ASSISTANT PROFESSOR AGRICULTURAL ENGINEERING DEPARTMENT, The University of Maryland (revised June 1, 1992). A tenure-track 10-month faculty position with 100% teaching in the area of ecological and biological engineering including water quality/water chemistry and wetlands is available at the University of Maryland. Appointee is expected to teach undergraduate courses in Agronomic, Biological Engineering and Natural Resources Management Curriculum and develop research projects in the areas of ecological and biological systems. A Ph.D. in Biological Engineering, Ecology, or closely related fields with background on ecological and biological systems emphasizing wetlands and water quality/water chemistry is required. Application deadline is August 15, 1992. Applicants should send a letter of application, résumé, academic transcripts, and at least three letters of reference to: Dr. Arthur Simrhomandi (chair of the search committee), Agricultural Engineering Department, The University of Maryland, College Park, MD 20742. The University of Maryland is an Equal Employment Opportunity/Affirmative Action Employer.

BIOLOGY: Anticipated vacancy; Fall 1992; contingent upon funding; ASSISTANT PROFESSOR level; temporary, two year position, renewable. This is a tenure-track position depending on the qualifications of the successful candidate. Successful candidate will teach introductory biology courses and conduct research in selected upper level coursework. A Ph.D. is strongly desired; however, persons at A.B.D. will meet the minimum requirement. Salary will be dependent upon qualifications and experience. Women and members of minority groups are strongly urged to apply. Review of application materials will begin immediately. Send letter of application, résumé, the names and telephone numbers of three references, and transcript for most recent degree to: DR. TIMOTHY C. MURPHY, DIRECTOR OF HUMAN RESOURCES, PERSONNEL OFFICE, WESTFIELD STATE COLLEGE, WESTFIELD, MA 01086. An Affirmative Action/Equal Opportunity Employer.

ORGANIC BIOGEOCHEMISTRY ASSISTANT PROFESSOR, TENURE-TRACK. Expertise sought in the ecology of microorganisms with emphasis on chemical mechanisms regulating the use and dynamics of natural dissolved organic compounds, energy flow, and nutrient cycling in fresh waters. Candidates must have a Ph.D., demonstrated scholarly accomplishment, and a strong commitment to a growing research and graduate program in ecology. Teaching duties include interdisciplinary courses in specialty. Submit curriculum vitae and three letters of reference to: Dr. Robert G. Wetzelaer, Search Committee Chairman, Department of Biological Sciences, The University of Alabama (UA), Box 870544, Tuscaloosa, AL 35487-0344 by 30 September 1992. The UA is an Equal Opportunity/Affirmative Action Employer and meets the affirmative action requirement of the Vietnam Era Veterans Readjustment Assistance Act. An Equal Opportunity Affirmative Action Employer.

POSSESSIONS OPEN

ENVIRONMENTAL TOXICOLOGIST Tulane School of Public Health and Tropical Medicine Department of Environmental Health Sciences is seeking an environmental toxicologist with demonstrated abilities in quantitative risk assessment and regulatory toxicology for a tenure-track ASSISTANT PROFESSOR position. Responsibilities include teaching in the graduate toxicology/risk assessment program, and establishing a funded research program. Send curriculum vitae by 1 September 1992 to: Dr. LuAnn E. White, Department of Environmental Health Sciences, Tulane School of Public Health and Tropical Medicine, 1430 Tulane Avenue, New Orleans, LA 70112. Tulane University is an Affirmative Action/Equal Opportunity Employer.

LANDSCAPE PLANT SCIENCE & MANAGEMENT. The Center for Urban Horticulture, College of Forest Resources, University of Washington seeks applicants for a 12-month, tenure-track ASSISTANT PROFESSORSHIP in Landscape Plant Science and Management to participate in research, teaching, and public service programs. Requirements include Ph.D. in horticulture, urban forestry, botany, or related field, including significant training in whole-plant physiology. Consideration will be given to candidates with extraordinary credentials at the Associate Professor rank. Send letter of application, statement of research interests (including an assessment of critical issues in the field), curriculum vitae, copies of four letters of reference to: Dr. Gordon Bradley, Center for Urban Horticulture, GP-15, University of Washington, Seattle, WA 98195 (telephone: 206-685-0881). Closing date for receipt of applications is December 1992. Affirmative Action/Equal Opportunity Employer.

GENETICIST Tenure track position at the ASSISTANT PROFESSOR rank available beginning January 1993 or August 1993 for a Geneticist. Responsibilities include teaching genetics for major and minor courses, and establishing a research program involving undergraduates. Ph.D. in genetics or Ph.D. in biological field with specialization in genetics required. Candidates must provide evidence of teaching and research effectiveness. Minorities and women are especially encouraged to apply. Send letter of application, curriculum vitae, transcripts, statement of long-term goals, and three (3) letters of recommendation to: Dr. Simon Beeching, Search Committee Chairperson, Biology Department, Slippery Rock University, Slippery Rock, PA 16057. The deadline for receipt of applications is 15 September 1992. Slippery Rock University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT PROFESSOR IN VISIONAL NEUROSCIENCE Available 1 July 1992, in Department of Anatomy, Louisiana State University Medical Center (LSUMC), New Orleans. Applicants should have an interest in neural substrates in the visual system. Training in electrophysiology and/or immunocytochemistry is highly desirable. Salary will be competitive and commensurate with experience. Send curriculum vitae and three names of references to: R. Ranney Mize, Anatomy Department, LSUMC, 1901 Perdido Street, New Orleans, LA 70112-1398. An Equal Opportunity/Affirmative Action Employer.
The National Center for Research Resources (NCRR) is seeking applicants for the position of Director, General Clinical Research Centers (GCRC) Program. This position is located in Bethesda, Maryland, and is a permanent full-time position with a salary range of $90,000 to $112,100 per annum commensurate with qualifications. Physicians may be eligible for Physician Comparability Allowance ranging from $5,000 to $20,000 per year.

The Director, GCRC Program, is responsible for planning, developing, managing and evaluating a multimillion dollar program of grants and contracts which supports high quality clinical research throughout the Nation. The GCRC Program currently supports 74 General Clinical Research Centers with a 600 research bed capacity and an annual budget of approximately $118 million. Applicants for this Senior Executive Service position must have a Doctor of Medicine degree or equivalent. Send applications to:

Ms. Pathenia Wiggins
NCRR
Building 31, Room 3B50
9000 Rockville Pike
Bethesda, MD 20892

For application forms and a copy of the requirements, contact Ms. Wiggins at NCRR on (301) 496-1524. Deadline for applications is July 22, 1992.

Public Health Service Commissioners Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

NIH is an Equal Opportunity Employer

International Conference on Nucleic Acid Medical Applications

January 26-30, 1993
Hyatt Regency, Cancun, Mexico

The International Conference on Nucleic Acid Medical Applications is designed to address all of the major subjects and recent advances in nucleic acid medical applications with emphasis on basic scientific principles and solutions to common problems.

- There will be special emphasis on exchange and interaction among universities, industry, and government through poster presentations and round table discussions.
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Regional Medical Associate

SmithKline Beecham is a $9.2 billion global health care company. Our world famous products and reputation mean unsurpassed opportunities for individuals to combine their scientific and marketing experience as a Regional Medical Associate. Our Regional Medical Associates establish relationships within major medical institutions for the purpose of acting as scientific liaisons and providing in-depth information regarding SmithKline Beecham products. This includes the training of representatives and medical professionals. Travel 50%.

To qualify, you must have a Ph.D. in Pharmacology, Toxicology, Microbiology or related life sciences. Strong Marketing and communications skills and a high degree of initiative are also required. An opportunity currently exists in the Western States, based in Denver with a territory including Utah, Colorado, Nevada, Montana, Idaho, Wyoming, and Nebraska.

We offer one of the best compensation packages - including salary, benefits and travel and training. As a part of our success, send your resume with salary history to: Box 20, Science Classified Advertising, Rm 814, 1333 H Street NW, Washington DC 20005. We are an equal opportunity employer, M/F/H/V.
European Opportunities for Ph.D. Life Scientists and Environmental Scientists

THE OPENINGS
Procter & Gamble has several entry-level openings for life scientists and environmental scientists with Ph.D. or postdoctoral training in the following disciplines:

- Biochemistry
- Toxicology
- Physiology
- Virology
- Food Sciences
- Microbiology
- Pharmacy
- Pharmacology
- Immunology
- Biology
- Ecotoxicology
- Soil Sciences
- Solid Waste Management
- Agricultural Engineering
- Environmental Engineering
- Environmental Chemistry
- Physiology
- Pharmacy
- Pharmacology
- Immunology
- Biology
- Ecotoxicology
- Soil Sciences

THE POSITIONS
The openings for these disciplines are in toxicology, environmental sciences, and regulatory affairs. Job responsibilities include the development and coordination of human and/or environmental safety programs for consumer products, and managing external issues that relate to the safety of consumer products. These positions are in one of the following Research and Development locations of Procter & Gamble in Europe: Brussels (Belgium), Schwalbach (near Frankfurt/Main-Germany), and possibly various locations in Eastern Europe at a later point in time after appropriate training.

*Note: Not all openings are available in all locations.*

THE CANDIDATES
The candidates will have excellent academic records, good communication skills, a high level of initiative and commitment, and must have a good command of English. In addition, fluency in at least one other European language is desirable. The candidates should be free of military service obligations and should be citizens or permanent residents of a European country.

THE COMPANY
Procter & Gamble is a research and development based international corporation with more than $27 billion in worldwide sales in household consumer products and an R&D budget of $800 million. In Europe, the Middle East and North Africa, Procter & Gamble is engaged in the research and development, manufacture and sale of a wide range of household consumer products including detergents, fabric care products, toilet soaps, beauty and health care products, disposable personal hygiene products, household care products and beverages.

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We offer starting positions for a research and development career in a successful, strong and growing company and in an environment which will stimulate personal and professional growth. We have a policy of 'promotion from within' based on contribution and potential. Salaries are highly competitive and coupled with an excellent benefits package which provides for pensions, health care and paid relocation.

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To apply, please send your resume and publication list to:

Dr. N.G. Howell, Manager
Ph.D. Recruiting
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The Procter & Gamble Company
Miami Valley Laboratories, Dept. S
P.O. Box 398707
Cincinnati, Ohio 45239-8707

Allow 6-8 weeks for response. No agency referrals, please.
RESEARCH ASSISTANT PROFESSOR—Conduct theoretical studies in plasma physics, including plasma processes in the Earth’s magnetosphere, utilizing research experience in magnetospheric magnetohydrodynamics and numerical and theoretical investigations in the field. Research involves studies of cyclotron/cyclotron/hydromagnetic frequency ranges, ring current transport and loss, nonlinear phenomena in plasmas (including solitons and rayleigh-turbulence), magnetic particle transport and acceleration (including radiation belt sources, loss processes and acceleration mechanisms). Experiments may include such as TiFIR measurements, 2D hydrodynamic codes and computer modelling (including Cray-1 and VMS VAX). REQUIREMENTS: B.S. in Physics, college level mathematics courses, 2 years of experience in job offered or as Research Assistant performing duties described above under supervision of senior researcher and with experience described above. Salary: $37,500 per year; 40 hours per week. Job in Hanover, New Hampshire. Send two copies of resume to: Job Order #92-76, P.O. Box 989, Concord, NH 03302-0989. Proof of legal right to work in the United States required.

RESEARCH IMMUNOLOGIST: The Immunology Division of the Pathology and Laboratory Medicine seeks an immunologist for the position of RESEARCH IMMUNOLOGIST. Candidates should possess a Ph.D. and/or M.D. degree, and have demonstrated research experience in molecular immunology. The successful candidate will be expected to generate a vigorous research program, with emphasis on transcriptional regulation. A strong background and experience in transgenic techniques are essential. Interested individuals should send their curriculum vitae, a summary of research interests, and the names and addresses of three references to: Mark I. Greene, M.D., Ph.D., F.R.C.P., Department of Pathology, University of Pennsylvania School of Medicine, 252 John Morgan Bldg., Philadelphia, PA 19104. University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

THE UNIVERSITY OF CALIFORNIA, SAN FRANCISCO (UCSF), ADJUNCT ASSISTANT OR ASSOCIATE PROFESSOR, OR RESEARCH SERIES. The Gallo Center seeks exceptional candidates eligible for a staff scientist position and an adjunct faculty appointment at UCSF. The major research interests of the Center are in signal transduction and gene expression with an emphasis on relevance to alcoholism. This is a securely-funded position to assist the Director in supervising a research group in cellular and molecular biology. Excellent laboratory facilities and substantial research support will be available. A successful applicant will have well-documented research experience and accomplishment. Send curriculum vitae and bibliography, a summary of research accomplishments, copies of relevant publications and arrange to send three to five letters of recommendation to: Ivan Diamond, M.D., Ph.D. Director, Gallo Center University of California Building 1, Room 101 1001 Forester Avenue San Francisco, CA 94110 The University of California is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR: The Department of Microbiology and Immunology of the Texas College of Osteopathic Medicine (TCOM) is seeking applicants for a faculty position at the level of Assistant or Associate Professor. The applicant will be responsible for generating a state of the art research laboratory in metabolic and molecular biology, with an emphasis on research in unique environments. Salary is competitive. Please send curriculum vitae and names of three references by 1 Oct 1992 to: Dr. Rafael Alvarez-Gonzalez, Search Committee Chair, Department of Microbiology and Immunology, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Ft. Worth, TX 76107-2699. TCOM is an Equal Opportunity/Affirmative Action Employer & Educator.

ASSISTANT/ASSOCIATE PROFESSOR POSITIONS available to study molecular and biochemical mechanisms of mammalian cell cycle control and tumor suppression. Please send curriculum vitae and names of three references to: Hal E. Broxmeyer, Ph.D., Scientific Director, Walther Oncology Center, Indiana University School of Medicine, Room 601-975 West Washington Street, Indianapolis, IN 46202-5121. Walther Oncology Center is an Equal Opportunity Employer.

MOLECULAR NEUROBIOLOGIST—The Institute of Psychiatric Research, Department of Psychiatry, Indiana University School of Medicine, seeks a candidate for a tenure-track appointment as an ASSISTANT or ASSOCIATE PROFESSOR of neurobiology. New laboratory and start-up funding available. Send curriculum vitae to: Dr. C. Hendrie, M.B., Ch.B., Albert E. Sterne Professor and Chairman, Department of Psychiatry, IUMC/CGI10, 634 Clinical Drive, Indiana University School of Medicine, Indianapolis, IN 46274-112. The position is an Equal Employment Opportunity/Affirmative Action Employer.

FACULTY POSITION—CANCER RESEARCH NEW YORK UNIVERSITY (NYU) SCHOOL OF MEDICINE: The DEPARTMENT OF PEDIATRICS invites applications (M.D. or Ph.D.) for a position at either the ASSISTANT or ASSOCIATE PROFESSOR level. Applicants must have demonstrated research experience and be expected to carry out independent laboratory research in the area of molecular biology. Candidates should have several years of postdoctoral experience including experience in molecular biology. Candidates will be working with members of the broad-based Cancer Research Program at the new Skirball Biomedical Institute. Please send curriculum vitae and statement of research goals to: Margaret Karpatkin, M.D., Department of Pediatrics, NYU Medical Center, New York, NY 10016. An Affirmative Action/Equal Opportunity Employer.

PROFESSOR AND CHAIR, DEPARTMENT OF BIOLOGICAL CHEMISTRY. The University of California, Irvine (UCI), College of Medicine, seeks outstanding scientist in molecular biology or biochemistry, including, but not limited to, disciplines such as developmental biology, neurobiology, and human genetics. The candidate must be of great distinction, and lead an active research program. Send nominations or applications to: Professor Francisco J. Ayala, Chair of Search Committee, c/o Janet Nash, Room 246 Irvine Hall, College of Medicine, UCI, Irvine, CA 92717. Nominations and applications will be accepted through October 1992. UCI is an Affirmative Action/Equal Opportunity Employer. Nominations of applications from women and minorities are encouraged.

RESEARCH MANAGER IN WETLANDS ECOLOGY The University of Georgia’s Savannah River Ecology Laboratory (SREL) has an immediate opening of a full-time science administration position in the Division of Wetlands Ecology. The Research Manager will be responsible for the daily management of a large multidisciplinary research program, including project coordination and budget allocation, and will participate in report and proposal preparation. The individual will have frequent interaction with SREL and University of Georgia research faculty and staff and with state and federal personnel. Candidates must use U.S. citizens. A Ph.D. degree and training in wetlands ecology or environ mental science is preferred. Candidate must have good communication and cooperation skills. Salary is negotiable. Send curriculum vitae and names of three references to: Dr. Patricia E. Ayars, Head Division of Wetlands Ecology Savannah River Ecology Laboratory Drawer B Aiken, SC 29802 Applications will be accepted until 13 July 1992. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

ADMINISTRATOR for scientific society in Philadelphia to assist with the management Board and committee initiatives. Requires dedicated, detail-oriented person with Bachelor's degree (graduate degree preferred), excellent writing skills, ability to handle multiple projects, and experience in office management. Science background valuable. Send resume, cover letter, salary history, and writing sample to: AJ, P.O. Box 543835. Philadelphia, PA 19105.

CHIEF OF PET RADIOCHEMISTRY The Department of Radiology at the University of Pennsylvania School of Medicine is seeking a faculty member with research interest in PET radiopharmaceuticals. Responsibilities of this faculty member will include drug metabolism and mathematical modeling of receptor mediated concentrations, blood flow tracers, and a variety of metabolic tracers. The successful candidate should have a Ph.D. degree in mathematics, physics, pharmacokinetics or related disciplines and have experience and expertise in trace element spectroscopy, particularly in positron labeled receptor ligands. Salary and benefits are competitive. The faculty position offered will be an Assistant/Associate Professor in the Department of Radiology. Send curriculum vitae and applications to: Dr. Robert Kessler, Director, Center for Functional and Metabolic Imaging, Department of Radiology, University of Pennsylvania, HUP/Radiology Administration 3400 Spruce Street Philadelphia, PA 19104 The University of Pennsylvania is an Affirmative Action/ Equal Opportunity Employer.

DIRECTOR OF DIAGNOSTIC IMMUNOLOGY The Department of Pathology and Laboratory Medicine is seeking a Director of the Diagnostic Immunology Laboratory at Emory University. This is a full service laboratory which conducts assays in protein chemistry, auto-immune and infectious disease serology, tumor markers, and clinical virology. The successful candidate will be expected to work with the medical staff to develop new assays and diagnostic programs to serve a developing and sophisticated patient environment. In addition, he/she will participate in the teaching of pathology residents, fellows and students. Finally, the successful candidate will be expected to participate in ongoing research programs and to develop an independent scholarly program in the area of diagnostic immunology. The minimum requirements are a Ph.D. degree and experience in diagnostic immunology. Supervisor experience in a diagnostic immunology facility is highly desirable. Please send your curriculum vitae plus names of four professional references to: Kenneth W. Sell, M.D., Ph.D., Professor and Chairman, Department of Pathology, Room 703 Woodruff Memorial Building, Emory University, Atlanta, GA 30322. Emory University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH DIRECTOR St. Luke's Hospital seeks a candidate with advanced degree and demonstrated experience in the design, execution and analysis of clinical research. The candidate will develop and direct an Education and Research Institute which will oversee the design, conduct, and publication or presentation of clinical research. An ability to communicate with, assist and encourage physicians with clinical research experience is required. Please send curriculum vitae and bibliography to: Dr. Ed Jones, Medical Affairs, St. Luke's Hospital, 801. Drexel Street, Philadelphia, PA 18105. Telephone: 215-954-4672.
The Bristol-Myers Squibb Pharmaceutical Research Institute is the R&D Division of Bristol-Myers Squibb, a worldwide leader in the discovery and development of innovative pharmaceuticals. We currently have exceptional opportunities available at our Princeton, New Jersey and Wallingford, Connecticut facilities.

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Research Investigator & Postdoctoral Fellow
NMR Spectroscopy

Two positions are available for a Research Investigator and a Postdoctoral Fellow to conduct research in NMR spectroscopy. Specific areas of interest include:

- Characterization or elucidation of structures of biological macromolecules (proteins, DNAs or RNAs) in solution using NMR spectroscopy and tools of computational chemistry.
- Elucidation of conformations of ligands bound to biological macromolecules by NMR techniques.

Candidates should have a Ph.D. in Chemistry, Biochemistry or Physics. Previous experience with a UNIX-run workstaton and knowledge of C programming would be an asset. Candidates for Research Investigator should have post-doctoral NMR experience which includes a demonstrated record of scientific accomplishment. An in-depth understanding of spin physics and strong motivation in applying NMR spectroscopy to solve problems in pharmaceutical research are necessary.

If interested in Princeton openings, please forward your resume to: Bristol-Myers Squibb Pharmaceutical Research Institute, Dept. 330-BM, P.O. Box 4000, Princeton, NJ 08543.

WALLINGFORD, CT OPENINGS

Molecular Pharmacologist
CNS Molecular Neuropharmacology

Research Investigator will be responsible for the cloning and characterization of novel G-protein coupled receptors and/or ion channels. The successful applicant will be part of an expanding group involved in basic and applied research on signal transducing proteins.

A position is available for a qualified candidate who will have a Ph.D. plus 3 years of postdoctoral experience, demonstrated experience in all modern areas of molecular biology, and a proven track record of accomplishments. Strong theoretical training in the pharmacology of neurotransmitter receptors and/or ion channels is desirable. Collaboration and publication of novel findings are encouraged.

If interested in Wallingford openings, please forward your resume to: Bristol-Myers Squibb Pharmaceutical Research Institute, Department 803LB-0420, P.O. Box 5101, Wallingford, CT 06492-7661.

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FACULTY OF PURE AND APPLIED SCIENCE
DEPARTMENT OF BIOLOGY
YORK UNIVERSITY, TORONTO, ONTARIO CANADA

invites applications for
Three positions at the Assistant Professor level to begin 1 July 1993

Applied Ecology: a tenure stream position (subject to budgetary approval) intended to complement present faculty in ecology and population biology. The successful applicant will be expected to establish an independent research programme and to contribute to graduate and undergraduate teaching in applied ecology. Correspondence should be directed to Professor E.G. Loughton, Chair, Applied Ecology Search Committee.

Molecular Biology: a tenure stream position (subject to budgetary approval) intended to complement present faculty in areas such as biochemistry, cell biology, genetics, animal biology, plant biology and evolutionary biology. The successful applicant will be expected to establish an independent research programme and to contribute to graduate and undergraduate teaching in molecular biology. Modern laboratory space, up-to-date infrastructure for research in molecular biology and generous start-up funds are available. The Department has a long term commitment to molecular biology and anticipates advertising another position to be filled in July 1994. Correspondence should be directed to Professor R.E. Pearman, Molecular Biology Search Committee.

Molecular Biology: a candidate in molecular biology to nominate for a Natural Sciences and Engineering Research Council (NSERC) Women's Faculty Award. Nominees should be Canadian citizens or permanent residents within 5 years of receiving their doctorate degrees. Correspondence should be directed to Professor R.E. Pearman, Molecular Biology Search Committee.

Send completed applications, which should include a current CV, three letters of reference, a research proposal and a selection of published works to the appropriate Professor at: Department of Biology, York University, North York, Ontario, Canada M3J 1P3. The closing date for these competitions is 15 August 1992 and the Department's fax number is 416-736-5698.

York University is situated in Metropolitan Toronto, an active centre for scientific and scholarly research which offers a wide range of cultural activities. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. York University is implementing a policy of employment equity, including affirmative action for women faculty.

CHIEF, LABORATORY OF CELL BIOLOGY
DIVISION OF CYTOKINE BIOLOGY
CENTER FOR BIOLOGICS EVALUATION AND RESEARCH
DHHS/PHS/FOOD AND DRUG ADMINISTRATION

The Food and Drug Administration, Center for Biologics Evaluation and Research, Division of Cytokine Biology invites applications for the position of Chief, Laboratory of Cell Biology, located in Bethesda, Maryland (Medical Officer or interdisciplinary position appropriate for Biologist, Chemist, Microbiologist). The Laboratory is responsible for supervising and conducting research related to protein growth factors and special responsibility for wound healing and neurotrophic factors. The Laboratory Chief is responsible for independently originating, developing, conducting and leading a research program related to the biology and chemistry of growth factors and/or the cell biology of issues related to these factors. An extensive background in cellular biology and demonstrated experience in conducting research is required.

Salary range for chemist, microbiologist, and biologist is $54,607 to $70,987 at the GM-14 level and $64,233 to $83,502 at the GM-15 level. Salary range for physician is $63,707 to $80,087 at the GM-14 level and $68,515 to $87,784 at the GM-15 level. Physicians may also be eligible for a Physician's Comparability Allowance up to $20,000 per year. Salary is commensurate with education and experience. The grade of the position depends upon the research qualifications of the candidate as determined by the CBER Peer Review Board. U.S. citizenship is required. FDA is an equal opportunity employer and has a smoke free environment. Advertisement closes August 7, 1992.

For information on where and how to apply, and to obtain appropriate forms, please call Ms. Phillips on (301) 496-5394.

VACCINE RESEARCH AND DEVELOPMENT
UNIVERSAL BIOMEDICAL, INC. (UBI), is a dynamic and growing biopharmaceutical company devoted to the development and manufacture of diagnostic products, vaccines and therapeutics to combat immune disorders and infectious diseases.

UBI is currently expanding its Vaccine Research and Development program to focus on the development of synthetic vaccines for the prevention of AIDS, hepatitis C, HTLV, and other infectious/autoimmune diseases. Opportunities exist in the following areas for Technical Associates, Scientists, Senior Scientists and Directors who have a strong commitment to excellence, and are dedicated to actively participating in goal-oriented, multidisciplinary vaccine research and development programs.

- Molecular Biology: Experience in gene expression, and protein/peptide purification.
- Immunology-Cellular and Humoral: Experience with in vitro assessments of cytotoxic T cells, virus neutralization, and/or mucosal immunity. Background with animal models of viruses is desirable.
- Vaccine Formulation: Experience in adjuvant technology and vaccine delivery vehicles.
- Vaccine Development: Experience in biologics testing, toxicology, process and production of biologics.

Located on Long Island, in close proximity to world-renowned Cold Spring Harbor Laboratory, the State University of New York at Stony Brook, and only 50 miles from Manhattan, UBI offers an active and stimulating scientific environment. An excellent benefits package and competitive salary accompany these positions.

Please send CV with salary requirements to: Human Resources, UBI, 25 Davids Drive, Hauppauge, New York 11788.
Hafslund Nycomed is a publically-listed Norwegian industrial corporation. The major growth area is the pharmaceutical industry, with energy operations as a permanent foundation. Hafslund Nycomed’s objective is to be a world leader in medical imaging and to achieve a strong international position in selected areas of therapeutic drug research and development. Hafslund Nycomed has 3300 employees with operating revenue in 1991 of USD 900 million.

Nycomed Drug Research is the organisation within the Hafslund Nycomed Corporation responsible for innovative therapeutics research. The main fields of research are Immunology/haematology, cardiovascular pharmacology and novel drug delivery systems. Our research facilities are located in Copenhagen, Linz, Munich, Oslo and Vienna and employ some 200 scientists and staff.

Nycomed Drug Research in Oslo is located in a beautiful setting in a Research Park in close contact with surrounding academic institutions and the University Hospital. We are 25 scientists of a staff of 35 investigating haematology/immunology and thrombosis/haemostasis. We have well equipped laboratories including organic/peptide chemistry with NMR; biochemistry, in vitro and in vivo laboratories with an X-ray irradiator and flow cytometer with sorter. The haematology/immunology group consisting of some 20 scientists are presently investigating small peptides/peptidomimetics that regulate the proliferation of early haematopoietic stem cells and function closely with our medicinal chemistry group. Clinically we are aiming toward the discovery of drugs that can protect haematopoietic stem cells from cytotoxic agents such as those used in cancer chemotherapy or that can stimulate the recovery of the haematopoietic system after bone marrow transplantation or cancer chemotherapy. The haematology group is working in close collaboration with a similar group at SmithKline Beecham Pharmaceuticals, Pennsylvania, and leading academic institutions in Europe and USA. We are expanding and need:

DIRECTOR OF RESEARCH

EXPERIMENTAL HAEMATOLOGY

To lead the haematology group, the successful candidate should have a strong scientific background and qualifications as a research manager.

Required qualifications should include Ph.D. or M.D., Ph.D. with extensive knowledge of the different aspects of experimental haematology (stem cell biology and techniques, regulatory mechanisms; in vitro, ex vivo and in vivo models and techniques) proven by an impressive publication record. Detailed, hands-on knowledge of methods used in modern haematology is essential. Insight or experience in clinically relevant animal models and clinical trials with immunomodulators is an advantage.

Applications, including a Curriculum Vitae and three references, should be sent promptly to Ms. Anne Westerboe, Nycomed Bioreg AS, Gaustadalleen 21, N-0371 Oslo. Informal inquiries should be directed to Dr. Steinar J. Engelsen in Linz, telephone +43 732 5919 4366.
Pharmaceutics and Drug Delivery

RESEARCH SCIENTIST

As an innovator and creative leader in the development of recombinant DNA-based human therapeutics based on the principles of cellular and molecular biology, Amgen is turning research into important clinical solutions. Because of the success of such breakthrough products as EPOGEN® (recombinant human Erythropoietin) and NEUPOGEN® (recombinant human G-CSF) we are expanding our research and further strengthening our technical base.

The Pharmaceutics and Drug Delivery Department has an opening for a Scientist to initiate a program for delivery of proteins to the CNS. We require a PhD and preferably 1-2 years post-doctoral experience in the study of drug delivery across the blood brain barrier. Experience with delivery of peptides and proteins is preferred. A background in cellular biology and transport processes would be advantageous.

In addition to exciting, unique challenges, Amgen offers Research Scientists strong support for external collaborations and interactions with peers in the academic community. We offer an excellent compensation and benefits package. For consideration, please send your CV to: Amgen Inc., Staffing Department, CodeS-125, Amgen Center, Thousand Oaks, CA 91320-1789. Amgen is an equal opportunity employer.

Assistant Professor
Neuropathology
Department of Laboratory Medicine & Pathology
University of Minnesota

Faculty position available at rank of assistant professor (tenure track) in neuropathology to begin as early as January 1, 1993. Minimum qualifications are M.D., eligible for licensure in state of Minnesota, board certified/eligible in anatomic pathology and neuropathology. Demonstrated research productivity is necessary with experience in molecular biological methods desirable. Excellent opportunities exist for interaction with University research and graduate programs in Neurosciences, Cell Biology and Pathobiology.

Teaching responsibilities include residents in neuropathology, general pathology, neurology, neurosurgery and medical students. Applicant will be expected to assist in providing neuropathological services to the University Hospital and affiliated hospitals.

Send curriculum vitae, three letters of recommendation and a brief research summary by September 30, 1992 to:

Neuropathology Search Committee
Department of Laboratory Medicine and Pathology
University of Minnesota, Box 198
UMHC
420 Delaware Street SE
Minneapolis, MN 55455

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

National Institutes of Health
MOLECULAR GENETICIST
Research Scientist/Senior Postdoctoral Fellow

The Laboratory of Cellular Development and Oncology, National Institute of Dental Research, seeks an outstanding research scientist or senior postdoctoral fellow position. The Laboratory will give preference to individuals with the potential to develop a program focusing on the molecular aspects of genetic diseases with a craniofacial/oral component. Applicants should have at least 3 years postdoctoral training and research experience in genetics and molecular biology. A substantial record of publication in these areas is required. Starting salary will be commensurate with qualifications and experience. Interested candidates should submit a current vita, several reprints, summary of research interests and names of three references no later than July 31, 1992.

Material should be sent to: Faye M. Harbrant, Personnel Management Specialist, National Institute of Dental Research, National Institutes of Health, Bldg. 31, Rm. 2C23, 9000 Rockville Pike, Bethesda, MD 20892.

NIH is an Equal Opportunity Employer.

POSITIONS OPEN

IUCN PLANT PROGRAMME OFFICER

Full-time position in Species Conservation Unit, at IUCN Headquarters, Switzerland. Responsibilities include: developing and leading Plant Conservation Programme; orienting and authenticating Species Survival Commission Plant Specialist Groups, especially in relation to developing and implementing conservation action plans; developing plant databases among the SIC groups in collaboration with the World Conservation Monitoring Centre; liaising with Botanic Gardens Conservation International; and promoting IUCN work on plant genetic resources and medicinal plants. The successful candidate should have a graduate degree (Ph.D. preferred), experience in plant conservation, fluency in English, and strong writing skills. Job involves some international travel. Applicants should submit their curriculum vitae by 31 July 1992 to: Head of Personnel, IUCN, Avenue du Mont Blac, CH-1196 Gland, Switzerland.

DEPUTY DIRECTOR
TEMPLE UNIVERSITY SCHOOL OF MEDICINE

The Fels Institute for Cancer Research and Molecular Biology and The Department of Biochemistry of the TEMPLE UNIVERSITY SCHOOL OF MEDICINE seek a Deputy Director. Must be a senior investigator with an extensive record of published research in the area of Cancer, Oncology or Molecular Biology of Human Diseases. Responsibilities are to: administer and promote competitive research programs; maintain primary responsibility for obtaining and administering institutional and external support, including our National Cancer Institute CORE and Training Grants; assist the Director in the formulation and execution of Institute policies and budgets; coordinate the management of the Institute’s 7 scientific programs and 12 shared resource facilities; and represent the Director on various University committees and at meetings of Cancer Center Directors at the National Institutes of Health.

Qualifications include the ability to obtain independent peer-reviewed funding in support of their research as demonstrated by a significant record of accomplishment in research and extensive success in writing federal grants and scientific proposals. Must meet qualifications for appointment as a full Professor in the Department of Biochemistry of the Medical School. Please send curriculum vitae and bibliography to: E. Premkumar Reddy, Ph.D., Director, Fels Institute for Cancer Research and Molecular Biology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, Medical Research Building, 3400 North Broad Street, Philadelphia, PA 19140.

Temple University is an Equal Opportunity Employer and strongly encourages applications from women and minorities.

VICE PRESIDENT/DRUG DEVELOPMENT

To formulate policy and direct all aspects of research, operation, finance, compliance with U.S. and international regulatory agencies, manufacture and marketing for drug development activities in the United States. Provides hands-on research management leadership and scientific expertise to drug development projects in areas of cardiovascular, allergy/immunology, gastroenterology, bone metabolism, blood products, cancer, CNS and infectious diseases and determination/analysis of drug substance and dosage forms utilizing applied principles of chemistry (emphasis on stereochemistry and biosynthesis), pharmacodynamics, pharmacokinetics, clinical pharmacology, medicinal chemistry, spectral instrumentation, NMR, MS, IR and UV. Ph.D. in Biochemistry plus 5 years in the job or 5 years of experience as Director of Research and Development/Pharmaceuticals required. Previous experience must include 5 years of hands-on experience providing research, financial, operational, manufacturing and regulatory compliance management of drug development projects in cardiovascular, allergy/immunology, gastroenterology, bone metabolism, blood products, cancer, CNS and infectious diseases and determination/analysis of drug substance and dosage forms utilizing chemistry (emphasis on stereochemistry and biosynthesis), pharmacodynamics, pharmacokinetics, clinical pharmacology, medicinal chemistry, spectral instrumentation, NMR, MS, IR and UV. Forty hours per week; 8:30 a.m. to 5:00 p.m.; Monday to Friday. Salary: $88,055.00 per year. Send resumes to: Judy Owens, H37, Rho Pollock Central Research, 500 Arcola Road, Collegeville, PA 19426. Equal Opportunity Employer.
HEAD AND PROFESSOR OF PLANT PATHOLOGY sought in the Department of Plant Pathology at Auburn University. The Department Head provides leadership and direction in all teaching, research, and extension programs of the department. The Department Head plays a key role in faculty and staff recruitment and professional development, and budgetary matters including allocation and accountability. Candidates for the position must have a Ph.D. in plant pathology or a closely related discipline; an outstanding professional record, including research with a strong publication record in refereed journals; successful history of receiving extramural funding, including competitive grants; commitment to excellence in instructional, extension, and research programs; record of leadership and evidence of administrative capabilities; and a commitment to affirmative action. Closing date for applications is 15 August 1992 (or until position is filled). Applications include curriculum vitae, names of four references, and a statement of administrative philosophy and qualifications to: Dr. Joseph Touchton, Chairman of Search Committee, Department of Agronomy and Soils, 201 Funchess Hall, Auburn University, AL 36849–5412. Auburn University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

THE SCHOOL FOR FIELD STUDIES
IN CONJUNCTION WITH
NORTHEASTERN UNIVERSITY
FIELD DIRECTOR
Center for Marine Resource Studies, Caribbean
Director will lead faculty and 30 undergraduates in summer and semester programs in an interdisciplinary hands-on, field-oriented research program. Will manage all aspects of the site, live on-site in a remote field setting and provide academic leadership for faculty and students. Qualifications: Ph.D. preferred, M.S. minimum, solid administrative, research and field experience. Must have experience in the region and have applied background in the specific focus of the center. Must have extensive experience in marine resource management or marine ecology in the area. TO APPLY: Send letter and curriculum vitae to SCI Search, School for Field Studies, 16 Broadway, Beverly, MA 01915, telephone: 508-927-7777, or FAX: 508-927-5127.

BIOLOGY: Bates College has openings for TWO FACULTY POSITIONS in Biology for the Fall of 1992. The first position is a full year leave replacement in MARINE ECOLOGY. The successful applicant will participate in a team taught introductory Population Ecology course in the Winter and offer advanced electives which might include: Marine Invertebrates, Animal Behavior, Oceanography, courses in animal ecology and/or courses with an environmental focus. The Ph.D. is required. The second position is full time, Fall Semester only, and involves teaching a large introductory level Biology course to majors and non-majors. Content in this course includes: Mendelian genetics, cell division, biological diversity, and evolutionary concepts. The Ph.D. is preferred but not required. Previous College level teaching experience is also preferred for both positions. Both positions begin 31 August 1992. Salary commensurate with degree, rank, and previous experience. Please forward a letter of application by 15 July 1992 accompanied by curriculum vitae, graduate transcripts and three letters of recommendation to: Introductory Biology Search, Department of Biology/Box 403, Lane Hall, Bates College, Lewiston, ME 04240, or Ecology Search, Department of Biology/Box 404, Lane Hall, Bates College, Lewiston, ME 04240. Bates College encourages applications from members of underrepresented groups. Bates College is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR ONCOLOGY/HEMATOLOGY
POSTDOCTORAL POSITIONS. Funding now available for 3-year research fellowships (four) in adjacent Oncology Center laboratories to study either: (a) A signal transduction pathway involving p53 which controls cell cycle responses to DNA damage: Michael Kastan, M.D., Ph.D. (three positions) OR (b) Molecular biology of genes expressed in hematopoietic stem cells, including a new research area: Curt Cavin, M.D. and Donald Small, M.D., Ph.D. Ph.D. and experience in protein biochemistry and molecular biology required. Salary approximately $28,000 per year plus benefits. Provide curriculum vitae and three reference letters: Johns Hopkins Oncology Center 3-109, 600 North Wolfe Street, Baltimore, MD 21205. Telephone: 410-955-8816, FAX: 410-955-8897.

GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

Research at the Glaxo Institute in Geneva is focused on discovering the molecular mechanisms of diseases of the CNS, allergies and inflammatory conditions. We have an outstanding opportunity for a

POSTDOCTORAL FELLOWSHIP IN BIOCHEMISTRY

to study receptor function by protein engineering with unnatural amino acids

The successful applicant will join an interdisciplinary team of biochemists and biologists who are probing receptor function by spectroscopic techniques. Candidates should have experience in protein biochemistry with a strong background in molecular biology and have an interest in developing new technologies for studying protein structure and function.

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. The Glaxo Institute 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.

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.

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 Gloor, Personnel Manager, Glaxo Institute for Molecular Biology, 14 chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland.
SENIOR DIRECTOR

Center for Research in Medical Education

Merck & Co., Inc., a world leader in ethical pharmaceuticals, has established a new position within its Human Health Division to conceive, develop and present innovative systems, programs, and approaches for educating the practicing physician. These programs are intended to establish new standards for postgraduate medical education and provide practicing physicians highly stimulating learning experiences. This is an opportunity for an individual with an M.D., M.D./Ph.D., or Ph.D., with broad experience and national recognition for research in medical education, to achieve additional professional recognition and personal growth by creating programs of premier quality and content while meeting, and even exceeding, the professional needs of the practicing physician. Proven expertise in computer technology is essential.

If you are interested in this unique position, please send your curriculum vitae, including list of publications, to Dr. G.S. Levey, Senior Vice President, Medical & Scientific Affairs, Merck Human Health Division, P.O. Box 2000, Rahway, NJ 07065. EEO/AA/VH Employer.

MERCK
Human Health Division

AMERICA'S MOST ADIMRED CORPORATION

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Senior Research Investigator/ Drug Metabolism

Searle, a leader in pharmaceutical research, development and marketing, has an excellent opportunity for a Senior Research Investigator in the Drug Metabolism Section.

The candidate we select will use his/her skills to design and conduct metabolism and pharmacokinetic studies in animals and man. This position is also responsible for preparing reports that interpret data for internal use as well as for submission to regulatory agencies. As a member of project teams, the Senior Research Investigator will integrate his/her research with that of his/her colleagues in Product Discovery, Clinical and other departments within Research and Development.

The qualified applicant will have a Ph.D. in Pharmacology or related field and 2 to 5 years of experience in drug metabolism/pharmacokinetics.

Investigate the opportunities Searle has for you. Send your resume, in strict confidence, to: Searle, Human Resources, Dept. JS2, 4901 Searle Parkway, Skokie, IL 60077. An equal opportunity employer M/F/D.

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PIONEERING A NEW CLASS OF PHARMACEUTICALS

At Gilead Sciences, we have a novel approach to the discovery of human therapeutics through our pioneering work in nucleotide-based technology. We are developing a broad new class of potential pharmaceutical products—disease-fighting drugs that target cancer, cardiovascular disease, and viral infections. For Scientists, our exciting R&D environment and current drug discovery programs represent the opportunity to make a significant contribution.

SCIENTISTS

DNA SYNTHESIS AND PURIFICATION

In this vital position, you'll be responsible for DNA synthesis and purification research. You must possess a Ph.D. and 0-2 years' experience in organic synthesis, HPLC, gel electrophoresis, and DNA synthesis. This is an excellent opportunity with management potential for those candidates with the appropriate combination of leadership skills and experience.

MEDICINAL CHEMISTRY

As a member of our dynamic team, you must possess a Ph.D. in organic or medicinal chemistry and two years' postdoctoral training with 0-5 years' of relevant experience and demonstrated ability in the design, synthesis and improvement of novel biologically-active agents.

As an emerging force in the pharmaceutical industry, Gilead provides a comprehensive compensation and benefits package, which reflects our leadership and commitment to our science. If you enjoy a team-oriented environment and would like to make an impact in the development of a new class of human therapeutics, please send your CV to: Human Resources, Gilead Sciences, 346 Lakeside Drive, Foster City, CA 94404. An equal opportunity employer.
Public Announcement regarding a New Research and Development Project on High Temperature Carbon Dioxide Separation, Fixation and Utilization Technology

Announced by the New Energy and Industrial Technology Development Organization on June 25, 1992

In order to promote the research of global environmental technology and industrial technologies, the New Energy and Industrial Technology Development Organization (NEDO) would like to inform all interested companies and research organizations regarding the research and development project described below. This new project is being undertaken as part of the Research and Development Program on Industrial Technology for Protection of the Global Environment and The National Research and Development Program of the Ministry of International Trade and Industry of Japan.

Theme of the Research Project
“Research and Development of Environmentally Friendly Technology for the High Temperature Carbon Dioxide Separation, Fixation and Utilization Technology”

Outline of the Research Work to be Entrusted
In order to reduce large-volume discharges of carbon dioxide from large-scale stationary sources into the atmosphere, the research and development work to be entrusted will be directed towards developing separation systems using ceramic membranes, which can isolate carbon dioxide at high temperatures of more than 300°C from waste gas, and developing carbon dioxide fixation and utilization methods for industry use.

Procedures for Application
(1) Qualification Criteria
All companies or research organizations who meet the following qualification criteria may submit an application to participate in the above project:

1. The applicant must have previous research and development experience in the field covered by or related to the project and possess the organizational structure, human resources and research facilities required to carry out the project work.
2. The applicant must be in sound financial condition and have the ability to manage its finances and facilities as necessary to smoothly carry out the project work.
3. The applicant must be able to comply with NEDO’s instructions, if such are necessary, to fully carry out the project work.
4. The applicant must have attended the explanatory meeting held by NEDO as set forth below or been represented at the meeting by a responsible agent or representative who is capable of accurately conveying the contents of the meeting in detail.

(2) Explanatory Meeting
An explanatory meeting will be held on the date shown below in order for NEDO to fully explain the details of the project research and development work to be entrusted and the application documents to be submitted. All companies or research organizations who are interested in submitting an application to participate in the project are required to attend this meeting or to send an agent or representative to attend on their behalf. Japanese will be the only language used during the meeting.

Date: Thursday, July 9, 1992
Time: 14:00 to 15:00
Place: NEDO’s Head Office
Sunshine 60 Building, 30th Floor, Room 30-02
1-1, Higashi-Ikebukuro 3-chome
Toshima-ku, Tokyo 170

(3) Further Information
For further information regarding the research and development work to be entrusted under the above project, please contact NEDO by telefax as follows:

New Energy and Industrial Technology Development Organization
Contract Division, Accounting Department
Sunshine 60 Building, 28th Floor
1-1, Higashi-Ikebukuro 3-chome
Toshima-ku, Tokyo, 170 Japan
Telefax 03-5992-1184
PHARMACOLOGY

Twelve-month position available immediately to teach pharmacology to preclinical students. Responsibilities: (1) parameterize a tree physiological model (TREGRO) for the herbicide thurin- giensis in plants and fungi; (2) establish model for the regulation of sugar alcohols in the plant; (3) develop a novel experimental design for the study of the effects of thurin-giensis on the growth of fungi. Send letter of application, curriculum vitae, and names of three references to: Dr. John Smith, School of Botany, University of Illinois, Urbana, IL 61801.

POSTDOCTORAL ASSOCIATE. Cell biology. Position available immediately to study intercellular communication in cell organelles using modern computer programs such as PCNORM. Additional responsibilities include: (1) parameterize a tree physiological model (TREGRO) for the herbicide thuringiensis in plants and fungi; (2) develop a novel experimental design for the study of the effects of thuringiensis on the growth of fungi. Send letter of application, curriculum vitae, and names of three references to: Dr. John Smith, School of Botany, University of Illinois, Urbana, IL 61801.
Opportunities in Hematology R&D

Miles Inc., Diagnostics Division, a leading developer of automated clinical laboratory instruments, is expanding and has immediate opportunities within its Hematology Research & Development Group for the following professionals:

**SENIOR RESEARCH SCIENTISTS**

Candidates will have primary responsibility for the design, execution and reporting of studies on the development of methods for specific cell identification and counting, for incorporation in automated hematology instruments for use in the routine diagnostics and clinical research on peripheral blood and tissue samples.

PhD in Cell Biology/Cytochemistry or related disciplines required. A minimum of 4 years' industrial or postdoctoral experience methodologically oriented research and/or development with strengths in flow cytometry and cytochemistry preferred.

**RESEARCH SCIENTISTS**

Candidates will develop and utilize flow-cytometric and cytochemical methods in support of studies to develop and commercialize automated cytoanalytical instrumentation. Additional responsibilities will include processing biological tissues and fluids, reagent preparation and qualification; system testing and data analysis.

PhD/MS/BS in Biology, Biochemistry, Biophysics or related areas with 2-6 years' industrial or postdoctoral experience preferred. Demonstrated skills in blood cell and tissue processing, cytochemical and immunocytochemical methods and general chemical/biochemical laboratory methodology necessary.

Miles Inc., Diagnostics Division, provides a professional and stimulating environment, competitive salary and a comprehensive benefits package. Qualified candidates are invited to send CV/resume to: Manager, Human Resources—R&D, Miles Inc., Diagnostics Division, 511 Benedict Avenue, Tarrytown, NY 10591. An Equal Opportunity/Affirmative Action Employer M/F/H/V.

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**Postdoctoral Training**  
**Toxicology and Carcinogenesis**

Positions are available for studies in various aspects of cancer research and toxicology in the Center in Molecular Toxicology through the Departments of Biochemistry, Chemistry, Medicine, and Pharmacology. Areas of investigation relating to toxicology and carcinogenesis are: 1) enzymatic oxidation, 2) oxidative damage, 3) DNA adduct chemistry, 4) mechanisms of mutagenesis, 5) structural and regulatory biology, and 6) analytic method development. Salaries are negotiable.

**Faculty**

- Ian A. Blair
- Raymond F. Burk
- Peter Gettins
- F. Peter Guengerich
- Thomas M. Harris
- Mark M. Jones
- Lawrence J. Marnett
- Michael R. Waterman

Applicants should submit curriculum vitae and three letters of recommendation to Dr. F. Peter Guengerich, Director, Center in Molecular Toxicology, Vanderbilt University, School of Medicine, Nashville, TN 37232-0146

An Affirmative Action/Equal Opportunity Employer

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**EXPERIMENT SUPPORT SCIENTISTS**

This is a unique opportunity to participate in the planning and implementation of life science experiments supported by NASA studying the effects of the space environment on living systems. The Experiment Support Scientist will act as the primary interface between scientific investigators and NASA, ensuring experiment goals are achieved. You will represent the investigator in forums which address scientific issues, prepare official documentation required for the conduct of the experiment, and assist with the implementation of the experiment.

An MS degree and laboratory experience in the life sciences is required. Excellent written and verbal communication skills and organizational ability is required. Ability to work in a multidisciplinary team environment is essential. Primate physiology research background is preferred. Other life sciences disciplines are encouraged to apply. Please forward a curriculum vitae and telephone numbers of two references to: Blythe Asagi, Human Resources, Lockheed Engineering & Sciences Company, P.O. Box 168, Moffett Field, CA 94035-0168. We are an equal opportunity, affirmative action employer.
**Scientist**

**Protein Engineering**

Genentech, Inc., an internationally recognized leader in the field of biotechnology, is seeking a Scientist to conduct independent research involving the mutational analysis of proteins and their functional design. This person will interact with structural biologists and chemists while focusing on the use of structure and function principles to develop new protein, peptide and small molecule pharmaceuticals.

The successful candidate should have a PhD in Biochemistry, Biophysics, Molecular Biology or Chemistry with at least 2 years’ postdoctoral experience. You should also have a background in protein structure and function relationships, molecular biological techniques (mutagenesis/heterologous gene expression) and biochemical/experimental physical methods.

Our progressive company offers an excellent salary and benefits package which includes child care facilities, free health club membership and fully paid medical/dental/vision coverage. For immediate consideration, please send your resume to Genentech, Inc., Human Resources, Dept. YS JW, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment. Women and minorities are encouraged to apply.

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**POSTDOCTORAL FELLOWSHIP**

A 2-year postdoctoral position in electrophysiology is currently available in the Pharmacology Department at ICI Pharmaceuticals Group, for independent and collaborative research on the action of drugs and neuromodulators on neuronal calcium channels. Candidate will be involved in ongoing research using the patch-clamp technique in combination with molecular biology to examine calcium channel regulation in acutely isolated and cultured neurons.

Experience in brain slice techniques and knowledge of whole-cell patch clamp helpful. Familiarity with computer-based data acquisition and analytical techniques desirable.

Interested candidates should submit a curriculum vitae and names/letters of reference to: Dr. J. M. H. French-Mullen, Dept. of Pharmacology, ICI Pharmaceuticals Group, Concord Pike and New Murphy Road, Wilmington, DE 19897.

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**VA HYPERTENSION PROGRAM**

We are recruiting faculty for the newly-created Hypertension Program of the Mount Sinai School of Medicine, New York, N.Y. and the VA Medical Center, Bronx, N.Y. Applicants should be MDs, and BE/BC in Internal Medicine. The advantages are substantial but not essential. We seek individuals with an established record or potential in clinical and/or basic science research, to utilize the excellent facilities at both institutions. There are outstanding opportunities for basic research in a dedicated Research Building on the modern VA Campus, and excellent potential for clinical investigation at both institutions. Academic appointment at Mount Sinai, and good VA benefit packages available.

Send Curriculum Vitae and the names of at least two references by July 31, 1992 to:

Clive Rosendorff, M.D., Ph.D., Director

**DEPARTMENT OF VETERANS AFFAIRS**

**BRONX VA MEDICAL CENTER**

130 W. Kingsbridge Road
Bronx, New York 10468

An Equal Opportunity Employer

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**Medizinisches Institut für Umwelthygiene at Heinrich-Heine University Düsseldorf**

The Medizinisches Institut für Umwelthygiene (MIU) (Medical Institute for Environmental Hygiene) at Heinrich-Heine University Düsseldorf (supporting organization: Society for Promoting Air Hygiene and Silicosis Research) seeks to appoint a

**DIRECTOR (male or female)**

(to succeed Prof. Dr. med. H.-W. Schlipf.)

This institute is a research establishment supported by the Federal Republic of Germany and the Land of North Rheine-Westphalia according to Art. 91 d GG (Blue List Institute). It enjoys a high reputation in Germany and abroad.

The Institute employs a staff of about 280 of which one-quarter are scientists. The impact of environmental factors on human health is researched in 14 departments working in close collaboration (analytic chemistry, biochemistry, biostatistics, electron microscopy, epidemiology, experimental hygiene, immisions measuring technology, immunology, neurotoxicology, psychophysiology, toxicology, environmental pathology, cytology and clinical environmental medicine).

The emphasis of the research is documented by departmental cooperation among the working groups of the Institute: epidemiology, immunology, inhalation toxicology and pneumoconiosis, neuro and behaviour toxicology, toxicology and allergies as well as environmental carcinogenesis.

The successful candidate will be appointed jointly with the Medical Faculty of Heinrich-Heine University Düsseldorf to the Chair of Environmental Medicine (C 4) and given leave of absence in order to head the Institute.

This invitation is addressed to scientists of international standing whose research activities blend with the biomedical environmental research activities of the Institute. Applicants should be university graduates and have held posts as a university lecturer or equivalent. They will have gained experience in directing and managing scientific institutes. The position also requires excellent knowledge of the German language.

The Institute Director will present the work of the Institute to specialist committees and the general public.

Applications including CV, a list of publications and brief summary of scientific work to date should be sent to the following address by August 15, 1992:

**Vorstand der Gesellschaft zur Förderung der Lufthygiene und Silikonforschung e.V.**

**Auff'n Hennekamp 50**

4000 Düsseldorf 1

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**The Salk Institute for Biological Studies**

**Visual Neuroscience Assistant Professor**

The Salk Institute for Biological Studies is seeking applications for a faculty position at the Assistant Professor level in the Vision Research Center. The successful candidate is expected to establish an independent research program employing any variety of experimental techniques to address the neural bases of visual perception and visually-guided behavior. We are particularly interested in individuals working on the cellular basis of visual cortical function and/or the relationship between cortical function and perception.

Qualified candidates should send curriculum vitae, description of research interests, reprints of selected publications, and the names and addresses of three individuals who have been asked to submit letters of recommendation to:

Thomas D. Albright, Director

Vision Center Laboratory

The Salk Institute for Biological Studies

P.O. Box 85800
San Diego, CA 92186

The Salk Institute is an Equal Opportunity Employer
Training And Research Opportunities.

Listed below are a few of the excellent opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

**Anticancer Drug Action**

Kurt W. Kohn, MD, PhD

Senior Staff Fellow (assistant professor equivalent) position is available to study the effect of anticancer drugs on cell cycle regulator elements, including the cyclin-dependent kinase family and related phosphatases. Training and experience required in appropriate areas of molecular/cellular biology, protein chemistry and pharmacology of DNA-reactive anticancer drugs. Laboratory of Molecular Pharmacology (OE-16), NCI, Building 31, Room 5C25.

**Cancer Epidemiology**

Joseph F. Fraumeni, Jr., MD

Opportunities for research in epidemiology include studying the role of occupation, radiation, diet/nutrition, genetics, infectious agents, lifestyle factors, medications, and environmental pollution in the development of cancer. Fellowships in biostatistics and methods development are also available. Applications are accepted on a continuing basis from candidates with a variety of academic, clinical and research backgrounds. Epidemiology and Biostatistics Program (OE-16), NCI, EPN, Room 543.

**Cellular Regulation**

Claude B. Klee, MD

*Drosophila* genetics are used to identify the physiological roles of the calmodulin-stimulated protein phosphatase, calcineurin. Experience in molecular and developmental biology and signal transduction is required. Laboratory of Biochemistry (OE-16), NCI, Building 37, Room 4E28.

**Muscle Transcription Factors**

Michael T. Crow, PhD

A unique class of transcription factors expressed in skeletal and cardiac muscle are being defined. The laboratory is interested in isolating and cloning these factors using novel screening procedures based on protein expression, determining how these factors interact with serum response factor to achieve tissue-specific gene transactivation and elucidating how the expression of these factors is altered by muscle activity and aging. Laboratory of Cardiovascular Science (OE-16), NIA, 4940 Eastern Avenue, Baltimore, MD 21224.

**Neuropeptide Gene Expression**

Y. Peng Loh, PhD

The molecular mechanisms regulating the onset of expression of neuropeptides and their processing enzymes are studied at the gene level in the developing frog brain. A minimum of three years experience in molecular biology, especially in the analysis of cis- and trans-acting elements regulating gene expression, is essential. This position may be filled at the Senior Staff Fellow (assistant professor equivalent) level. Laboratory of Developmental Neurobiology (OE-16), NICHD, Building 36, Room 2A21.

**Regulation of Cell Growth and Differentiation**

Bruce H. Howard, MD

The role of RNA polymerase III-transcribed interspersed repetitive sequences in control of mammalian cell growth and differentiation is being determined. Proven experience in techniques of molecular cloning, analysis of gene expression, mammalian gene transfer, signal transduction mechanisms, protein purification and chromatin analysis is required. Laboratory of Molecular Growth Regulation (OE-16), NICHD, Building 6, Room 416.

**Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board’s POSTDOC conference via modem (1,3014922221 or 1,8003582221). The settings for modem access are “7,Even,1”. When connected to NIH, type in “sv100” at the connect message, “F5E” at initial, and “AJL1” at account.

Those interested in receiving information on other postdoctoral opportunities in NIH research laboratories, as well as information on clinical training opportunities, may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

**To Apply**

If you hold a PhD, MD, or equivalent degree and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.

9000 Rockville Pike, Bethesda, MD 20892

Equal Opportunity Employer
**STAFF SCIENTIST**

**Developmental Molecular Genetics**

The Hospital For Sick Children Research Institute in Toronto, Canada is seeking to appoint a Staff Scientist. The qualified individual will be expected to establish an independent research programme in the area of developmental molecular genetics.

Individuals with either a Ph.D., M.D. or both will be considered. Those with an M.D. will be expected to have completed at least four years of post-clinical bench research training. Candidates with a Ph.D. are also expected to have completed, at a minimum, a 2-3 year post-doctoral fellowship.

The successful candidate will be appointed as a Scientist at The Hospital For Sick Children Research Institute with a cross-appointment to an appropriate Department at the University of Toronto. Start-up support and laboratory facilities will be made available for the successful candidate to develop his/her independent research programme and interactions with investigators in established Developmental Biology programmes in Toronto will be encouraged. Laboratory facilities will include access to a complete small animal transgenic facility.

Send curriculum vitae and a list of three referees by September 15, 1992, to: Dr. K. Skorecki, Director, Division of Nephrology, Dept. of Medicine and Paediatrics, The Hospital For Sick Children, 555 University Avenue, Room 5128C, Toronto, Ontario, Canada M5G 1X8.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

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**RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY**

The Department of Biotechnology is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, gene expression, gene isolation or RFLP analysis.

**PROJECT LEADER, SPECIALTY CARBOHYDRATES (JOB #1372) -** The successful candidate will initiate an independent research program on starch biosynthetic and/or modifying enzymes. The ideal candidate will be knowledgeable about starches and capable of isolating and assaying enzymes involved in starch synthesis and modification. Expertise in recombinant DNA technology would be an additional asset. The ultimate research goal will be to enhance current, and develop new, value added starches. The successful candidate will be expected to work with molecular and cellular biologists to clone starch related genes and transfer them into target crops. EDUCATION/EXPERIENCE: Ph.D. or equivalent in biochemistry or a related field plus 3 or more years of relevant research experience are required. More experienced individuals are encouraged to apply.

**RESEARCH ASSOCIATE, SPECIALTY SEED PROTEINS (JOB #1373) -** The successful candidate for this position will become a member of a team investigating methods of altering amino acid composition of seeds via genetic engineering. Applicants must have extensive experience in molecular cloning techniques. Skills in seed protein analysis will be considered a plus. A broad working knowledge of plant biology is desirable. EDUCATION/EXPERIENCE: B.S. degree or equivalent work experience in molecular biology/biochemistry or related field plus 3 or more years relevant experience are required.

Applications received by JULY 31, 1992 will be assured of consideration. However, applications will be considered until the positions are filled.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity/Affirmative Action employer. Please send resume indicating the JOB # on the outside of the envelope and include the names, addresses and telephone numbers of three references in your correspondence to:

PIONEER HI-BRED INTERNATIONAL, INC.
Plant Breeding Division
Department of Biotechnology Research
Attn: Lisa Hall JOB #
P.O. Box 38
Johnston, IA 50131-0038
EML
The European Molecular Biology Laboratory is an international research organization situated in Heidelberg, Germany. Its Biological Structures and Biocomputing Programme is seeking applicants for the position of

GROUP LEADER

in the characterization of protein folding in vivo or in membrane protein structure determination.

Characterization of Protein Folding in vivo: Candidates should have a strong experimental background in the characterization of protein folding in eukaryotic or prokaryotic cells. The successful candidate will join five other groups in the Programme using theoretical and experimental approaches to explore protein folding. Candidates with experience in membrane proteins and/or the interpretation of folding in the light of structural information are particularly encouraged to apply.

Membrane protein structure: Candidates should have experience in high resolution structural approaches to membrane proteins. The successful candidate will join six other groups within the Programme that are pursuing membrane protein structure by X-ray and electron crystallography, NMR, mutagenesis, spectroscopy and theoretical approaches. Candidates with an interest in photosynthetic or pore forming proteins are particularly encouraged to apply.

The Biological Structures and Biocomputing Programme at EMBL comprises 18 groups using experimental (X-ray crystallography, electron microscopy, cell biology, mutagenesis, NMR, and optical spectroscopy) as well as computational techniques (sequence analysis, molecular dynamics, protein design) to a range of topics in structural biology including nucleic acid protein interactions, muscle structure, virus structure as well as membrane protein structure and protein folding.

Informal enquiries may be directed to Dr. Steve Fuller or Dr. Dietrich Suck (+49 6221 3870).
Please send a CV, a brief research proposal, the names of referees, and a list of publications to the Personnel Section, quoting ref. no: 92/14

Washington
WASHINGTON UNIVERSITY IN ST. LOUIS

TENURE TRACK ASSISTANT PROFESSOR
MOLECULAR BIOLOGY AND PHARMACOLOGY

The Department of Molecular Biology and Pharmacology at Washington University School of Medicine is recruiting an individual at the level of Assistant Professor in the tenure track. Outstanding scientists working within the broad area of molecular biology and biological chemistry will be considered with an emphasis on those who are expert at using molecular genetic approaches to examine fundamental questions in gene regulation and function, particularly as they affect cellular differentiation.

Interested applicants should forward a curriculum vitae, a short summary of research plans, and the names and addresses of three references to:

Search Committee (c/o Jeffrey Gordon, Head)
Department of Molecular Biology and Pharmacology
Washington University School of Medicine
660 South Euclid Avenue, Box 8103
St. Louis, Missouri 63110

Washington University is an Affirmative Action/Equal Opportunity Employer committed to increasing the representation of women and minority groups on its faculty.

B.S./M.S. SCIENTISTS
Pharmacology,
Drug Metabolism,
Analytical Chemistry

For more than 115 years, scientists at Eli Lilly and Company have been developing novel, high quality pharmaceutical products. To further build its research capabilities the Department of Drug Metabolism and Disposition is seeking self-motivated, innovative B.S./M.S. scientists to work with senior investigators studying chemical transformations in biological systems. The ideal candidate will have the following qualifications:

• Bachelor's or Master's degree in analytical chemistry, biochemistry, pharmacology, pharmaceutical sciences, or in a related discipline.
• Experience in developing and implementing quantitative bioanalytical methods to study absorption, distribution, metabolism, and excretion of potential new drugs in non-rodent/rodent animal models.
• Excellent organizational and communication skills.
• Experience with HPLC and/or GC systems.

The Company offers an attractive total compensation program. Entry level and salary will be based upon each candidate's experience. For prompt consideration please forward your resume to: Eli Lilly and Company, Scientific Recruitment-DMD, Lilly Corporate Center, Indianapolis, IN 46285. An Equal Opportunity Employer.
POSTDOCTORAL POSITION is available immediately to study the function and metabolism of vitamin K. Project involves isolation, purification, and characterization of vitamin K-dependent protein. A Ph.D. in biochemistry or a related field is required. Experience in research involving RNA and DNA synthesis, protein-DNA interactions, and/or site-directed mutagenesis is desired. Salary based on experience. Send curriculum vitae and list of three references to: Dr. Myrtle Thayer-Palmer, Department of Biochemistry, Morehouse School of Medicine, 720 Westview Drive, S.W., Atlanta, GA 30310; telephone: 404-752-1505.

POSTDOCTORAL POSITION, MOLECULAR BIOLOGY available summer or fall to study thermophilic DNA interacting proteins and their role in genetic disease. Experience with protein-exchange techniques in DNA synthesis, PCR, protein-DNA interactions, DNA sequencing, and/or site-directed mutagenesis preferred. Salary based on experience. Send curriculum vitae and names of three references to: Dr. Francis Barany, Department of Microbiology, Box 62, Cornell University Medical Center, 1500 York Avenue, New York, NY 10021. FAX: 212-746-8587. Equal Opportunity Employer.

POSTDOCTORAL POSITION

Research on structure/function relationships in eukaryotic RNA binding proteins, with emphasis on hnRNP and other related proteins containing the RNP consensus sequence. Approaches being used include in vitro mutagenesis, protein-peptide analogues and a variety of biophysical techniques including fluorescence, CD and NMR. Experience in in vitro mutagenesis and biophysical methods of protein characterization would be useful but not essential. Applicants should send curriculum vitae and three names of references to: Dr. Kenneth Williams, Department of Molecular Biophysics and Biochemistry, Yale University, 333 Cedar Street, New Haven, CT 06510. Equal Opportunity Employer.

POSTDOCTORAL POSITION to conduct research on carbon flow and denitrification in groundwater and soils using stable isotope techniques. Ph.D. required, experience with molecular techniques and/or stable isotope preferred. Send curriculum vitae and names of three references by 15 August 1992 to: Peter M. Groffman, Institute of Ecosystem Studies, Box AB, Millbrook, NY 12546.

POSTDOCTORAL POSITION available immediately to study tyrosine kinases in the central nervous system. Projects include cloning novel tyrosine protein-kinase and phosphatase genes expressed in the brain and retina, and functional studies pertaining to signal transduction, cell adhesion and neurite outgrowth. Candidate should have Ph.D. and experience with recombinant DNA methods. Please send curriculum vitae and names of three references to: Dr. Patricia F. Manase, Department of Biochemistry and Molecular Biology, University of North Carolina at Chapel Hill, School of Medicine, Chapel Hill, NC 27599-7260. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS at Albert Einstein College of Medicine (AECOM) in several areas of biology. At least two appointments will be made in the laboratory of Professor Mark R. Chance starting September 1 or later. Training and opportunities for research are available in several projects including coenzyme B12 enzymology and zinc finger proteins. Our approaches to structure-function investigation involve molecular biology, protein modeling and design, and spectroscopy, including time-resolved optical and x-ray techniques. We are interested in molecular biologists who wish to learn biophysics, physicists interested in biochemical problems, and chemists who are in between. Please send a letter of inquiry and curriculum vitae to: AECOM, Ullman 303, 1300 Morris Park Avenue, Bronx, NY 10461.

POSTDOCTORAL FELLOWSHIP. Position is available to study molecular and cellular mechanisms of drug resistance in human papillomavirus. Candidate must have a recent Ph.D. in virology or immunology. Preference will be given to candidate with previous experience in cellular and molecular biology. Send curriculum vitae and names of three references to: Dr. Raphael P. Viscidi, Department of Pediatrics, The Johns Hopkins University School of Medicine, 600 North Wolfe Street, Baltimore, MD 21205. FAX: 410-955-0329.

POSTDOCTORAL POSITION available immediately to study sex reversal in the filamentous fungus Neurospora and Populus. The work involves isolation and characterization of mating-specific genes and the control of their expression at the molecular level. Opportunities exist for collaborative research with other laboratories in molecular and biochemical genetics of Populus. Experience in molecular biology and genetics techniques desired. Send curriculum vitae, names of three references, and references to: Dr. Mary Anne Nelson, Department of Biology, University of New Mexico, Albuquerque, NM 87131. FAX: 505-577-0304.

FELLOWSHIP IN ENDOCRINOLOGY AND BIOMEDICAL SCIENCE at the University of San Diego. Positions for M.D.'s and Ph.D.'s in September 1992 and June 1993. Specific research areas include: molecular, cellular, and clinical biology of the calcium-regulating hormones (corticotropin, PTH, PTH-related protein); regulation of neuroendocrine gene expression, including the glucagonoma, and bone matrix proteins. U.S. citizen or permanent resident status required for NIH training grant. Send curriculum vitae and references to: Dr. L. J. Defios, SDVAMC, 3530 La Jolla Village Drive, San Diego, CA 92161. Affirmative Action/Equal Opportunity Employer.

NIH POSTDOCTORAL FELLOWSHIP

Available to study cell signaling and controls of cell proliferation/differentiation. Open to 1 January 1993. Send curriculum vitae and statement of research interests to: Barbara Gilchrest, M.D., Department of Dermatology, Box 4804, School of Medicine, 80 East Concord Street, Boston, MA 02118.


POSTDOCTORAL RESEARCH ASSOCIATE

Positions are available in the Molecular Urology Laboratory for NIH-funded studies of transgenic mouse models in the molecular and cellular biology of androgen regulation of the cell cycle and apoptosis. Requires experience and background in recombinant DNA and molecular analysis. Experience with immunocytochemistry and in situ hybridization also preferred. Send curriculum vitae and names of references to: Dr. Ralph Buttyan, Department of Urology, Columbia University College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

Higuchi Biosciences Center and the department of Biomedical Engineering at the University of Kansas seek a RESEARCH ASSOCIATE to participate in research focused on cloning and expression of proteins forming NMDA receptor complex in brain. Studies involve cloning and sequencing of genes, expression in mammalian and insect cells, site-directed mutagenesis, and regulation of gene expression. Required: Ph.D. in biochemistry, molecular biology, or related discipline; experience in research in molecular biology. Preferred: One or two years of postdoctoral experience in research on gene expression and/or cloning. Salary range $23,000 to $26,000 plus benefits. Send cover letter, resume and address and telephone number to: Dr. Robert I. Higuchi, Higu- chi Biosciences Center, 2009 Constant Avenue, Lawrence, KS 66047-2535 by 17 July 1992. Telephone: 913-864-5183. The University of Kansas is an Equal Opportunity/Affirmative Action Employer.

INSTITUTE OF PLANT SCIENCES

PHYTOMEDICINE RESEARCH ASSOCIATE

Opportunities in Applied Entomology

We are seeking a creative and cooperative scientist with strong expertise and post-doctoral experience in population dynamics of insects in agroecosystems. Responsibilities include (1) research together with graduate and undergraduate students on population dynamics including qualitative and quantitative field and laboratory studies, with special emphasis on herbivore/ plant interactions and dispersal of insects; (2) participation in teaching and administration. Send curriculum vitae, publications and three references to Professor R. B. Butcher, Institute of Plant Sciences, Applied Entomology, ETH Zentrum, Clausiusstr. 21, CH-8092 Zürich.

RESEARCH ASSISTANT II—Prepare virus crys- tals x-ray diffraction studies of virus structures. Duties include cell culture and virus crystallization and crystal handling. Cell culture, infecting cell monolayers with virus, techniques in hood, harvest and purity by using ultracentrifuge machine; concentration and mea- surement of virus by radioactive inactivation; crystal preparation and handling by controlled atmosphere and moun- ting crystal under microscope. Master's Degree in Public Health with six months of experience in biological research training in entomology. Work experience gained prior to earning of the degree will be acceptable. 8:00 a.m. to 5:00 p.m.; 40 hours per week. Salary: $32,000 per calendar year. Contact: Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, Alabama 35222. RE: Job Order #AL0228736.

RECEPTOR LABORATORIES, INC., a young, venture-backed biotechnology company developing innovative drug-discovery technologies, has openings in its Research and Development Program:

BIOANALYTICAL PEPTIDE CHEMIST—Ph.D. level, preferably including postdoctoral experience. Develop and execute analytical techniques for the characterization, purification, and quantitation of compounds bound to biological macromolecules.

ENZYMOLOGIST—Ph.D. level, with significant experience in serine proteolytic enzymes. Minimum of 2 years postdoctoral experience or the equivalent required.

Receptor Laboratories offers competitive salaries, an attractive benefits program, a stimulating work environment, and an opportunity for equity participation. Please send your application in confidence to:

Receptor Laboratories, Inc. is an Equal Opportunity Employer.

Personnel and Recruitment

Receptor Laboratories, Inc.
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RESEARCH SCIENTISTS
We’re working to enhance the body’s natural ability to heal itself.

At Immunobiology Research Institute, our small team of scientists is carrying out basic research of peptide drugs in the exploration of new, exciting and non-toxic ways of moderating the immune system. Led by the world-renowned immunologist, Dr. Gideon Goldstein, and a member of the Johnson & Johnson family of companies, the people of IRI are conducting some of the most exciting work in immunobiology today. Currently, we are seeking Research Scientists in the following areas to join us:

PHARMACOKINETICS
You will design and conduct pharmacokinetic studies on peptide drugs, as well as originate, monitor and review data results of studies conducted at contract labs. Responsibilities include bioanalytical method development; animal surgery; dosing and sampling; sample analysis, and data interpretation. To qualify, you must possess a PhD in a physical or life science with at least 5 years’ postgraduate experience characterizing the absorption, distribution, metabolism and excretion of drugs in preclinical and clinical studies. Expertise in pharmacokinetic models, small animal surgery, and test method development is also required along with knowledge of GLP. Experience with peptide/protein drugs and knowledge of toxicology is desirable.

LC-MS INSTRUMENTATION
We’ll look to you to develop and apply LC-MS methodology to the characterization of proteins, peptides, and metabolites in isolated samples and in complex matrices. In addition, you will participate in the planning and execution of interdisciplinary research projects involving peptide drug characterization, pharmacokinetics, metabolism, and protein isolation/characterization. An MS/PhD in Chemistry and a minimum of 2 years’ related postgraduate experience is required. You must also possess extensive “hands-on” mass spectrometry operating and troubleshooting experience and the ability to modify instrumentation to meet laboratory and clinical demands. Experience in chromatography and drug metabolism is also desirable.

Ours is an atmosphere which can offer you many of the best features of a world-class academic environment; a place where the freedom to explore new ideas and the interchange of knowledge is nurtured. If this is the opportunity you’ve been seeking, we invite you to send your resume, indicating position of interest, to: Human Resources, Immunobiology Research Institute, Route 22 East, P.O. Box 999, Annandale, NJ 08801-0999. An equal opportunity employer.

Immunobiology Research Institute
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Position Available: Postdoctoral Positions in Immunology

The Weis Center for Research is a well-equipped facility located in a semi-rural area. Competitive salary and fringe benefits are available. Send curriculum vitae and names of three references to: Human Resources (JDR), Geisinger Clinic, 100 N. Academy Avenue, Danville, PA 17822-3024.

The Weis Center for Research is a well-equipped facility located in a semi-rural area. Competitive salary and fringe benefits are available. Send curriculum vitae and names of three references to: Human Resources (JDR), Geisinger Clinic, 100 N. Academy Avenue, Danville, PA 17822-3024.

E.O.E.

M/F/H/V

CORNELL UNIVERSITY MEDICAL COLLEGE

Postdoctoral Positions In Immunology

Postdoctoral positions are available September 15, 1993. We study the molecular biology of lymphocyte growth and differentiation. Ongoing projects are focused on interleukin-2 (IL-2) and its receptor with emphasis on signal transduction intermediates or early gene expression. Systems have been developed to study the molecular genetic mechanisms controlling the differentiation switch in T cells that determines immunologic memory. A strong background in lymphocyte biology, biochemistry and molecular genetics is desirable.

To be considered, please submit a curriculum vitae, publication list, a statement of research accomplishments and future objectives, and 3 qualified individuals for letters of recommendation to: A. Smith, Chief, Division of Allergy/Immunology, Department of Medicine, Weis Center for Research, Geisinger Health System, 1300 York Avenue, New York, NY 10021, Equal Opportunity Employer M/F/H/V.
POSITIONS OPEN

FLOW CYTOMETRY SPECIALIST

Full-time flow cytometry specialist position available immediately in the Human Transplantation Biology Laboratory at the University of Minnesota. This laboratory is equipped with a FACS Star Laser Plus flow cytometry system. Experience in flow or imaging systems and sterile cell sorting and familiarity with computers required. The selected candidate will have a bachelor's degree in the biological, biophysical sciences or electromechanical engineering or equivalent experience. Three plus years of experience with flow cytometry and sterile cell sorting is required. Salary commensurate with experience. Please send curriculum vitae, summary of professional experience and one or more professional references to: Catherine Verfaillie, M.D., Department of Medicine, Box 480, University of Minnesota Hospital and Clinic, 420 Delaware Street at East River Road, Minneapolis, MN 55455.

RESEARCH PLANT PATHOLOGIST: Crop Production Research Unit, West Lafayette, Indiana. Permanent, full-time. Responsible for establishing and directing a program to determine the molecular basis of host-pathogen interactions for foliar fungal diseases, other than rusts, of cereal small grains. Research includes identification and characterization of genes in the host that control establishment of infection and induction of host plant resistance. This position uses molecular techniques to identify and characterize genes for pathogenicity and genetic variability among isolates of Fusarium and Sclerotinia. Requires a Ph.D. degree and the ability to manipulate cereal hosts and fungal pathogens to identify and enhance resistance factors. Desirable salary range $38,861-$46,210 per annum based on qualifications and experience. For position information contact: J. R. Wilcox, 317-494-8074. For the vacancy announcement and application procedures contact: Beverly Webb, 301-344-1921. Applications must be marked 2N060 and postmarked by 12 August 1992. Incomplete applications will not be considered. AMS is an Equal Opportunity Employer.

ATTENTION SCIENCE ADVERTISERS

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Place your classified ad in any May-August 1992 issue of SCIENCE and get double exposure. We'll display the same position announcement at the Employment Exchange during the AAAS Pacific Division Meeting, 21-24 June 1992, at the University of California, Santa Barbara campus; followed by Science Innovation '92, 21-24 July 1992, at the Moscone Convention Center, San Francisco. Applications from thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

For more information on how you can interview candidates on-site please refer to the 8 May 1992 issue of Science, or contact Jacquiyn Roberts at (202) 528-6737, FAX: (202) 842-1065.

The Employment Exchange takes place at the AAAS Pacific Division Meeting, 21-24 June 1992, at the University of California, Santa Barbara campus; followed by Science Innovation '92, 21-24 July 1992, at the Moscone Convention Center, San Francisco. Applications from thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

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GENERAL HUMAN IMMUNODEFICIENCY VIRUS THERAPY

Opportunities in oligonucleotide therapeutics

Gen-Probe Incorporated is the acknowledged leader in DNA probe diagnostics. The foundation of our Company's success has been innovative approaches to solving challenging technical problems as well as the ability to apply our unique methodology to important medical problems. These same strengths coupled with our experience in nucleic acid diagnostics make Gen-Probe uniquely suited to assume a leadership position in the emerging area of oligonucleotide therapeutics.

We are seeking scientists with varied backgrounds and experience to join us in developing agents to treat HIV infections and develop core technologies. We seek those with a pioneering spirit who wish to explore new approaches in an environment that fosters creativity and rewards innovative contributions.

PROGRAM LEADER — The successful candidate will lead a group of creative scientists developing oligonucleotide therapeutics for treating HIV infections from initial concepts through clinical trials. As such, you will have primary responsibility for the development of new agents and the evaluation of their effectiveness and safety.

Requirements include a PhD or MD degree in Virology, Cell Biology, Molecular Biology, Pathology, Microbiology or other relevant discipline, and a minimum of 5-7 years' experience in the pharmaceutical industry in positions of increasing responsibility. At least 2 years' experience in HIV drug development is essential, as are documented managerial and leadership skills and a record of significant scientific accomplishment as evidenced by publications in refereed journals and patents. Some experience with antisense agents is highly desirable. Dept. 273.

SENIOR RESEARCH SCIENTISTS — We are seeking candidates with 3-5 years' related experience, good supervisory and leadership skills, as well as a proven record of scientific accomplishment.

In Vitro Assay Development

Primary responsibility of this position is the development of in vitro assay systems for evaluating oligonucleotide therapeutic agents for treating HIV infections.

Candidates are required to possess a PhD or MD degree in Virology, Cell Biology, or other relevant discipline, and experience working with recombinant enzymes and developing assay systems, for monitoring expression of genes in eukaryotic cells. Previous experience with HIV is highly desirable. Dept. 274.

Chemistry

Successful candidates will design and synthesize novel organic compounds in support of the oligonucleotide therapeutics program. Experience with nucleic acid analogs and modifications and related chemistry of heterocyclics is necessary.

Experience in molecular modeling and structural chemistry is highly desirable.

Position requirements include a PhD in Chemistry and post-doctoral experience in synthetic organic chemistry. One position also requires experience in process development and production scale-up in the chemical industry. Dept. 275.

Molecular Biology

This researcher will work on a special project requiring familiarity with a broad range of modern techniques in molecular genetics, including cloning, sequencing, expression systems, and nucleic acid characterization.

Candidates must have a PhD in Molecular Biology, Biochemistry, or a related, relevant discipline, and experience with the biological synthesis of nucleic acids. Experience with modern techniques of molecular genetics and with nucleic acid polymerizing enzymes is essential. Experience with eukaryotic systems is highly desirable. Dept. 276.

RESEARCH ASSOCIATES — Four candidates are sought, each of whom will report respectively to one of the Senior Research Scientists described above. Requirements include an MS or BS in Chemistry, Molecular Biology, Virology, Biochemistry, or related discipline and a minimum of 2 years' post-degree relevant experience. For one position, previous experience with HIV is essential.

Successful candidates may take advantage of significant opportunities for career advancement, including tuition reimbursement and the company's established policy of promoting individuals based upon ability and performance without rigid formal degree requirements. Dept. 277.

Gen-Probe offers the advantages of working for an established, successful company which, none-the-less, maintains an entrepreneurial focus. Experienced and highly educated support groups in DNA synthesis, computer analysis, sequencing and probe design, and other relevant areas are in place to allow incoming investigators to concentrate their efforts on development of new approaches. The UCSD campus is just across the street, allowing Gen-Probe researchers to take advantage of excellent library facilities, seminars, and other resources of a renowned academic institution. As a center for biotechnology companies, San Diego offers a rich schedule of meetings and conferences in addition to the recreational opportunities afforded by its climate and location.

If you are excited by the challenge of working on one of the most difficult and important medical problems of our time, we'd like to hear from you. Please send your resume/C.V. referencing appropriate department code to: GEN-PROBE CORPORATION Human Resources, 9880 Campion Point Drive, San Diego, CA 92121.
SCHOOL OF MEDICINE
CHAIRMAN, DEPARTMENT OF GENETICS

The University of Pennsylvania School of Medicine has an opening for the position of Professor and Chairman of the Department of Genetics. Candidates must be of national and international stature and be able to provide academic leadership in the discipline of genetics, broadly defined, including human, mammalian and non-mammalian systems. Applicants must have demonstrated qualifications in research, education and administration in the field of genetics.

The University of Pennsylvania is an equal opportunity/affirmative action employer. Women and minority candidates are encouraged to apply.

Peter C. Nowell, M.D.
Chairman,
Genetics Search Committee
University of Pennsylvania
School of Medicine
M161 John Morgan Building
Philadelphia, PA 19104-6082

Pharmaceutical/ Biotechnology:
Careers In Industry

This special section, reprinted from the May 8 issue of SCIENCE, takes an in-depth look at careers in the pharmaceutical and biotechnology industries.

Highlighted topics include:

• Challenges and incentives offered by a pharmaceutical or biotechnology firm
• A sampling of salaries for scientists in industry
• How industry salaries compare with university jobs
• "Hot" new fields in industry

Also included are "career stories" from five scientists who made the decision to move to a position in industry.

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MARIE ELISE WHITNEY SNYDER MEMORIAL FELLOWSHIP
WOMEN'S SCHOLAR AWARD IN MOLECULAR BIOLOGY

The Allegheny–Singer Research Institute and The Medical College of Pennsylvania invite applications for the Marie Elise Whitney Snyder Memorial Fellowship to support a woman's scholar award in molecular biology. This award is intended to encourage the investigation of the basic molecular aspects of human disease by young women scientists, and offers the opportunity to initiate independent research at Allegheny–Singer Research Institute. Awards of up to $50,000 a year for up to three years are made to individuals with either an M.D. or Ph.D. degree with extensive postdoctoral training or research experience in molecular biology. The awardee will have the opportunity to design and conduct research in a fully equipped laboratory as a staff scientist at Allegheny–Singer Research Institute with an accompanying faculty appointment at the appropriate rank at The Medical College of Pennsylvania. The awardee will be selected by a panel of nationally recognized scientists for the award which will begin July 1, 1993.

Eligible applicants will have an M.D., Ph.D. or equivalent degree with a minimum of three years of postdoctoral or research experience and not more than 7 years beyond degree prior to the initiation of the award. The research will be conducted at the Allegheny–Singer Research Institute and the award may be used for salary or other support. Major items of equipment will be provided by the Institute.

Interested candidates should apply by October 1, 1992 by submitting a curriculum vitae, a description of future research plans and long term career goals, and the names of three references to Dr. Leonard L. Ross, Dean, The Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129. The reference letters should be sent directly to Dr. Ross. Selection of the awardee will be made by December 15, 1992.

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Washington, DC 20005

DIABETES RESEARCH SCIENTIST
Cincinnati Center

Marion Merrell Dow Research Institute, headquartered in Cincinnati, Ohio, is seeking a creative, team-oriented scientist who is interested in the discovery of new drugs for the prevention and/or treatment of diabetes mellitus. Responsibilities will include collaboration with Sr. Scientists on ongoing research efforts and establishment of a project to broaden our understanding of the underlying pathophysiologic mechanisms in diabetes.

The ideal candidate will have:
• Ph.D. or M.D. plus 2 years postdoctoral training
• Experience in intermediary metabolism or endocrinology preferred

Our research-based company is committed to many areas of drug research including cardiovascular diseases, cancer biology, CNS and metabolic & inflammatory diseases.

Excellent compensation includes bonuses, 401(k), and stock options. You'll also find an affordable yet cosmopolitan lifestyle in Cincinnati. Please send resume, 2-3 references and salary history to: Marion Merrell Dow Inc., Staffing Department KMR, P.O. Box 9627, Kansas City, MO 64134. Equal Opportunity Employer.
RESEARCH AGRONOMIST: Manage corn parent testing program at Pioneer Hi-Bred International, Inc. Responsibilities include coordinating the testing for parent traits of corn inbreds, disseminating parent information in a timely and accurate manner, and working with corn breeders, Parent Seed, Production, International Operations, and company management on parent issues. Research on inbred growth and development, inbred mapping methods, and/or seed production will be required. Qualifications required include a Ph.D. or equivalent in plant physiology or agronomy. Experience with handling, analysis, collection of data, statistical analysis, and cooperative research with plant breeders and/or seed production is desired. Send letter of application, résumé, and the names and addresses of three references by 31 July 1992 to: Michelle Shirrrow, Pioneer Hi-Bred International, Plant Breeding Division, P.O. Box 85, Johnston, IA 50131; telephone: 515-270-3504.

SENIOR SCIENTIST: Responsible for studies related to pesticides registration. Plant and animal metabolism, environmental fate and residue studies. Study design; protocol and preparation of reports for submission to regulatory agencies. Supervise contract and compliance studies. Isolation and identification of metabolites or degradates. Operate and maintain sophisticated analytical chemistry instrumentation. Requirements: Ph.D. biochemistry/organic chemistry and 2 years of experience with background in organic chemistry and biochemistry and in-depth HIPLC background involving chromatography and molecular purification and isolation. Background in analysis of organic compounds using GC and TLC and other analytical methods and polymers. Practical experience in plant-host interactions using molecular techniques in the investigation of plant diseases is desirable. Salary range: $38,861 to $46,620 per annum based on qualifications and experience. For position information contact: J. R. Wilcox, 317-494-8074. For the vacancy announcement and application procedures contact: Beverly Webert, 301-544-1921. Applications must be marked 2N049 and postmarked by 12 August 1992. Incomplete applications will not be considered. ARS is an Equal Opportunity Employer.

TECHNICAL SERVICE REPRESENTATIVE: Strategene, a leading biotech company in La Jolla, is in search of a qualified Technical Service Representative. Applicants should have a B.S./M.S. in molecular biology or a related field. Experience in customer service experience a plus. Will be primarily responsible for answering technical inquiries. Strategene offers a beautiful environment, potential for advancement, and excellent salary and benefits. Qualified candidates forward résumé of qualifications to: Strategene, Attention: Professional Staffing, 11009 North Torrey Pines Road, La Jolla, CA 92037. Affirmative Action/Equal Opportunity Employer.

RESEARCH MOLECULAR BIOLOGIST, Crop Production and Research Unit, West Lafayette, Indiana. Permanent, full time. Responsible for initiating a research program to reduce losses of small grain cereal proteins by transgenic methods. This work involves understanding the genetic and molecular basis for the interrelationships of barley yellow dwarf virus and cereal hosts that are relevant to virus-host interactions. Incumbent will utilize knowledge of molecular biology as appropriate in a team approach to pest resistance. The research will provide a basis for designing innovative and stable insect resistance in cereal grains. Degree in the biological sciences, agricultural natural resource management, chemistry, or related discipline, and knowledge of plant molecular genetics and pathogen/virus are required. A Ph.D. degree and minimum 100 mg of research experience in plant-host virus interactions and use of molecular techniques in the investigation of plant diseases is desirable. Send letter of application, résumé, and the names and addresses of three references by 1 July 1992 to: Jennifer E. Flood, West Lafayette, IN 47906; telephone: 317-236-9867.

PRINCIPAL SCIENTIST, INSTRUMENT DEVELOPMENT: Beckman Instruments, a leading manufacturer of state-of-the-art, precision medical instruments, seeks a research scientist to help develop new instrumentation based on centrifugation. In this highly visible position, you will perform exploratory research to validate new opportunities for the use of centrifugal fields in separating or manipulating macromolecules and cells. To qualify for this position, you should have a Ph.D. and 3 to 5 years of experience in molecular or cell biological techniques, possess good interpersonal skills, and be capable of establishing external collaborations in addition to performing in-house research. We offer an immediate challenge and a highly visible role within one of our premier business units. If you're looking for a rewarding career with a competitive compensation and benefits package, and have the freedom to grow a career at one of the country's leading biomedical instrument companies, apply today. Qualified scientists interested in this type of role should forward a current curriculum vitae, in confidence, to: Human Resources Department, Beckman Instruments, Position: Sr. Scientist, 1050 Page Mill Road, Palo Alto, CA 94304. Equal Opportunity Employer.

EDUCATIONAL RESEARCH CONSULTANT: Designing research protocols, writing research proposals, assuming duties in providing multidisciplinary consulting services, evaluating effectiveness of educational and clinical programs, preparing major reports/papers for professional organizations or publications, performing qualitative and quantitative analyses, managing a computer information system for extramural research funding research, writing grant applications, reviewing literature, and generating research ideas. This position will consult with a wide variety of faculty in divergent disciplines within a medical school environment for educational, medical, and evaluation aspects of research projects with a maximum on rheumatic diseases and cancer control. M.S. or equivalent in health sciences with 1 year of experience in health services research, including dissemination studies, and economic analyses. 8:00 a.m. to 5:00 p.m., 40 hours per week. Salary: $33,500 per year (12 months). Contact: Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222. RE: Job Order #AL0228744.

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