formation in the Drosophila embryo. Previous efforts have identified a role for a gene related to the neurogenic genes in this developmental process (Genes and Dev. 4, 2086-2097, 1990; Cell 67, 511-523, 1991). Current studies are focused on the role of somatic muscle-specific gene expression as well as screens for novel myogenic genes. A Ph.D. and strong background in Drosophila genetics/molecular biology are essential requirements of this position. Please send curriculum vitae, bibliography and three letters of reference to: Dr. Alan M. Michelson, Department of Medicine, Division of Genetics, Brigham and Women's Hospital, 20 Shattuck Street, Boston, MA 02115. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP
Position available to participate in studies of the role of polypeptide growth factors in brain aging, injury, and stroke. Familiarity with molecular biology, histology, and neuronal tissue culture techniques is desirable. Contact: Dr. Seth Finklestein, CNS Growth Factor Research Laboratory, Massachusetts General Hospital, 149 13th Street, Charlestown, MA 02129. Telephone: (617) 726-8599, FAX: (617) 726-5677.

POSTDOCTORAL FELLOWSHIP U.C.S.F. BREAST CANCER RESEARCH
A POSTDOCTORAL RESEARCH POSITION is available for a Ph.D. or M.D. with molecular biology experience to study transcription factors involved in human breast cancer. Please submit curriculum vitae, a summary of your research accomplishments and interests, and the names and telephone numbers of three references to: Christopher C. Benz, M.D., Cancer Research Institute, University of California San Francisco, 44143-0128. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP IN MOLECULAR BIOLOGY/TRANSGENIC RESEARCH:
A postdoctoral position is available in the Laboratory of Molecular Neurobiology, Cornell University Medical College, New York, New York. Major interests are in the area of transgenic mouse projects. Send curriculum vitae to: Maureen McCray, 1354 Madison Avenue, Box 19, The Rockefeller University, New York, New York 10021. Contact: Thomas D. Petryka, Ph.D., 1455 Madison Avenue, Box 19, The Rockefeller University, New York, New York 10021.

POSTDOCTORAL POSITION available for studies on DNA repair mediated resistance to anticancer alkylating agents. NIH-supported projects focus on the role of DNA adduct formation and on the function and regulation of human genes for DNA repair. Applicants should have a recent Ph.D. in biochemistry, molecular biology or related areas. Salary $22,000 to $26,000. Contact: Dr. Tom Brent, Department of Molecular Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE:
The Chemistry Department has a position available for a recent Ph.D. trained in synthetic organic chemistry to join the Cyclotron-PET Program at Brookhaven National Laboratory. The successful candidate will participate in the program at the Chemistry Department laboratory incorporating the short-lived positron emitters, carbon-11 and fluorine-18 (half-life: 20.4 and 110 minutes, respectively). Experience in high performance purification and analytical methods. New radioactive tracers resulting from this work will be applied to problems in the neurosciences, with specific interest in substance abuse and degenerative disease, schizophrenia and drug mechanisms. Contact: Dr. Joanna S. Fowler, Chemistry Department, Building 555, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer, M/F/D/V.

POSTDOCTORAL RESEARCH POSITION in the Laboratory of Reproductive and Developmental Toxicology at U.C.S.F. The laboratory is interested in investigating estrogen action and responsiveness in bone/skeletal issues and to participate in ongoing studies of the effects of estrogen exposure on a mouse and skeleton. Applicant must possess an M.D. or equivalent degree and extensive knowledge in the area of bone cell biology specifically involving regulation of cell responsiveness. Applicants will be expected to conduct independent research including investigation of estrogen responsive genes in bone, alteration/modification and functional activity of the estrogen receptor complex or gene expression of protein kinase C during in bone cells and investigations of the developmental influences of exposure to estrogenic compounds on bone density and skeletal changes. Applicant must show evidence of clinical endocrine training at least three years of experience, with a strong record of research productivity and proven ability to set up and carry out independent and collaborative research in all of the above areas. Salary range is $28,000 to $42,000, commensurate with experience. For additional information, contact: Dr. Kenney, S. R. each at 919-541-3512. For prompt consideration, send cover letter, curriculum vitae and three letters of reference by April 30, 1993, to: Mr. Bruce Wiggins, NIEHS Personnel Office (HEV69), P.O. Box 1239, Research Triangle Park, NC 27709. An Equal Opportunity Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOWSHIP in the Department of Endocrinology:
This position is focused on a hormone-moment and synthesis of complement receptors in human myeloid cells. Experience with immunoassays, monoclonal antibodics, and/or mammalian cell tissue culture required. Salary/benefits dependent on qualifications. Send curriculum vitae and references to: Melvin Berger, M.D., Ph.D. Division of Immunology Department of Pediatrics Case Western Reserve University 3400's West 25th Street Cleveland, OH 44106
Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.


STAFF RESEARCH ASSOCIATE to conduct research on global climate change using a computer model of the atmosphere-ocean system. Design and conduct simulations of climate with the model and perform detailed analysis of the results. Optimize and redesign the computer code so that the model can be performed on state-of-the-art supercomputers which can be at great distance from each other and connected by networks. Requirements: Ph.D. in Atmospheric Sciences. Research experience in the area of large-scale atmosphere-ocean interaction and climate variability. Experience and demonstrated achievements in designing and building interactive computer programs. Job location/interview: Los Angeles. $34,296 per year. Send this ad and resume to: job #PET3693, P.O. Box 169086, Sacramento, CA 95826-9065, no later than May 8, 1993.

Here at Chiron, we are on the leading edge of biotechnology research and development, pursuing an array of therapeutic and diagnostic tools to advance potential cures for AIDS, Cancer, Herpes, Hepatitis and Diabetic retinopathy.

RESEARCH ASSOCIATE/INSTUMENTATION SPECIALIST
Take on new challenges as you provide analytical service and assist in research involving the structural characterization of proteins and peptides, nucleotides and a variety of synthetic organic molecules. HPLC and mass spectrometry (electrospray and laser desorption) are performed at a high performance basis.
To qualify, you need a B.S./M.S. in Chemistry/Biochemistry and 3 years of experience in an analytical laboratory. Demonstrated capability operating, maintaining, and troubleshooting lab equipment (e.g., HPLC, protein sequencer, mass spectrometer) is necessary. Experience with mass spectrometry or HPLC of proteins preferred. Excellent written/verbal communication skills are essential. Computer experience is helpful. Experience and expertise with personal computers are essential.
If you have the dedication, spirit and flexibility to rise to our many challenges, send your resume to: Chiron Corporation Human Resources, 300 P.O. Box 555, 4560 Horton Street, Emeryville, CA 94608-2916. We are an Equal Opportunity Employer.

TECHNICAL SUPPORT SCIENTIST
Ventana Medical Systems has an immediate opening for an experienced technical support scientist. Candidates should have a minimum of five to ten years of experience in in vitro diagnostics and an advanced degree or equivalent. In this position the individual will be responsible for establishing our technical support group which will be responsible for transferring new products from R&D to manufacturing and for troubleshooting products on the market. Ventana Medical Systems is an entrepreneurial company leading the development of automated immunohistochemistry and in situ hybridization. Interested candidates should send their resumes to: Personnel Director Chemistry Section Ventana Medical Systems 3865 North Business Center Drive Tucson, AZ 85705

SCIENTIST AND REGULATORY AFFAIRS
Opportunity for scientists with demonstrated success in any of the following: transdermal drug delivery, electrotransport, peptide and parenteral delivery, adhesives and polymers, problems of transdermal medication, clinical trials, electrophysiology and regulatory affairs. Salary commensurate with experience and knowledge. Send curriculum vitae, samples and published papers to: President, D.D.S., P.O. Box 276, Stony Brook, NY 11797-8027.
GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

The Glaxo Institute in Geneva is an international centre of excellence for the discovery of novel molecular mechanisms implicated in serious diseases. In particular, research is focused on the CNS, allergies and inflammatory conditions. We have an outstanding opportunity for a

POST-DOCTORAL SCIENTIST

to join a team studying signal transduction pathways in yeast.

The ideal candidate will have a PhD and a proven track record in yeast molecular biology with a thorough knowledge of signal transduction mechanisms in yeast or mammalian cells. Informal enquiries may be made to Dr. Kinsey Maundrell (+41 22 706 96 00).

The Institute provides a dynamic international research environment and actively encourages collaborative projects with academic groups as well as the publication and presentation of results at scientific meetings.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live. The Institute for Molecular Biology is part of the Glaxo group, one of the world’s most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

If you are interested in this position, please send your curriculum vitae with a list of publications and the names of three referees to: Rita Glor, Personnel Manager, Glaxo Institute for Molecular Biology, 14, chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland.

NATIONAL INSTITUTE OF MENTAL HEALTH
NATIONAL INSTITUTES OF HEALTH
PUBLIC HEALTH SERVICE

DIRECTOR, DIVISION OF INTRAMURAL RESEARCH PROGRAMS

The National Institute of Mental Health invites nominations and applications for the position of Director, Division of Intramural Research Programs (DIRP), located in Bethesda, Maryland. This program is the largest scientific research center in the world focused on mental health, mental illness, and behavioral and brain research. Its diverse research programs are conducted by approximately 950 employees in 24 different laboratories and clinical branches.

Responsibilities of the Director, DIRP, include the overall management of all scientific, fiscal, and personnel resources. The Director is involved in planning and directing basic and clinical research, supervising the training of scientists, implementing national science policy, and administering and evaluating research programs.

Minimum qualification requirements include a degree of Doctor of Medicine, Doctor of Philosophy, Doctor of Osteopathy, or a bachelor’s or higher degree in an academic field related to the health sciences, and progressively responsible experience in developing, administering, and evaluating biomedical research programs. Applicants must further meet established mandatory professional/technical and managerial/executive requirements and additional desirable qualifications.

The person selected for the position will receive a career appointment to the Senior Executive Service (SES) with an annual salary range of $92,900 to $107,300 (plus up to $20,000 per annum for physicians only). SES members are also eligible for performance awards of 5 to 20 percent of base salary. Alternatively, this position may be filled through an appointment in the Public Health Service Commissioned Corps.

Further information about the position and qualification requirements may be obtained by contacting Ms. Pat Middleton at (301) 443-9094. An Application for Federal Employment, SF 171, accompanied by a current curriculum vitae and bibliography, should be submitted to Ms. Middleton at the Personnel Management Branch, National Institute of Mental Health, Parklawn Building, Room 15C 12, 5600 Fishers Lane, Rockville, Maryland 20857. Completed applications (including the SF 171) must be postmarked by the closing date of the vacancy announcement, June 1, 1993.

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.

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NeXagen, Inc., a Boulder-based biotechnology company, is dedicated to drug development through the implementation of proprietary, novel repertoire chemistry. NeXagen scientists are in pursuit of oligonucleotide ligands for use as pharmaceutical agents for the treatment of several major diseases. In addition to their own in-house research programs, NeXagen scientists are involved in an interactive research program with many scientists at the University of Colorado, Boulder campus.

Director of Production

We seek a PhD to direct the production of oligonucleotide-based pharmaceuticals. The successful candidate will have a broad knowledge of synthetic chemistry and nucleotide chemistry, experience in large-scale, GMP preparation of reagents, and creative ideas about interfacing with a strong group of research chemists, molecular biologists, and medical doctors in order to facilitate drug development. Management experience, preferably with a pharmaceutical background, is essential. Resumes should be sent to:

Director of Chemistry
NeXagen, Inc.
2880 Wilderness Place
Suite 300
Boulder, CO 80301

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NEXAGEN
**Senior Retrovirologist**

The Infectious Diseases Department of the PARKE-DAVIS Pharmaceutical Research Division seeks an experienced PhD Virologist to lead our established HIV program. The PARKE-DAVIS anti-HIV program covers diverse areas such as inhibitors of viral enzymes, inhibition of virus activation from latency, and gene therapy approaches to AIDS. The program involves several major collaborations with academic and government centers of excellence on HIV research.

The successful candidate will have a minimum of 5 years of post-doctoral experience and hands-on familiarity with retroviruses (preferably HIV). A demonstrated ability for evaluating investigational antiviral agents in cell based systems is highly desirable, as is the ability to lead a research group and to interact with existing antiviral research at PARKE-DAVIS. Competence in molecular biology and/or biochemistry of retroviruses is highly desirable, and a record of productivity, indicated by a substantial publication record, is essential.

The successful candidate will develop cell based antiviral testing strategies which complement in vitro screening, and will initiate and participate in external research collaborations. Development of additional antiviral approaches to drug discovery is an essential part of this position.

Interested individuals should send their CV and list of references to Box JDM-93042, Human Resources Department, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"

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**Arctic Research Consortium of the United States, Inc.**

The Arctic Research Consortium of the United States (ARCUS) is seeking a highly qualified individual to serve as its President and Chief Executive Officer. ARCUS is a national non-profit corporation, consisting of member institutions involved in arctic research and education. ARCUS provides leadership in and promotion and facilitation of these activities.

The President provides leadership for the Consortium, is responsible to its Board of Directors, manages the affairs of ARCUS, and supervises its staff. The President recommends and implements the programs and policies established by the Board of Directors; develops and administers ARCUS programs and activities; represents the corporation in contract, grant, and financial negotiations with government and private funding and banking entities; and interacts with the arctic research community to assess and advance its needs and priorities. The President represents ARCUS interests and concerns to other groups and organizations to ensure that quality programs and services exist to meet the needs of the arctic research and education community.

Applicants are required to have a Ph.D. or its equivalent. Applicants should also have at least five years of experience in the design and conduct of research in the Arctic and at least five years of experience in the design and management of interdisciplinary research. Demonstrated excellence in the ability to communicate and function effectively with diverse constituencies within the scientific and education community, the policy making community, and the general public is highly desirable. Successful experience in the preparation, negotiation, and management of grants and contracts, as well as in direct responsibility for fiscal management, is a must.

Salary will be negotiated. ARCUS offers a competitive benefits package. ARCUS is currently based in Fairbanks, Alaska.

Send applications, including curriculum vitae and four references, to receipt by 15 May 1993, to:

President Search Committee
Dr. Mark F. Meier, Chair
ARCUS, Inc.
600 University Avenue, Suite B
Fairbanks, AK 99709

ARCUS is an Equal Opportunity, Affirmative Action Employer and invites and encourages applications and nominations from women and under-represented minorities.

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Search Reopened
Director, Center for Laboratory Animal Care
University of Connecticut Health Center

The University of Connecticut Health Center invites applications and nominations for the position of Director of its Center for Laboratory Animal Care (CLAC). We seek an individual with experience in laboratory animal care, and in the management/administration of a university (or equivalent) animal care facility. A doctorate in veterinary medicine is a requirement, board certification/eligibility by AALAC is desirable. This position reports to the Assistant Vice President for Research. CLAC is fully accredited by AALAC, is organizationally separate from University animal care facilities at Storrs, and is organized as a multi-story, 24,000 ft² facility, adjacent to the research laboratories of the Health Center. The Health Center is home to the University’s Schools of Medicine and Dental Medicine. The Director also serves as consulting veterinarian for the animal care program at the Department of Veterans Affairs Medical Center, Newington, CT. An in-residence (non-tenure track) faculty appointment in an appropriate department of the University is a possibility.

Interested candidates should send a letter of application, curriculum vitae, and a list of five references to:

Dr. Klaus Nuki, Chairman, Search Committee for Director of CLAC, c/o Office of the Assistant Vice President for Research, The University of Connecticut Health Center, ASB-3 MC5355, Farmington, CT 06030.

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VIROLOGIST

NATIONAL INSTITUTES OF HEALTH. Three post-doctoral positions are available in the Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases involves: (1) the development and characterization of live attenuated influenza A and respiratory syncytial virus (RSV) vaccines; (2) the use of new "rescue" systems for both viruses to examine basic questions of viral genetics, especially for RSV (see PNAS 88, 9663); and (3) the merging of these methods to engineer viruses for evaluation as live virus vaccines and to use in experimental studies of molecular biology, pathogenesis and immunology. These positions offer a unique opportunity to work on investigations that range from basic molecular biology to applied vaccination. Applications are invited from individuals who have a doctoral degree in Medicine, Microbiology, Virology, Biochemistry, Chemistry, Immunology, or Pathobiology or related disciplines. Salary will be commensurate with experience.

Qualified and interested candidates should send curriculum vitae and names and address of three (3) references to:

Brian R. Murphy, M.D., NIH, Building 7, Room 106, 9000 Rockville Pike, Bethesda, MD 20892
FAX (301) 496-8312.

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POSITIONS OPEN

POSTDOCTORAL TRAINING IN NEUROSCIENCE

Postdoctoral fellowships are available for training in neuroscience-oriented approaches to drug abuse research through a training program funded by the National Institute of Drug Abuse. Research emphases include design of novel ligands for opioid receptors, molecular biology of opioid and catecholamine receptors, signal transduction of opioid receptors, and spinal mechanisms of pain and analgesia. Trainees include: D.R. Brown, R. Elde, G.J. Giester, K. Har- greaves, A.A. Larson, P.-Y. Law, H. Loh, P. Portoghesi, V.S. Seybold, B. Sharp, S. Thorell, and G. Wilcox. Eligible candidates must have completed a Ph.D. degree or equivalent by the time of appointment and must hold U.S. citizenship or permanent resident status. Address applications (including vitae plus statement of training goals) or inquiries to: Virginia S. Seybold, Ph.D., Department of Cell Biology and Neuroanatomy, University of Minnesota, 4-135 Jackson Hall, 321 Church Street, S.E., Minneapolis, MN 55455. Email: ginger@med.umn.edu. The University of Minnesota is an Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE

Postdoctoral position available immediately to study the molecular biology of Hepatitis-B virus infections, using an avian model system. Experience in molecular biology and tissue culture desirable. Excellent opportunity exists in a highly interactive atmosphere. The Center. To apply please send curriculum vitae and references to: Dr. John Pugh, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE position (100%) available at a new NIH-funded electrophysiology laboratory to study ion channels in mammalian skeletal muscles. Individual will utilize whole cell patch-clamp techniques to study calcium currents, charge-movement, and contractile proteins in striated muscle. Ph.D. in Biological Science required. Previous experience in electrophysiology, muscle physiology, and/or computer applications is recommended. Position to start July 1, 1993, or as soon as possible thereafter; application deadline is June 15, 1993. Position is funded for up to 5 years. Send letter of application, curriculum vitae and names of three references to: Esther M. Gallant, Veterinary Pathobiology, College of Veterinary Medicine, 477A Muller Hall, Box 7001, University of Minnesota, St. Paul, MN 55108. THE UNIVERSITY OF MINNESOTA IS AN EQUAL OPPORTUNITY EDUCATOR AND EMPLOYER.

RESEARCH ASSOCIATE

needed by southwest Ohio University doing research to design and perform studies in electrophysiology. Design and test neuropharmacological effects on cells in culture of the solitary tract. Conduct single unit recordings in vivo, slice preparation of extra-, intracellular and patch-clamp recordings; fixation and staining of slices. Responsible for data analysis using p-Clamp software for written and oral presentation of results in publication and scientific meetings. Research uses intracellular labeling and biocytin tracing. Must have an M.S. degree in Basic Medical Science. Foreign degree acceptable if equivalent to recognized authority. Must have 1 year of experience described above or Biologist have 1 year of research in single unit recording from NT5 cells, intracellular and patch clump recording of potassium in vitro slices, intracellular labeling and biocytin tracing. Minimum of 1 publication in the field of neuroscience. Must have proof of legal authority to work permanently in the United States. Please send curriculum vitae, plus statement of research experience by 8:00 a.m. to 5:00 p.m., Monday to Friday; $22,700 per year. Send resumes in duplicate (no codes) to: L. Ellison, JO# 1230907, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

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POSITIONS OPEN

STAFF ASSOCIATE for Molecular Neurogenetics Laboratory, investigating YAC's and cosmids that correspond to known genetic markers. Applicant must have a minimum Master's degree in related field with four years of professional work experience. In addition, expertise in BIONE robot, pulse field gel electrophoresis and polymerase chain reaction equipment required. Additional training and the names of reference to: Stanley Fahn, M.D., Movement Disorder Division, Department of Neurology, 710 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

BIOLOGICAL CONTROL OF INSECTS ILLINOIS NATURAL HISTORY SURVEY

The Center for Economic Entomology at the Illinois Natural History Survey invites applications for an ASSISTANT PROFESSIONAL SCIENTIST position specializing in the biological control of insects using parasitoids and predators. Candidates must possess a doctoral degree in entomology or another appropriate discipline and are expected to have a broad background in entomology and to be well versed in the theory and practice of biological control. To obtain more detailed information about this position contact: Ms. Dawn Schulze, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820; Telephone: (217) 344-7790. For full consideration, applications should be received by May 15, 1993. The Illinois Natural History Survey is an Equal Opportunity and an Americans with Disabilities Employer without regard to race, religion, color, national origin, sex, or disabled conditions.

TECHNICAL STAFF MEMBER sought by large molecular biology department to take responsibility for the implementation, interpretation, and educational aspects of governmental regulatory matters as they relate to radioactive, chemical, medical, and biohazardous materials, and to administer an extensive emergency, fire, and safety program. Candidates must have the ability to manage a phosphorous 32 storage-to-decay facility, oversee a chemical hygiene plan, be familiar with the blood-borne pathogens and laboratory safety standards, and be cognizant of the Nuclear Regulatory Commission rules and regulations. Of primary importance will be the ability of the technician to interact with laboratory personnel, to supervise the equipment, and to function as liaison with the university's Office of Health and Safety. A degree in molecular biology, biology, or chemistry, along with demonstrated responsibility for regulatory matters in a research laboratory environment, are a must. Rank of Professional Technical Staff and salary dependent upon qualifications. Send application to: Alice Coco, Department of Molecular Biology, Lewis Thomas Laboratory, Princeton University, Princeton, NJ 08544. Princeton University is an Equal Opportunity/Affirmative Action Employer.

CELL AND MOLECULAR BIOLOGISTS Staff Scientist and Postdoctoral Level

Molecular Geriatrics Corporation (MGC) has several positions available for postdoctoral and staff scientist levels for individuals interested in pursuing research projects related to the cellular and molecular mechanisms of neurodegeneration with applications in drug discovery efforts. Expertise is sought in cell and molecular biological methodologies such as immunofluorescence, computer-assisted video microscopy, immunocytochemistry, cellular adhesion, FCR, Northern and Southern blot analyses, cDNA sequencing, and site-directed mutagenesis. Preference will be given to candidates with good publication records demonstrating continuous scientific accomplishment. Molecular Geriatrics Corporation is located in Lake Bluff, Illinois, a northern suburb of Chicago on the shores of Lake Michigan. Send curriculum vitae and the names, addresses and telephone numbers of three references to: Lester I. Binder, Ph.D., Director Cellular, Molecular and Natural Biology, Molecular Geriatrics Corporation, 42 Sherwood Terrace, Suite 4 & 5, Lake Bluff, IL 60044. MGC is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

GENETIC EPIDEMIOLOGIST

For cancer genetics research program. Must be able to take a leadership role in supervision of a registry of high risk patients, and to facilitate multi-institutional collaboration. Candidates should have postdoctoral experience in both epidemiology and human genetics. The position carries an appointment at Cornell University Medical College. Working conditions and stipend are attractive. Send resume to: Dr. D. G. Miller, Strong Cancer Prevention Center, 428 East 72nd Street, New York, NY 10021.

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Requirements for Submission: Abstracts will not be considered unless the presenter is a paid registrant of Science Innovation '93. (Fax the coupon below for registration forms. Registration fee will be refunded in full if abstract is rejected and presenter cancels registration by July 23, 1993.) Only one abstract per presenter may be submitted.

Format of Abstracts: Abstracts not following the format required will be returned. The text of the abstract must fit within a 5" square area in the center of an 8.5" x 11" sheet of white paper. Since the text will be electronically scanned, use a letter-quality (not dot matrix) printer. Use black ink for all hand lettering. Do not double space text, nor draw a box around the abstract. At least two lines above the text, designate the name of the concurrent session to which the abstract relates and indicate whether you wish your abstract to be considered for oral presentation. At least two lines below the text, list the presenter's name, address, phone, and fax numbers.

Acceptance: Applicants will be notified by July 1, 1993 regarding the status of their abstracts. If your abstract is accepted, you will be assigned to a poster session and provided with a 4' x 4' bulletin board on which to display graphics and text. Posters will be displayed in the Exhibit Hall during the entire meeting, and presenters will be assigned two hours at their posters. Accepted abstracts will be published in the program book, which will be distributed to all registrants. Abstracts received after June 15, 1993 will not be published in the program book but may be accepted for display.

Mailing Instructions: Faxes are unacceptable. Mail the abstract flat (do not fold or bend). Send original plus four photocopies to: Science Innovation '93 Contributed Papers, AAAS Meetings, 1333 H St, NW, Washington, DC 20005.

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