

Protein and Nucleic Acid Sequencing Software

MultAlin software for sequence analysis of proteins and nucleic acids comes with a menu system and screen editor to allow manual refinement of the analysis. MultAlin performs a stepwise iterative analysis that incorporates: the Lipman + Pearson FASTP algorithm, which obtains similarity scores for every possible pair of sequences; the unweighted pair-group method of hierarchical clustering; and an extended version of the Needleman-Wunch algorithm to reach the final alignment and consensus sequence. On a 386 PC at 25 MHz it takes 2 min to perform an alignment on 30 sequences (each containing 150 residues). The program requires an IBM-compatible PC with 256K memory running DOS 2.0 or higher. Cherwell Scientific. Circle 88.

Monoclonal Antibodies

A panel of monoclonal antibodies (MAbs) to enzymes associated with pancreatitis (amylase, chymotrypsin, lipase, and trypsin) and emphysema (neutrophil elastase) is now available. The MAbs are suitable for immunoassays, immunohistochemistry, or purification procedures; some neutralize enzyme activity. Also available are MAbs to α -1-antitrypsin and α -1-antichymotrypsin. Immunopharmaceutics. Circle 89.

MAbs to CD41a are available. Serotec. Circle 90.

A line of purified human MAbs that can be used in immunophenotyping *Macaca* species monkeys includes specificities to CD2, CD4, CD8, CD25, and HLA-DR. Exalpha Corp. Circle 91.

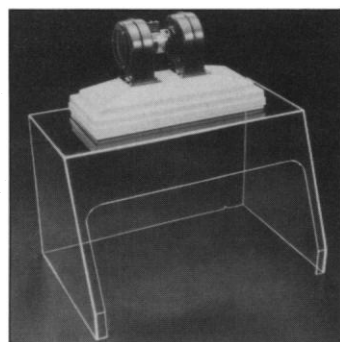
Medical Research Laser

The Optima VTE allows simultaneous use of up to three of seven different wavelengths in one solid-state laser. The flexibility allows complete control over a

wide range of parameters. Simultaneous transmission of different wavelengths, energies, and pulse widths allows tissue interaction studies from micron ablation to centimeters-deep coagulation. Coherent Inc. Circle 92.

PCR Clean Air Hood

This portable, bench-top Clean Air Hood for polymerase chain reaction is designed to be placed on a work surface to provide a



Class 100 cleanliness level. The 24 by 36 inch unit has transparent panels of quarter-inch acrylic with solvent welded seams. It is equipped with a centrifugal blower motor and 8-foot power cord. Options available include pre-filter housing, electrical outlet, lighting, speed control, and hinged or fixed faceplate. Midwest Scientific. Circle 93.

Chemical Release Hazard Software

CHEMS-PLUS Version 2.0 is an upgraded version of software designed to estimate the consequences of a potential chemical release. The software enables engineers and safety professionals to model the results of toxic and flammable vapor releases, fires, and explosions. Included in the program are models for estimat-

ing the rate and duration of discharges from storage tanks and pipelines, downwind hazard distance for toxic releases, hazard zones for flammable vapor clouds, fatality and injury zone radii for fires and explosions, storage tank rupture hazards, and solid/liquid explosion hazards. The program runs on DOS-based personal computers. Arthur D. Little. Circle 94.

Protein Sequencing Membrane

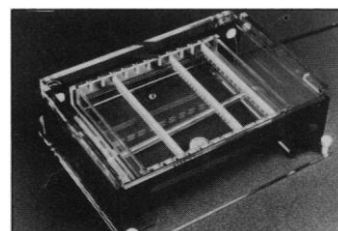
Hyperbond is a new polymeric membrane designed for isolating samples for protein sequence analysis. Hyperbond exhibits a much higher binding capacity during the blotting process than polyvinylidene difluoride membranes and can even trap and retain very short peptides. In the sequencer, the properties of Hyperbond allow the Edman degradation to operate at high efficiency without the need for special procedures. Beckman Instruments. Circle 95.

DNA Probe Detection System

The Super Sensitive DNA Probe Detection System can detect as few as one or two copies of target DNA. After hybridization to target DNA in situ, the biotinylated nucleic acid probe is visualized using an amplified immunoassay. Amplification is achieved by the sequential addition of anti-biotin IgG, biotinylated anti-IgG, and an exclusive alkaline phosphatase-conjugated streptavidin label. Each step provides an additional layer of amplification, with the increased sensitivity permitting up to 15-fold dilution of commercially available probes. BioGenex Laboratories. Circle 96.

Self-Recirculating Electrophoresis Tanks

The Buffer Puffer self-recirculating electrophoresis tanks provide a streamlined solution to the



problem of buffer recirculation. The tanks eliminate the problems of bulky pumps, leaking ports, and tangled tubing. The tanks work by collecting the hydrogen bubbles generated at the cathode and shunting them through an internal conduit to the other end of the buffer chamber. The flow of bubbles pumps and recirculates the buffer within the chamber. Two sizes are available: 20 by 25 cm and 12 by 14 cm. Hybaid. Circle 97.

Literature

Molecular Modeling and Computational Chemistry Results organizes journal citations, with brief summaries, under a series of topics within the broad categories of applications and methodology. MMCC Publishing. Circle 98.

ATCC Catalogue of Cell Lines and Hybridomas contains 539 pages and includes more than 1700 cell line listings under the categories of certified cell lines, cell repository lines, human tumor cell bank, hybridoma cell bank, and tumor immunology cell bank. In addition, more than 1500 human and animal lines from the Naval Bioscience Laboratory are listed. American Type Culture Collection. Circle 99.

Biotrak Cytokine ELISA Systems describes a range of enzyme immunoassays for the detection and measurement of cytokines, including interleukins, tumor necrosis factor, granulocyte colony-stimulating factor, and granulocyte macrophage colony-stimulating factor. Amersham International. Circle 100.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

Science

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FAX: 202-682-0816
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- **Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

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Deborah Cummings
Telephone: 202-326-6541

Janis Crowley, Recruitment
Advertising Manager
Telephone: 212-496-7704
FAX: 202-682-0816

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

POSITIONS OPEN

ASSISTANT PROFESSOR. The Department of Physiology and Biophysics at the University of Arkansas for Medical Sciences (UAMS) invites applications for a full-time, tenure-track position. Applicants should have at least two years of postdoctoral experience, be capable of establishing an independent research program supported by extramural funds, and participate in teaching of physiology to medical and graduate students. While the specific research area is open, individuals who utilize cellular or molecular approaches to answer questions of physiological significance are particularly encouraged to apply. Curriculum vitae, representative publications, and the names of three references should be sent to: **Lawrence E. Cornett, Ph.D., Department of Physiology and Biophysics, Slot #505, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, AR 72205** by 31 August 1992. *UAMS is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR POSITION in Molecular Biology. The University of Texas (UT) M.D. Anderson Cancer Center, Science Park-Research Division in Smithville, Texas is expanding into new laboratories and invites applications for a tenure-track position at the Assistant Professor level. Research at Science Park encompasses programs in mechanisms of multistage carcinogenesis, retrovirology, DNA damage and repair, and genetics. Successful applicants will be expected to establish high-quality, independent research programs. Preference will be given to applicants working in the area of molecular biology of cancer, emphasizing tumor suppressor genes, oncogenes, and/or cancer genetics. Consideration will also be given to strong applicants in other areas of molecular biology related to carcinogenesis. Submit curriculum vitae, two representative publications, brief outline of current and future research plans, and three letters of reference by September 1, 1992, to: **Dr. M.C. MacLeod, U.T. M.D. Anderson Cancer Center, Science Park-Research Division, P.O. Box 389, Smithville, TX 78957.** *Equal Opportunity/Affirmative Action Employer.*

BIOLOGIST—ASSISTANT PROFESSOR AND DIRECTOR OF THE NFB FIELD STATION. The Biology/Microbiology Department invites applicants for a nine month tenure track teaching, research and directorship position. Ph.D. in Biology or related area with emphasis in environmental biology and natural resources, demonstrated effective teaching ability or potential, skill in communicating with students, effective interpersonal relations skills, and the ability to develop programs that interface agriculture with natural resources are required. Experience in directing or working with a field station or similar facility, budget management, grant writing, and generating extramural funding are highly desirable. Send letter of application with curriculum vitae, statements of teaching philosophy and research interests, documentation of experience in directing or working with a field station, and three letters of reference by September 1, 1992 to: **Dr. Gary Peterson, Chair Search Committee, Box 2207B, South Dakota State University, Brookings, SD 57007. Telephone: (605) 688-6141.** *Affirmative Action/Equal Opportunity Employer.*

BIOLOGY SCIENCE EDUCATOR

The Department of Biology at Southwest Missouri State University (SMSU) invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** rank. The preferred starting date is January, 1993. To be considered, applicants must have an earned doctorate in Biology or Science Education and college teaching experience. Duties include teaching introductory-level courses in biology and an upper-division course in area of expertise, advisement of teacher education students, coordination of the biology teacher education program, and participation in the biology graduate program. Research emphasis should be in Science Education and the successful candidate will be expected to seek outside funding to support an active research program. Applicants should send curriculum vitae, transcripts, and the names of three references by **September 1, 1992**, to: **Dr. Steve Jensen, Biology Science Educator Search Committee, Department of Biology, Southwest Missouri State University, 901 South National, Springfield, MO 65804-0095.** *SMSU is an Affirmative Action/Equal Opportunity Employer and encourages applications from minorities and women.*

POSITIONS OPEN

ASSISTANT PROFESSOR CELL, MOLECULAR OR DEVELOPMENTAL BIOLOGIST

Outstanding candidates with a strong commitment to research and teaching in Graduate and Medical School curricula are sought for a tenure-track position. The successful candidate's research area will be in the broad area of cell, molecular or developmental biology and complement existing research programs. Salary, startup funds and facilities are nationally competitive. Applicants should send curriculum vitae, a brief description of research plans and three letters of recommendation to: **Search Committee, Department of Cell Biology and Anatomy, Texas Tech University Health Sciences Center, 3601 4th Street, Lubbock, TX 79430** by 15 October 1992. *Equal Opportunity Employer.*

SOUTHEASTERN LOUISIANA UNIVERSITY (SLU)

DEPARTMENT OF BIOLOGICAL SCIENCES

CONSERVATION BIOLOGY. Tenure-track position at the **ASSISTANT PROFESSOR** level to join active program in environmental and evolutionary biology, starting either January or August, 1993. Candidates should have a strong background in conservation biology of birds or mammals. Teaching involvement includes conservation biology, comparative anatomy, and course in taxonomic specialty. Maintaining an active research program involving graduate students is expected. Ph.D. required; postdoctoral experience preferred. Send curriculum vitae, statement of research and teaching interests, and names of three references to: **Dr. Gary Childers, Department of Biological Sciences, Southeastern Louisiana University, P.O. Box 814, S.L.U., Hammond, LA 70402**, no later than September 21, 1992. *SLU is an Equal Opportunity Employer.*

MOLECULAR DEVELOPMENTAL GENETICIST

The University of British Columbia (UBC), Vancouver, Canada: The Department of Medical Genetics invites applications for a tenure track position in the area of animal or human Molecular Developmental Genetics. Appointment will be at the **ASSISTANT PROFESSOR** level with the possibility of a higher rank for a suitable candidate with more experience. Preference will be given to individuals whose research involves molecular approaches to the study of the genetic basis of development.

Candidates for this position must have a doctoral degree, a minimum of two years of postdoctoral experience, and demonstration of outstanding research abilities. The successful candidate will be expected to develop a vigorous, independent research program in an interactive environment, and should be an enthusiastic teacher. The anticipated start date is January 1, 1993. The deadline for applications is September 30, 1992 or until such time as a suitable candidate is identified.

UBC encourages qualified women and minority applicants. Salary will be commensurate with qualifications and experience. This appointment is subject to final budgetary approval. *In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.*

Applications, including curriculum vitae, selected reprints, a statement of research interests and present research activities, and the names of three referees, should be sent to: **Dr. J.M. Friedman, Head, Department of Medical Genetics, The University of British Columbia, Room 226-6174 University Boulevard, Vancouver, B.C. CANADA V6T 1Z3.**

TERRESTRIAL VERTEBRATE BIOLOGIST: ASSISTANT PROFESSOR, tenure-track Ph.D. required, beginning January or September 1993. We seek a broadly trained vertebrate biologist interested in working closely with undergraduate and graduate students (M.S. level) and capable of teaching in at least two of the following areas: mammalogy, ornithology, herpetology, wildlife biology, and ethology. The teaching of a science course(s) for non-majors in our General Education Program is a requirement. Strong commitment to teaching and the development of a research program required. Applicants must submit a letter of application, statement of academic philosophy and research goals, résumé, transcripts, and have three letters of reference sent to: **Edward J. Kelly, Assistant to the President, SUNY Brockport, Brockport, NY 14420.**

Application Deadline: August 28, 1992. *Affirmative Action/Equal Opportunity Employer.*

SANDOZ RESEARCH INSTITUTE

EXPANDING OUR COMMITMENT TO INNOVATIVE RESEARCH

CHEMISTS – ONCOLOGY RESEARCH

Innovative research at Sandoz has been enhancing medicine around the world for over a century. Pioneering drugs have extended and improved the quality of life for countless individuals and revolutionized basic scientific concepts within the transplantation and mental health fields.

As a result of a major expansion into oncology research, the Sandoz Research Institute seeks highly-motivated and creative scientists. Successful applicants will be part of multidisciplinary teams of scientists using state-of-the-art technology in modern newly-opened research facilities.

Major responsibilities at all levels include the design, synthesis, purification and identification of appropriate quantities of novel chemical entities in support of various cancer drug discovery programs.

MEDICINAL CHEMISTS

Assistant Fellow

Ph.D. in Organic Chemistry (or less preferably, Medicinal Chemistry) and 0-3 years of postdoctoral experience in academic and/or industrial setting. Extensive training/experience in the synthesis of complex molecules required. Thorough training in, and familiarity with, modern separation and analytical methods. Previous experience in cancer and/or chemotherapeutic drug development preferred. Computer literacy and familiarity with a variety of appropriate chemistry-related software packages and some modelling experience preferred. Ability to coordinate research efforts with other team members. Communication skills to present/explain scientific results. **Position #2292MS.**

Associate Fellow (2 Positions)

Ph.D. in Organic Chemistry (or less preferably, Medicinal Chemistry) and 3-6 years of postdoctoral experience in academic and/or industrial setting. Extensive training/experience in the synthesis of complex molecules required. Thorough training in, and familiarity with, modern separation and analytical methods. Previous experience in cancer and/or chemotherapeutic drug development. Computer literacy and familiarity with a variety of appropriate chemistry-related software packages and some modelling experience preferred. Ability to coordinate research efforts with other team members. Communication skills to present/explain scientific results. Supervisory experience preferred. **Position #2290/91MS.**

Postdoctoral Research Associate

Ph.D. in Organic Chemistry. Extensive training/experience in the synthesis of complex molecules required. Thorough training in, and familiarity with, modern separation and analytical methods. Initial work will include the synthesis of sequence-specific DNA binding agents. Analysis of the binding of these agents to DNA will also be performed by the scientist. Experience with gel electrophoresis and with radioisotopes preferred. Computer literacy and familiarity with a variety of appropriate chemistry-related software packages and some modelling experience preferred. Communication skills to present/explain scientific results.

Postdoctoral openings are for one year, extendible up to two years by mutual agreement. **Position #377MS.**

B.S./M.S. Chemist

Major responsibility is the design, synthesis, purification and identification of appropriate quantities of novel chemical entities in support of various cancer drug discovery programs. The individual will collaborate/interact with a broad group of scientists in Oncology Research and other areas at Sandoz and with various outside collaborators.

M.S. in Organic Chemistry and 3-5 years of experience or equivalent in academic and/or industrial setting. Training/experience in the synthesis of complex molecules. Thorough training in, and familiarity with, modern separation and analytical methods. Previous experience in cancer and/or chemotherapeutic drug development preferred. Computer literacy and familiarity with a variety of appropriate chemistry-related software packages preferred. Communication skills to present/explain scientific results. **Position #2293DC.**

Being part of the research team at Sandoz has many advantages. Our salaries and benefits programs are designed to attract top candidates and provide them with the resources to produce their best. Comprehensive health, dental, and savings plans as well as fitness and athletic facilities are all provided at our attractive location in northwest New Jersey, which also allows for outstanding academic, cultural and outdoor pursuits. For consideration, please forward your curriculum vitae, a statement of research interests and the names and addresses of three references to:

SANDOZ PHARMACEUTICALS CORP

SRI Human Resources Department
Building 403/1
East Hanover, New Jersey 07936
An Equal Opportunity Employer M/F/D/V



SANDOZ

bringing research to life

POSITIONS OPEN

HUMAN GENETICS AT THE UNIVERSITY OF UTAH

The University of Utah, Department of Human Genetics would like to fill two faculty positions at the **RESEARCH ASSISTANT PROFESSOR** level. The Department would like to recruit candidates that have a Ph.D. with three or more years of research in creation of mice that carry various mutations in specific genes involved in inner ear development using gene targeting in embryonic stem cells. Analysis of mutant phenotypes presented by mice that carry targeted or spontaneous mutations in genes involved in inner ear development. Knowledge of mouse genetics, development and anatomy. Specific techniques used: DNA cloning and sequencing; Southern, Northern, and Western blotting; Mammalian cell culture; Histology, histochemistry and immunohistochemistry in situ hybridization.

Application deadline will be August 30, 1992. Applications submitted after the deadline may be considered if no qualified candidates have applied by the deadline. Send curriculum vitae and references to: **Dr. Raymond F. Gesteland, Human Genetics Department, University of Utah, Building 533, Room 2100, Salt Lake City, UT 84112.** The University of Utah is an Equal Opportunity Employer.

VERTEBRATE BIOLOGIST

The Department of Biology at Southwest Missouri State University (SMSU) invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** rank. The preferred starting date is January, 1993. Applicants must have a Ph.D., teaching experience at the undergraduate level and evidence of productive research in vertebrate biology. The primary teaching responsibility will be Comparative Anatomy. Other teaching duties will include participation in the general zoology program and instruction in the applicant's specialty. The successful candidate will be expected to seek outside funding to support an active research program. Applicants should send curriculum vitae, transcripts, and the names and addresses of three references by **September 1, 1992** to: **Dr. Russell Rhodes, Vertebrate Biologist Search Committee, Department of Biology, Southwest Missouri State University, 901 South National, Springfield, MO 65804-0095.** SMSU is an Affirmative Action/Equal Opportunity Employer and encourages applications from minorities and women.

VISITING ASSISTANT PROFESSOR OF BIOLOGY NON-TENURE TRACK

The College of Basic Sciences, Louisiana State University (LSU), anticipates a non-tenure track visiting assistant professor position to begin by August 10, 1992. This is a teaching position supported by grant funds for persons intending to pursue a career in college life science teaching. Duties include laboratory coordination and supervision of student workers and teaching assistants in major and non-major introductory laboratories as well as one lecture section in introductory biology. The successful applicant will also have administrative/research responsibilities associated with educational grant initiatives at LSU. A Ph.D. in any field of biology is required. Applications including curriculum vitae, three letters of reference, and a written statement of educational objectives should be addressed to: **Dr. Marshall D. Sundberg, 32 Agricultural Administration, Louisiana State University, Baton Rouge, LA 70803.** Application deadline August 5, 1992. LSU is an Equal Opportunity/Equal Access Employer.

BIOMEDICAL RESEARCH LABORATORY MANAGER, CHILDREN'S HOSPITAL. Manage a basic biomedical academic research facility involving several principal investigators and ca. \$3.0 million annually. Provide administrative and financial services, supervise technical staff and serve as a computer and graphics resource. Represent the facility to the Hospital, Harvard Medical School and outside vendors.

Requires excellent management skills, detailed familiarity with biomedical research labs, knowledge of Macintosh, especially graphics applications, and at least five years of experience.

Send résumé and references to: **Merton Bernfield, M.D., Joint Program in Neonatology, Harvard Medical School, 300 Longwood Avenue, Boston, MA 02115.**

POSITIONS OPEN

FORESTRY DEPARTMENT CHAIR. Candidates must have: an earned doctorate and a degree in forestry or another renewable natural resource field; strong teaching, research or extension background and an outstanding record of scholarly accomplishments; proven communication skills. Applicants should send résumé, academic transcripts and names and addresses of five references to: **Dr. Loukas G. Arvanitis, Department of Forestry, University of Florida, Gainesville, FL 32611-0420.** Application deadline: **October 15, 1992.**

HEAD, DEPARTMENT OF BIOCHEMISTRY FACULTY OF MEDICINE THE UNIVERSITY OF BRITISH COLUMBIA

The Faculty of Medicine, University of British Columbia (UBC) invites applications and nominations for the position of Head of the Department of Biochemistry.

We seek an academic leader who will direct and develop the teaching and research programs of the Department. The Department has 25 Full-time Faculty members and attracts research support of approximately \$5.5 million annually. Candidates should be qualified biochemists with a proven record of scholarly achievement and a strong research background, a commitment to undergraduate and graduate teaching and the ability to encourage and to develop interdisciplinary initiatives. Starting date will be July 1, 1993. Salary will be commensurate with experience and qualifications. This appointment is subject to final budgetary approval.

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

Applications, accompanied by detailed curriculum vitae and the names of three references, should be directed by September 30, 1992 to: **Dr. M.J. Hollenberg, Dean, Faculty of Medicine, University of British Columbia, Room 317, Instructional Resources Centre, 2194 Health Sciences Mall, Vancouver, B.C. CANADA V6T 1Z3.**

GENETIC TOXICOLOGIST

Microbiological Associates is a leading international provider of mutagenicity testing services to the chemical and pharmaceutical industries. Our growing businesses have provided an immediate opportunity for an outgoing individual holding an M.S. or Ph.D. degree to join our staff of experienced scientists.

The **DEPARTMENT MANAGER/STUDY DIRECTOR** will oversee in vitro and in vivo cytogenetics assays and assist in the development of new assay systems. Excellent communication skills and two to four years of experience in a GLP-complaint industry or contract lab preferred.

We offer a comprehensive compensation package that includes relocation assistance. Please send your curriculum vitae to: **MICROBIOLOGICAL ASSOCIATES, INC., 9900 Blackwell Road, Rockville, MD 20850.** Fax: 301/738-1036. Equal Opportunity Employer, M/F/H/V.

WILDLIFE RESEARCH ADMINISTRATION

The U.S. Fish and Wildlife Service in Jamestown, North Dakota, seeks a **SENIOR WILDLIFE RESEARCH MANAGER** to administer its Northern Prairie Wildlife Research Center located in Jamestown with field stations at Dixon, California; Delano, California; and LaCrosse, Wisconsin. The Center is responsible for conducting research on waterfowl west of the Mississippi River, excluding Alaska and the gulf coast. The Center Director is responsible for integrating management of a broad, multidisciplinary program on migratory birds, upland ecology and waterfowl modeling activities. Applicants must have one year of specialized experience equivalent to the next lower grade level in the Federal service. Salary range: \$64,233 to \$83,502 (GM-15). Individuals currently employed by the Federal Government should submit an SF-171 to: **U.S. Fish and Wildlife Service, Department of the Interior, Washington Headquarters Personnel Office, MS 100 ARLSQ, 1849 C Street, N.W., Washington, DC 20240.** Non-government applicants should submit an Application for Federal Employment (SF-171) to: **Office of Personnel Management, Twin Cities Service Center, Federal Building, Room 501, Ft. Snelling, MN 55111.** For further information, call Pearl Inge (703) 358-1743. Applications must be received by close of business August 14, 1992. The U.S. Fish and Wildlife Service is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

HEAD, DEPARTMENT OF BIOLOGY UTAH STATE UNIVERSITY

A distinguished scientist is sought to serve as head of a large and diverse biology department. The candidate must have a Ph.D. in a relevant field, leadership abilities, and an understanding of the teaching, research and extension roles of a land-grant university. A broad appreciation for teaching and research in the ecological, organismal, and molecular aspects of biology from both basic and applied perspectives is necessary. Significant academic experience, a notable research career, and recent success in extramural funding are required. The candidate should be tenurable at the full professor level. The head oversees the activities of 45 faculty, 9 administrative staff, and approximately 500 undergraduate and 75 graduate students. The head also promotes the department's affiliations with other campus units including the Biotechnology Center, Ecology Center, Extension Services, Molecular Biology Program, and Utah Agricultural Experiment Station. Candidates must send curriculum vitae, a statement of research, teaching and administrative goals, and have three reference letters sent to: **Dr. Jon Takemoto, Chair, Search Committee, Department of Biology, Utah State University, Logan, UT 84322-5305.** Telephone: (801) 750-1770, FAX: (801) 750-1575. Screening of applications will begin October 1, 1992, and will continue until a suitable candidate is found. Utah State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.

BIOLOGY INSTRUCTOR WASHTENAW COMMUNITY COLLEGE (WCC)

A comprehensive two-year college dedicated to student, community, and staff success, is presently seeking a qualified individual to teach preparatory, first and second year college-level courses in Biology. Prefer a person with a strong background in Microbiology, Botany and General Biology. The College is located in the city of Ann Arbor, Michigan, a community of over 100,000, whose growth and vitality is supported through cultural enrichment of the arts, entertainment, Big Ten sports, and the surrounding metropolitan area.

The successful candidate must possess a Master's degree in Biology, Biology Education or closely related Biology area, two years of successful teaching experience, preferably at the community college level and demonstrated experience in developing Biology teaching materials.

Anticipated date of appointment is January 4, 1993. Initial annual salary: \$26,900 to \$36,021 dependent upon education and related experience; base of 32 weeks/450 contact hours/160 days per academic year with numerous fringe benefits.

Deadline for receipt of official WCC application form is August 31, 1992. Résumés received in lieu of official WCC application are not acceptable.

To apply, send completed official WCC application form to: **Office of Human Resource Management, Washtenaw Community College, 4800 East Huron River Drive, PO Box D-1, Ann Arbor, MI 48106.** Telephone: (313) 973-3497. The College, through its Affirmative Action goals, is seeking candidates who will augment the diversity of its faculty, staff and administration. Women and minorities are encouraged to apply.

FACULTY POSITION BIOLOGY OF INFECTIOUS DISEASES

The Department of Molecular Genetics and Cell Biology at The University of Chicago invites applications for a junior or intermediate level tenure-track position to investigate the basic biology of infectious diseases. Host-parasite interactions, the immune response to infection, and basic mechanisms of pathogenesis by bacteria, fungi and parasites are examples of research interests appropriate for this position. Significant postdoctoral experience is required. In addition to establishing an independent research program and participating fully in the graduate programs of the Department and of the Division of the Biological Sciences, the individual filling this position will have the opportunity to interact with clinicians and trainees of the Departments of Medicine and of Pediatrics interested in infectious diseases. Applicants should send curriculum vitae, a statement of research interests and a list of at least three references to: **Dr. Wolfgang Epstein, Microbiology Search, Department of Molecular Genetics and Cell Biology, 920 East 58th Street, Chicago, IL 60637-1474.** The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR VIROLOGY

Faculty-Level Position at the NIH

A tenured/tenure-track position is available in the Laboratory of Viral Diseases, NIAID, NIH. The Laboratory is located on the intramural campus of the NIH in Bethesda, Maryland, and has outstanding facilities and resources. It comprises five independent sections and is similar to a small academic department. Current interests of the present staff include: regulation of viral gene expression; DNA replication and recombination; virus receptors; assembly of virus particles; mechanisms of viral pathogenesis; cell mediated immunity to viruses and antigen processing; and new approaches to vaccines and antiviral agents. The successful applicant will receive resources to establish and maintain an independent research program involving molecular virology. Salary will be commensurate with experience.

Applications should include a c.v. with bibliography, a statement of research interests and the names and addresses of three references. Applications should be sent to:

**Dr. Bernard Moss, Chairman
Search Committee
Laboratory of Viral Diseases, NIAID
National Institutes of Health
Building 4, Room 229
9000 Rockville Pike
Bethesda, MD 20892**

NIH is an Equal Opportunity Employer

Director - Immunology

Experienced scientist to lead research focused on development of immunodirected therapies using marine toxins including prodrugs, bispecific antibodies and other highly innovative uses for mAbs. Develop new product proposals, contract immunoassay research and grant proposals. Hands on involvement expected. Industry management experience highly desirable. This position offers an opportunity to shape the future of the business and share in its rewards.

Hawaii Biotech offers competitive salary and benefits, extraordinary opportunities for equity participation, and a location with quality of life second to none. Send your application, résumé and three references to:

**Tom Humphreys, Ph.D.
Vice President
Hawaii Biotechnology
Group, Inc.
99-193 Alea Heights Dr.
Honolulu, HI 96701**



Postdoctoral Opportunities at Pfizer

The Central Research Division of Pfizer Inc offers three unique postdoctoral positions, each comprising a 3 year appointment that includes 18 months in our laboratories followed by 18 months in an academic laboratory.

Brown Fat Metabolism

This position requires a scientist with a PhD in Molecular Biology or related area and an interest in obesity and brown fat-specific gene regulation. The study, to be carried out in the Department of Molecular Genetics at Pfizer and with Dr. Leslie Kozak at The Jackson Laboratory, will focus on the mechanism of glycerol 3-phosphate dehydrogenase induction in brown fat tissue (see Kozak, L. et al. *Genes and Development* 5: 2256-2264 [1991]). Publication of the results of these studies will be expected.

Structure/Function of G Protein-Coupled Receptors

The study, to be carried out in the Department of Molecular Genetics at Pfizer and with Dr. James Krause at the Washington University School of Medicine, will focus on the generation and expression of mutant and chimeric tachykinin receptors. Publication of the results of these studies will be expected. This position requires a scientist with a PhD in Molecular Biology, Cell Biology, Neurobiology or related area and an interest in receptor structure as it relates to ligand binding and signal transduction.

Molecular Immunology

A postdoctoral opportunity, to be carried out in the Department of Molecular Genetics at Pfizer and at Yale University, will study the transcriptional regulation of the human CD8 gene complex both *in vitro* and in transgenic animals. This work will focus on the role of previously identified transcriptional control regions and potential secondary structure in the developmental regulation of this gene complex. Requires a PhD in Molecular Biology, Immunology or a related area. Publication of results is expected.

These positions include a stipend, medical and dental insurance, and relocation assistance. To be considered please forward your *curriculum vitae* and the names of three references, indicating position of interest, to: **Mr. Kym Goddu, Personnel Associate, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** An equal opportunity employer.



Central Research
Bringing science to life.

These aren't Jobs, They're Opportunities

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Here at Chiron, we are on the leading edge of biotechnology research and scientific advancement. Our work in AIDS, herpes, hepatitis, oncology and ophthalmology has produced an array of important therapeutic and diagnostic tools. We are changing the way these and many other diseases are understood and treated. We are a global organization, with significant businesses in: diagnostics, therapeutics, vaccines and ophthalmics. This solid and diversified foundation has created exceptional opportunities for our people to make a difference. Join us. You will apply your talents working for humankind, discovering rewards far greater than you imagined.

— — — —

Associate Director, **Synthetic Organic Chemistry** (Box # 192-70)

You will organize and direct programs exploiting proprietary technologies for the creation of chemically diverse compounds for use in discovery research. Initiate and direct synthetic organic chemistry programs targeted at designing and creating novel libraries of building blocks, as well as maintaining inventories through in-house process development or outside contract labs. Your qualifications must include a Ph.D. and a minimum of ten years industrial experience with a versatile, broadly-based, in-depth background in synthetic organic chemistry, medicinal chemistry, molecular modeling, peptide synthesis and peptido-mimetics, as well as knowledge of cellular and molecular biology, and both biochemical and classical pharmacology. Experience preparing patent applications is also important. A background in natural products isolation and structure proof is a plus.

Openings at other levels also planned.

Associate Director, **Molecular Pharmacology** (Box #WM-1)

You will direct a program exploiting proprietary technologies for the creation and screening of biologically-based random peptide libraries, and initiate internal therapeutic programs and establish major

outside collaborations. Potential products initially arising from this program will include both peptides and modified peptides. In addition to a Ph.D. or M.D./Ph.D., an especially broad background is required encompassing a working knowledge of cellular and molecular biology, biochemical pharmacology and several areas of classical pharmacology. This is a position that demands considerable independence, superior management skills and an outstanding scientific reputation.

Associate Director, **Pharmacokinetics** (Box #92-123) *and Associate Director,* **Toxicology** (Box #BZ-1)

Join impressive teams working at the preclinical/clinical interface and collaborate with clinical therapeutics to direct human efficacy studies. You will study the preclinical effects of cytokines and colony stimulating factors as well as other protein products, including antibodies. Begin investigations into the efficacy and safety of a rich variety of novel therapeutics from proteins to peptides to "peptoids" to anti-sense agents, and ranging from cancer to infectious diseases to cardiovascular and central nervous system indications. Required are a Ph.D., M.D., or D.V.M., broad working knowledge of preclinical development and some understanding of regulatory affairs. Experience directing contract studies with outside laboratories and collaborating with the FDA is a clear advantage. Superior writing skills are essential.

*Openings at the Senior Scientist
level also available in Pharmacology,
Pharmacokinetics, and Toxicology.*

At NPS Pharmaceuticals, Inc., our novel focus involves more than an outstanding vision of science. It involves the development of talent and leadership. It involves growth...for Scientists like you who are serious about success.

Our exciting and rapidly growing young pharmaceutical company is building its capabilities in medicinal chemistry and drug metabolism/pharmacokinetics in order to accelerate development of small molecule leads in anticipation of clinical trials in the areas of osteoporosis, hyperparathyroidism and stroke.

DEVELOPING IMPORTANT THERAPIES AND CAREERS.

NPS combines a novel focus on calcium-related drug targets with a nontraditional program in discovery of natural product drug leads. NPS Pharmaceuticals has developed a unique multidisciplinary program in the pathophysiology and pharmacology of calcium-mediated regulation. The company has built a significant library of novel compounds as well as identified lead compounds for its programs and has developed a strong portfolio of issued and pending patents. As part of its expanding product development efforts, NPS Pharmaceuticals is in the process of building a team of highly talented scientists in the medicinal chemistry and drug metabolism areas.



MEDICINAL CHEMISTRY

Opportunities are available in medicinal chemistry at the Ph.D., M.S. and B.S. levels. Candidates should have training in synthetic organic chemistry and an outstanding record of productivity. Responsibilities will include synthesis, structural analysis and purification, and successful candidates will be expected to work closely with colleagues in biology and molecular biology in an interdisciplinary team. Pharmaceutical industry experience is desirable.



DRUG METABOLISM/PHARMACOKINETICS

Candidates at all levels will also be considered in the area of drug metabolism and pharmacokinetics. Successful candidates will have responsibilities for the development of analytical methods for drugs and their metabolites in biological fluids and tissues. Additional responsibilities will include design of pharmacokinetic studies, elucidation of metabolic pathways, and oversight of similar work at contract labs. Proven scientific ability and training in pharmacokinetics, pharmacology, analytical chemistry or related discipline is required and industrial experience is preferred.

If you have a desire to make a large impact in a growing company and a creative approach to your discipline that will complement NPS's novel biological approaches to major disorders, we would like to hear from you. NPS Pharmaceuticals is backed by substantial venture capital investment and is located in the University of Utah Research Park at the foot of the Wasatch mountains. We offer competitive salaries, comprehensive benefits, and a stimulating atmosphere in which to do important work. No calls or agency referrals please. Please send your resume to: **Director of Personnel, Reference #MC792, NPS Pharmaceuticals, Inc., 420 Chipeta Way, Salt Lake City, UT 84108.** NPS Pharmaceuticals, Inc. is an Equal Opportunity Employer.



NPS
PHARMACEUTICALS

POSITIONS OPEN

COLUMBIA UNIVERSITY DEPARTMENT OF OPHTHALMOLOGY FACULTY AND RESEARCH POSITIONS OXIDATIVE STRESS AND MOLECULAR BIOLOGY

The department is seeking outstanding individuals for full-time at the non-tenure **PROFESSOR (1), SENIOR RESEARCH SCIENTIST (1)** and **POSTDOCTORAL (2)** levels to develop or join research programs related to the impact of oxidative stress on cataract development and molecular biology of the lens epithelium. The candidates for the senior positions must have established records of excellence in either oxidative stress, molecular biology or molecular genetics of mammalian systems. Applicants should submit recent curriculum vitae and names of three references to: **Search Committee, Department of Ophthalmology, Edward S. Harkness Eye Institute, 635 West 165th Street, Room 218, New York, NY 10032. Columbia University takes Affirmative Action to ensure Equal Opportunity.**

SENIOR FACULTY POSITION BIOMOLECULAR X-RAY CRYSTALLOGRAPHY

WASHINGTON STATE UNIVERSITY (WSU)

The Department of Biochemistry and Biophysics seeks a well-established crystallographer with outstanding abilities in research and approximately five years or more of experience before the doctorate in the crystallography of proteins (or protein-nucleic acid complexes). **Applications will be screened beginning September 21, 1992** until the position is filled. After interviewing selected applicants, the successful candidate will be appointed part-time *in absentia* and collaborate with WSU in securing funds to develop the Laboratory of Biomolecular Crystallography. The individual will be appointed full-time as Associate or Full Professor when equipping and staffing of this Laboratory are assured; the target date is August 16, 1994. Send curriculum vitae, research plans, names, addresses, telephone and FAX numbers for four references to: **Dr. B. A. McFadden, Search, Washington State University, Pullman, WA 99164-4660. Telephone: (509) 335-4937. WSU IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EDUCATOR AND EMPLOYER. PROTECTED GROUP MEMBERS ARE ENCOURAGED TO APPLY.**

RESEARCH FACULTY POSITION IN MOLECULAR PATHOGENESIS

The Public Health Research Institute (PHRI) invites applications for appointment as a member of its research faculty at either the junior or senior level. Candidates must have training and experience of the highest quality and a research program addressing fundamental questions on the mechanism of pathogenesis in prokaryotic systems, preferably related to tuberculosis or other mycobacterial diseases. The research program must be funded or, in the case of a junior applicant, eminently fundable. The PHRI is an independent, not-for-profit research organization founded in 1942. Its current programs center on basic molecular biology and molecular genetics of disease-causing organisms. The PHRI offers an excellent research environment and laboratory facilities, start-up funds, and a generous benefits package. Salary is negotiable. Candidates should submit curriculum vitae, a statement of research interests and accomplishments, and a list of at least three references. Review of applications will begin on 7 September 1992, but applications will be accepted until the position has been filled.

Applications should be sent to: **Dr. Leonard Mindich, Chairman, Recruitment Committee, Public Health Research Institute, 455 First Avenue, New York, NY 10016. The PHRI is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION MEMBRANE/PARASITE BIOCHEMISTRY

NIH-funded, renewable position available to work on the isolation/characterization of mitochondrial enzyme systems crucial to the anaerobic energetics of parasitic helminths. Candidate, having a Ph.D. or equivalent in cell biology/biochemistry, with interests in mitochondrial energetics and proton pumping systems is desirable. Send résumé and names of three references to: **Dr. Carmen F. Fioravanti, Department of Biological Sciences, Bowling Green State University, Bowling Green, OH 43403-0212. Deadline August 21, 1992 or until filled. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

FACULTY NEUROSCIENCES

UMDNJ, New Jersey's university of the health sciences, seeks a tenure-track or tenured basic Neuroscientist to play a major role in graduate and undergraduate teaching programs. A strong funded research program is required. Rank and salary are competitive. Send curriculum vitae and three references to: **Robert Ledeen, Ph.D., Department of Neurosciences, UMDNJ-New Jersey Medical School, 185 South Orange Avenue, MSB/H506, Newark, NJ 07103. UMDNJ is an Affirmative Action/Equal Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.**

POSTDOCTORAL POSITION. Available immediately. Investigate structure and function of the aryl hydrocarbon receptor and of other proteins binding to xenobiotic responsive elements. Experience in molecular biology desired. Send curriculum vitae and names of three references to: **Dr. John Dougherty, Roger Williams Cancer Center, 825 Chalkstone Avenue, Providence, RI 02908. Equal Opportunity Employer.**

POSTDOCTORAL POSITION—Available immediately, to study non-P-glycoprotein multidrug resistance in human leukemia cells which are defective in drug accumulation. Work will focus on the cloning and analysis of cDNAs which encode proteins involved in drug transport processes. Standard molecular genetic techniques for cDNA cloning is required. Send curriculum vitae with references to:

**Dr. Melvin S. Center
Division of Biology
Ackert Hall**

**Kansas State University (KSU)
Manhattan, KS 66506
Telephone: 913-532-6661**

KSU is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION AVAILABLE FOR TRAINING IN MOLECULAR CARDIOLOGY

Studies will involve utilizing techniques of molecular biology to examine function, structure and regulation of the endothelial cell nitric oxide synthase. Opportunities available for active collaboration among several laboratories utilizing a multidisciplinary approach to the study of this important enzyme as it relates to the broad areas of endothelial cell and vascular biology. Previous experience with biochemistry or molecular biology is desirable. Please address inquiries to: **David G. Harrison, M.D., P.O. Drawer LL, Division of Cardiology, Emory University School of Medicine, Atlanta, GA 30322, telephone: (404) 727-3710, FAX: (404) 727-3330.**

POSTDOCTORAL POSITION

Available to investigate vitronectin-like adhesion molecules in plants including their isolation, localization, and function in pollination and development. The candidate should be skilled in techniques of molecular biology, immunology (including immunocytochemistry), and ultrastructure. The project is a cooperative one between the labs of E. Lord and L. Walling. Send curriculum vitae to: **Elizabeth Lord, Department of Botany and Plant Sciences, University of California, Riverside, CA 92521. Application deadline is August 15, 1992.**

The University of California, Riverside, is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.

POSTDOCTORAL ASSOCIATE

A postdoctoral position is available immediately to study the effects of ethanol consumption on hepatic proteolytic systems. Specific projects include investigations of lysosomal proteolysis, cellular autophagy and ubiquitin-mediated proteolysis in the whole organ as well as in isolated hepatocytes. A background in biochemistry and/or cell biology is preferred. Please send curriculum vitae and the names and addresses of three references to: **Dr. Terrence M. Donohue, Jr., Liver Study Unit, VA Medical Center and University of Nebraska Medical Center (UNMC), 4101 Woolworth Avenue, Omaha, NE 68105. UNMC is an Equal Opportunity Employer. Women and minorities are encouraged to apply.**

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** available immediately in a group interested in chemosensory transduction, to study ligand-gated taste receptors. One position is for a Molecular Biologist, while the other is for an individual with background in electrophysiology and/or optical measurements of intracellular Ca^{2+} in single cells using fura-2. This is an excellent opportunity to work in an emerging field as part of an interdisciplinary group. Please send curriculum vitae and three letters of reference to: **Dr. John H. Teeter, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, PA 19104.**

POSTDOCTORAL POSITION available September 1, 1992 to study macromolecule transport in tumors using an *in vitro* B16 melanoma model. Work will involve development/characterization of model system and transport studies. Requires Ph.D. in cell biology, biochemistry or related field and experience in cell culture techniques. Preference will be given to candidates having experience with B16. Send curriculum vitae and names of three references to: **Dr. Elizabeth M. Topp, Department of Pharmaceutical Chemistry, 3006 Malott Hall, The University of Kansas, Lawrence, KS 66045-2504. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS VANDERBILT UNIVERSITY

Several positions available in August at Vanderbilt University School of Medicine. Research involves design of HIV vaccine and protein engineering. Training in immunology, lipid/liposome chemistry or peptide/protein chemistry is essential. Send curriculum vitae and names of three references to: **Dr. James P. Tam, Department of Microbiology and Immunology, A5301 Medical Center North, Vanderbilt University, Nashville, TN 37232-2363. Vanderbilt University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION to study the biochemistry and genetics of glycoproteins, dolichol-linked oligosaccharides, and GPI-lipid anchors in mammalian cells. See JBC 265:2296; 265:14250; 267:8895; Glycobiology 1:553-562. Send curriculum vitae and names/telephone numbers of three references to: **Mark A. Lehman, Department of Pharmacology, University of Texas (UT) Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235. UT Southwestern is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION WITH THE PLANT GENOME PROJECT to work cooperatively with USDA Plant Genome Initiative as technical advisor to PG Data and Information Center (National Agricultural Library, Beltsville) on the development of the Plant Genome Database and information products. Ph.D. in molecular genetics required. Send application, résumé and three letters of recommendation to: **Dr. James L. Reveal, Department of Botany, University of Maryland, College Park, MD 20742-5815 by 21 August 1992. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

Available immediately to develop a new approach to the physical mapping of genomes (distances 20 Kb to several Mb) using naked DNA and fluorescence imaging. Expertise in nucleic acid manipulations is required. Send curriculum vitae and ask three people to write letters to: **Arnold Bendich, Botany Department KB-15, University of Washington, Seattle, WA 98195. Telephone: 206-685-3801.**

POSTDOCTORAL POSITION: Individual interested in the area of bone biochemistry and bone homeostasis. This group is interested in understanding the function of bone related proteins, cellular regulation, mineralization, and the overall organization and structure of bone. Studies will involve assessing the deposition and ordered assembly of extracellular matrix proteins. Candidates should possess an M.D. or Ph.D. with experience in biochemistry. Send curriculum vitae, selected papers and names of three references to: **Kenneth G. Mann, Ph.D., Professor and Chair, Department of Biochemistry, College of Medicine, Given Building, University of Vermont, Burlington, VT 05405-0068.**

to Improve the Human Condition.

Scientists

Computational & Biophysical Chemistry

(Box # Biochem-1)

We are looking for creative, Ph.D. level individuals with industry experience and skills in molecular modeling, artificial intelligence and/or chemical physics. These positions involve strong collaborations with organic and biological chemists, and cellular and molecular biologists. Experience with quantitative structure activity relationships or G-protein coupled receptors a plus.

Positions at Various Levels

Bio-Organic Chemistry

(Box # Bio-Org-1)

We are looking for individuals with a B.S./M.S. or Ph.D., together with a well-rounded background in chemistry, biochemistry and biology. A synthetic organic chemistry background, as well as a facility with computers and a broad range of equipment are essential. Physics or robotics engineering familiarity a plus.

Positions at Various Levels

Biological Chemistry

(Box # Rabio-1)

Study the molecular basis of angiogenesis and metastasis. You will investigate the receptor binding and processing enzymes of various protein factors and their mimics, including fibroblast growth and tumor necrosis factors. You will also research novel cell adhesion mechanisms, including those of the integrin family, and aid in the development of new ligands for G-protein coupled receptors. We have openings at various levels for outstanding Enzymologists, Receptor Biochemists, Cellular Biochemists, and Molecular Biochemists.

Positions at Various Levels

Molecular Biology

(Box # Ramobio-1)

Participate in the discovery and development of growth factors, cytokines, and their receptors. You will research and develop innovative technologies for improved mammalian, insect and microbial expression. We are looking for dedicated, creative scientists with relevant experience.

Scientist

Biochemical Engineering

(Box # 92-202)

You will design and scale-up purification processes for a variety of recombinant proteins with therapeutic applications, as well as participate in FDA and other regulatory submissions. Necessary are a Ph.D. and 1-3 years experience or an M.S. with 3-6 years in the Biotechnology/Pharmaceutical industry, working knowledge of engineering principles involved in protein purification (e.g. SEC, IEX, affinity separations, etc.) and the ability to scale up these processes to meet GMP production requirements.

Scientists

Protein Chemistry

(Box # Prochem-1)

Play a key role in programs to characterize and develop proteins for therapeutic and vaccine indications. Required are a Ph.D. with demonstrated background in protein purification and characterization, as well as postdoctoral experience.

Positions at Various Levels

High Volume Screening

(Box # Volscr-1)

Individuals must have experience with cell culture, especially baculovirus expression systems, microtiter assays, robotics and computer programming. Experience with receptor, enzyme and second messenger systems, including radiochemical binding assays, also required. Familiarity with fluorescence assays is a plus.

Join us in the beautiful San Francisco Bay Area and experience our cultural, educational and recreational diversity. If you have the dedication, spirit and flexibility to rise to our many challenges, contact us today. Please indicate the corresponding box number of interest and mail/fax your resume/CV to: Chiron Corporation, 4560 Horton St., Emeryville, CA 94608-2916, FAX (510) 601-2504. We are an equal opportunity employer.



CHIRON

Postdoctoral Scientist

Monoclonal antibodies (mAb) to the T cell antigens CD3 and CD4 are effective immunosuppressive agents *in vivo* and *in vitro*. Their exact mechanism of action is unclear but may include inhibition of lymphocyte activation, T cell depletion, and alteration of lymphocyte recirculation patterns.

The R.W. Johnson Pharmaceutical Research Institute (PRI), conveniently located in central New Jersey between New York City and Philadelphia, has an immediate opening for a post-doctoral fellow to study the mechanisms of immunosuppression and tolerance induction by anti-T cell mAb. Requirements include a Ph.D. in Immunology or a related field, experience in tissue culture, and a desire to work in a team-oriented environment. Experience in models of autoimmune disease desired.

This position provides liberal research support, excellent library facilities, and a good benefits package as part of Johnson & Johnson, the world's largest and most comprehensive provider of health care products. Ours is a smoke-free workplace. Please submit your curriculum vitae with the names of 3 references to: Ms. Gerry Scott-Higgins, Human Resources Dept. 15, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, NJ 08869-0602. An Equal Opportunity Employer, M/F



THE R.W. JOHNSON

PHARMACEUTICAL RESEARCH INSTITUTE

a Johnson & Johnson company

UNIVERSITY COLLEGE DUBLIN DEPARTMENT OF MEDICINE AND THERAPEUTICS Mater Misericordiae Hospital MOLECULAR BIOLOGIST (Ref: 73/92)

An opportunity is available to join a multidisciplinary group which has recently transferred from the US and is focussed upon the mechanisms and treatment of platelet dependent vascular occlusion. A background in expression systems, microinjection, antisense technology, gene transfer, gene knock out or transgenic technology is desirable. Areas of current work include the analysis of eicosanoid biosynthetic enzymes and cellular signal transduction systems, the structure function relationships of platelet receptors for adhesive macromolecules, the influence of thrombolytic agents on platelet and vascular function, and the development and delivery of novel antiplatelet and anti-thrombotic drugs.

Initial inquiries to: **Dr. G. A. FitzGerald**, telephone no. (+353-1) 307419. FAX: (+353-1) 307074. Please forward six copies of your curriculum vitae with the names of three referees to the: **Personnel Officer, University College Dublin, Belfield, Dublin 4, Ireland.** Telephone no. (+353-1) 7067777 ext. 1412. FAX: (+353-1) 2694409.

The closing date for receipt of completed applications is: **Thursday, 20 August 1992.**

U.C.D. is an equal opportunities employer

Research Assistant and Postdoctoral Positions in Molecular Biology

One research assistant and two post-doctoral positions in molecular biology are available immediately at the new Research Building of the Children's Hospital Research Foundation in Cincinnati. Research areas include molecular mechanisms of eukaryotic gene regulation and development using yeast and *Drosophila* as model systems. Candidates for the research assistant position should have a Bachelor's degree in Biology, Biochemistry or Chemistry and should be committed for at least 3 years. Candidates for the postdoctoral positions should have a recent Ph.D. or M.D. degree with strong background and research experience in Biochemistry, Molecular Biology or Genetics. Interested individuals should send curriculum vitae, a brief statement of research interest (post-doctoral applicants only), and names and addresses of three references to:

Dr. Jun Ma

**Division of Basic Science Research
Children's Hospital
Research Foundation
Elland and Bethesda Avenues
Cincinnati, OH 45229-2899
Tel: (513) 559-4544
FAX: (513) 559-4317
EOE M/F/D/V**

CALIFORNIA INSTITUTE OF TECHNOLOGY

Applications are being accepted for tenure-track faculty positions in Geophysics in the Division of Geological and Planetary Sciences. Both junior and senior academic levels will be considered. Outstanding individuals with a strong commitment to original research and teaching in fields related to geodynamics, seismology, and evolution and structure of the Earth and the terrestrial planets are encouraged to apply. It is expected that these faculty members would carry forward innovative research programs. We are especially interested in individuals whose research naturally links approaches involving existing or new techniques with existing programs in the Division. Strong interactions with research programs covering the full spectrum of the Earth and planetary sciences are encouraged. Areas of interest include:

Geodynamics: Physics of the solid Earth, employing observational, theoretical or experimental techniques. This may include studies of Earth structure, mantle convection, physics of the core, and mineral physics.

Seismology: Observational and theoretical seismology with experience in body waves, surface waves, normal modes, inversion and tomography with an interest in the structure and dynamics of the Earth's interior. An ability to use modern digital data is desired.

A curriculum vitae including a list of publications and a brief description of proposed research activities should be sent to **D. J. Stevenson, Chairman, Division of Geological and Planetary Sciences, 170-25, California Institute of Technology, Pasadena, California 91125.**

The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority candidates are encouraged to apply.

Faculty Positions in Immunology and Virology The Pennsylvania State University College of Medicine at Hershey

The Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine, invites applications for tenure-track faculty positions from outstanding candidates who are working in immunology and/or virology. We are seeking individuals who are using molecular and cellular approaches to better understand the development, function, or regulation of the immune response. We are also seeking molecular virologists with special consideration given to individuals working with HIV or other retroviruses, tumor viruses, as well as individuals studying the molecular basis of viral pathogenesis. Candidates at the **Assistant Professor** level are preferred; however, outstanding candidates for positions at the **Associate** or **Full Professor** level will be considered. All applicants must have a Ph.D. and/or M.D. degree, postdoctoral research experience and a strong record of research accomplishments. Successful applicants are expected to establish an extramurally funded research program. Availability of research facilities within the new Biomedical Research Building, strong departmental and interdepartmental graduate student training programs, and macromolecular synthesis core facilities all contribute to the productive research environment within the Department. Participation in the Department's graduate and medical student teaching programs is expected. Applicants should send their curriculum vitae, a statement of research interests and the names of at least three references to: **Dr. Richard J. Courtney, Chair, Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine, Post Office Box 850, Department 24, Hershey, PA 17033. The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**



**THE UNIVERSITY
OF QUEENSLAND**

Equal Opportunity in Employment is University Policy

Lectureships in Parasitology and Parasite Molecular Genetics Department of Parasitology

Applications are invited for the following fixed term positions:

Lecturer in Parasitology (Reference No. 26992)

To be responsible for undergraduate and postgraduate teaching in one of the following areas of parasitology: a) Parasites of Veterinary Importance; b) Ecology, modelling population biology; c) Protozoology; d) Functional morphology and life-cycles; e) Physiology, nature of parasitism.

Lecturer in Parasite Molecular Genetics (Reference No. 26892)

Offered by the Department of Parasitology in conjunction with the Centre for Molecular Biology and Biotechnology.

To develop and be responsible for undergraduate and postgraduate teaching in parasite molecular genetics. Applicants should have knowledge in molecular biology and parasitology and have research experience in the area.

A demonstrated capacity to attract research funds is desirable for both positions.

Salary: A\$41,000 – \$48,688 per annum. Closing date: 16 September 1992. Further information may be obtained from Professor C. Dobson, Head, Department of Parasitology, The University of Queensland, phone +61 7 365-2572, or for the second position: Professor J.S. Mattick, Director, Centre for Molecular Biology and Biotechnology, The University of Queensland, phone +61 7 365-4446.

The University requires an original plus seven (7) copies of an application. One (1) copy only of supplementary materials should be provided. Applications quoting appropriate reference number must be forwarded to the Director, Personnel Services, The University of Queensland, Qld 4072 Australia.



HEAD OF THE GLOBAL CHANGE DATA CENTER

The Goddard Space Flight Center is seeking candidates for the position of Head of the Global Change Data Center. The incumbent will be responsible for the Earth Observing System (EOS) – Systems Development Office, the Goddard Distributed Active Archive Center (DAAC) Facility, and the Earth Science Data Operations Facility. The incumbent must have demonstrated ability to manage complex data operations and archiving facilities related to Earth or space science research, including translating the needs of scientific data users into operational data systems.

The incumbent must have a bachelors degree (advanced degree preferred) in physical science, mathematics or engineering. He/she must be a recognized authority in science data systems development/operations, computer/data systems technology/techniques development, or Earth or space science data analysis, and have indepth experience in the processing, analysis and use of spacecraft-acquired Earth or space science data. Knowledge of some disciplines of Earth science is desired.

Salary (\$64,233-\$83,502) dependent on education and experience. Candidates should submit an Application for Federal Employment (SF-171) to NASA/Goddard Space Flight Center, Employment and Employee Services Branch, Code 115M, Greenbelt, MD 20771 by August 14, 1992.

General inquires should be directed to Dianne Hagerty at (301) 286-8319. Technical inquires should be directed to Robert Price at (301) 286-2239. U.S. Citizenship is required. Equal Opportunity Employer.

CIBA-GEIGY Ltd., Pharmaceuticals
Division, Research Department,
Basel, Switzerland

Applications are invited for a

Postdoctoral Research Position

in inflammation research to study the role of cytokines in inflammation. The successful candidate is expected to participate actively in an interdisciplinary research team and to contribute to its drug discovery efforts.

A solid background in pharmacology or biochemistry and experience in animal handling is required.

The CIBA-GEIGY Research laboratories in Basel, Switzerland, offer an excellent research environment. Publication of research data is encouraged.

Please send your curriculum vitae, a summary of your professional experience, including technical skills, and the addresses of two references under ref. "Science 8277" to Dr. U. Spaeti, CIBA-GEIGY Ltd., Personnel Dept., P.O. Box. CH-4002 Basel, Switzerland.

CIBA-GEIGY

PROJECT SCIENTIST FOR EDUCATION

The Educational and Public Affairs Office (EPAO) provides the public, news media, and educators with information on the activities and science mission of the Hubble Space Telescope and on astronomical research conducted at the Space Telescope Science Institute. The EPAO disseminates this information via media releases; photographs; educational video tapes; brochures and fact sheets; and other audio/visual materials. EPAO holds periodic open nights and lectures, supports national science writers and teachers workshops, and manages the Institute's Speakers Bureau and Astronomy Visualization (animation) Laboratory. To further science education at the secondary school and college level, the EPAO/ST Scl has been an active partner with Maryland Public Television in developing the Starfinder series, has produced various programs with NASA SELECT, and is a partner with The Johns Hopkins University and Morgan State University in the Johns Hopkins Space Grant Consortium.

ST Scl is seeking an astronomer with both research and educational experience to assist in the activities of the EPAO and to lead future efforts in support of science education. Candidates must possess a Ph.D. or equivalent in Astronomy, Planetary Science, or Physics, and experience in public education. The precise duties and level of the appointment, which may be tenured, will be commensurate with the accomplishments and experience of the candidate. ST Scl supports the research of scientific staff through internal grant, graduate student, and postdoctoral programs. Several workshops and symposia are held each year at the Institute. It is expected that the Project Scientist will continue productive independent research in a field related to the HST science mission.

ST Scl is committed to equal opportunity; women and minorities are strongly urged to apply. Candidates should send a curriculum vitae and bibliography, a brief statement of research and functional interests, and the names of four references to the Personnel Manager at the address below. Applications will be accepted until September 15, 1992.



**Space Telescope
Science Institute**
3700 San Martin Drive
Baltimore, Maryland 21218

EEO/AA/M/F/D/V

BIOCHEMIST/ENZYMOLOGIST

Merck Research Laboratories in West Point, a leader in pharmaceutical and biological research, has two excellent antiviral enzymology research career opportunities available in our Biological Chemistry department.

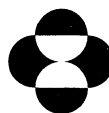
The senior research biochemist/biophysicist position deals with the mechanistic and biophysical studies of enzymes and proteins involved in the replication, infectivity or pathogenicity of human viruses. The focus of our research efforts is the identification of potential drugs and development of approaches to inhibit target enzymes.

Applicants must have a Ph.D. in chemistry/biochemistry with expertise and postdoctoral experience in protein chemistry, kinetics, enzyme structure function analysis. Experience in subcloning and mutagenesis is useful but not required.

The research technician position involves enzyme kinetics and protein purification. Applicants must have a B.S./M.S. Degree in chemistry or biochemistry and 1-2 years of general biochemistry laboratory experience with emphasis on enzyme and protein research studies.

Excellent salary and benefit programs accompany these positions at our modern research facilities located 25 miles northwest of Philadelphia.

Please send curriculum vitae with cover letter to: **Personnel Manager, Ad #D15, MRL Human Resources, WP42-2, Merck Research Laboratories, West Point, PA 19486.** EOE/AA/VH/Employer.



MERCK

Research Laboratories

AMERICA'S MOST ADMIRRED CORPORATION

SANDOZ Postdoctoral Fellowship In Molecular Toxicology

The Division of Pathology and Toxicology of the American Health Foundation has an opportunity for one or two years for a postdoctoral fellow to study molecular effects of pharmaceuticals in relation to their potential hazard to humans. The division has a broad-based program on chemical safety assessment involving research on peroxisome proliferators, antioxidants, antiestrogens, and quinoline antibiotics. The laboratory utilizes *in vivo*, *in vitro*, biochemical, and molecular techniques in these studies.

We also provide an excellent opportunity for independent research, within a modern environment in a pleasant Westchester County setting. If qualified, please direct your inquiry to: **Dr. Gary M. Williams, Director of Medical Sciences, American Health Foundation, One Dana Road, Valhalla, New York 10595.** We are an equal opportunity employer m/f/h/v.

**American Health
Foundation** 

National Institutes of Health CHIEF

Sexually Transmitted Diseases Branch

The Public Health Service, National Institutes of Health, National Institute of Allergy and Infectious Diseases (NIAID) is seeking candidates for Chief, Sexually Transmitted Diseases Branch, Division of Microbiology and Infectious Diseases, NIAID, NIH, PHS, Bethesda, Maryland. The Chief is responsible for the daily scientific management of an extramural research program in sexually transmitted diseases. Incumbent's role involves a broad range of scientific, managerial, and supervisory activities encompassing internal affairs and inter-organization relationships of the Institute in stimulating, developing, operating and coordinating a national program for the development of new detection methods, vaccines, other prophylactic and therapeutic agents, and behavioral approaches for the prevention, treatment, and control of STDs. Incumbent supervises a staff of four professionals and non-professionals. Applicants should possess a Ph.D., M.D., or equivalent degree, and should have demonstrated ability to work with a variety of public and private organizations as well as staff and researchers from multiple disciplines. This is a GM-15 position with a salary range of \$64,233 to \$83,502 per annum. U.S. citizenship required.

Applicants should send copies of curriculum vitae or Application for Federal Employment (SF-171) by **August 28, 1992** to:

Dr. Jane Kinsel, Assistant Director
Division of Microbiology and Infectious Diseases,
6003 Executive Boulevard, Room 3A19,
Bethesda, Maryland 20892.
Telephone (301) 496-1884, Telefax (301) 480-4528.

NIH is an Equal Opportunity Employer



Chair of Biochemistry (Ref. 91/92-96)

Applications are invited for the Chair of Biochemistry which will fall vacant on 1 July 1993, following the retirement of Professor T R C Boyde.

Applicants should have strong academic qualifications, a substantial record of research and publications, experience in administration and teaching. Preference may be given to medically qualified biochemists, but possession of a medical qualification is not essential. The subject is taught in the Faculties of Medicine, Science and Dentistry.

The University would prefer to make a permanent appointment, but consideration may be given to applications for appointment for a fixed-term or on secondment for a period of preferably not less than three academic years. An appointee to the Chair may be called upon to become Head of Department.

The University reserves the right not to fill the Chair or to fill the Chair by invitation or to make an appointment at a lower level.

Annual salary (superannuable) will be within the professorial range, of which the minimum is HK\$685,620 and the average is HK\$848,040 (approx. US\$1=HK\$7.70 as at 29 June 1992). At current rates, salaries tax will not exceed 15% of gross income. Housing at a charge of 7.5% of salary, children's education allowances, leave and medical benefits are provided.

Further particulars and application forms may be obtained from Appointments (40819), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK; or from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (Fax (852) 5592058; E-mail: APPTUNIT@HKUVM1.HKU.HK).

Closes: 4 September 1992.

Department of Food and Agriculture



VICTORIAN INSTITUTE OF ANIMAL SCIENCE PRINCIPAL SCIENTISTS (3 positions)

ANIMAL HEALTH, ANIMAL PRODUCTION & MOLECULAR BIOLOGY/GENETICS
Salary (PS-1) \$59,450 to \$65,600

DUTIES

You will be required to lead a group of approximately 50 scientific and technical staff. As a practicing scientist, you will initiate and conduct relevant research projects. You are expected to significantly influence strategic and operational planning for your discipline area across the Department of Food and Agriculture and to promote and negotiate on proposals for research funding. Reporting to the Director, you will assist in management of the institute.

QUALIFICATIONS

You will need an approved degree or diploma in a field of biological science, preferably with post graduate training or experience and achievement to PhD level. Experience in leadership of scientific teams and resource management. Ability to secure scientific research resources. Ability to conceptualize, promote, initiate and achieve research objectives. Well developed communication skills. An understanding of animal industries in Australia.

Applicants are encouraged to obtain a copy of the duty statement and selection criteria from Ms Erika Worl on telephone (03) 333 1200. For further information contact Dr Len Stephens (03) 333 1200.

Written applications quoting position number 05/05/3434/6 (Animal Health), 05/05/3435/7 (Animal Production), 05/05/3436/8 (Molecular Biology and Genetics) are invited from men and women, giving details of qualifications and experience and a business hours contact telephone number. Applications should be sent to the Personnel Officer, Victorian Institute of Animal Science, 475-485 Mickleham Road, Attwood, 3049, Victoria, Australia, Facsimile (03) 333 2471 and should be received by 31 August 1992.

VIAS maintains 2 campuses at Attwood & Werribee. The incumbent may be required to work at either location, as directed. VIAS has a smoke-free workplace policy.

AN EQUAL OPPORTUNITY EMPLOYER

Post-Doctoral Position Infectious Diseases

The PARKE-DAVIS Pharmaceutical Research Division of the Warner-Lambert Company seeks a self-motivated scientist to conduct genetic and biochemical research on general and specific mechanisms of antibiotic resistance in bacteria.

Required are a PhD in Molecular Biology, Biochemistry or a related discipline and experience with the fundamental methods of molecular biology. Familiarity with *Escherichia coli* as a genetic system is preferred.

Qualified individuals should send their resume and references to **Human Resources, Box JDM-63, PARKE-DAVIS Pharmaceutical Research Division, 2800 Plymouth Road, Ann Arbor, MI 48105.** "Smoke-Free Work Environment"



PARKE-DAVIS
People Who Care

"Equal Opportunity
in Action"

BIOMEDICAL RESEARCH

At the forefront of biomedical research, Program Resources, Inc. (PRI) is paving the way for new programs and discoveries at the National Cancer Institute's Frederick Cancer Research & Development Center (NCI-FCRDC).

Currently, we are seeking candidates with expertise in:

AIDS VACCINE DEVELOPMENT

Postdoctoral positions: PHD with experience in recombinant DNA technology and eukaryotic expression vectors to develop recombinant vaccines and/or immunology of viral infections (lymphocyte/macrophage culture, lymphoproliferative responses, ADCC, CTL, neut. assays) to assess host response to vaccines using human/nonhuman retroviruses.

ANIMAL MODELS DEVELOPMENT

Postdoctoral positions: PHD/DVM to work on immunopathogenesis of lentivirus infections and antiviral strategies using nonprimate retroviruses. Some experience in cell culture of leukocytes, virology, cellular/humoral immunity, cytokine assays, FACS,

transgenic animals, and/or recombinant DNA technology required.

RECOMBINANT DNA LABORATORY

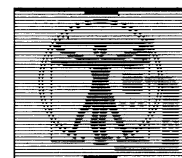
MS/BS with experience in recombinant DNA technology: cloning, cDNA synthesis, library preparation and screening, PCR, oligonucleotide synthesis, plasmid production and purification, RNA/DNA isolation, Southern/Northern blotting, expression vectors, protein analysis (Western blots, RIP) and cell culture.

You'll work in a campus-like setting in Frederick, MD near Baltimore and Washington, DC. PRI offers a salary commensurate with credentials and an attractive fringe benefits program. For consideration, forward CV/resume in confidence to Barbara J. Norton-Gill, Technical Recruiter.

PROGRAM RESOURCES, INC.

a DynCorp subsidiary
NCI-FCRDC
P.O. Box B
Frederick, MD
21702-1201

EOE, M/F



BIOLOGICAL SCIENCES

Cincinnati Center

Marion Merrell Dow Research Institute, headquartered in Cincinnati, Ohio is seeking creative, team-oriented pharmacologists, a biochemist and a microbiologist/enzymologist. Our research-based company is committed to many areas of drug research including cardiovascular diseases, cancer biology, CNS, and metabolic & inflammatory diseases.

Pharmacologist

Will perform electrophysiological experiments, using whole-cell and single channel patch clamp techniques to evaluate experimental compounds on ion channel activity in single cells. The ideal candidate will have:

- BS/MS or equivalent in a biology related area
- Delicate hand work skills are essential
- Laboratory experience in electrophysiology or cardiac research is preferred
- Working knowledge of electronics and personal computers is useful

Please respond to Job Code 07084.

Pharmacologist

Assists in designing and performing studies for the evaluation of novel cardiovascular agents. Requires in vivo experience and general biochemical assays. The ideal candidate will have:

- BS/MS in biology or equivalent
- 2 or more years of research experience
- Working knowledge of cardiovascular system
- Excellent oral and written communication skills

Please respond to Job Code 03911

Biochemist

Requires experience in ligand-protein interaction or protein function and the ability to use these skills to design highly sensitive and selective assays for drug discovery. Also must have the ability to creatively work both independently and in collaboration with chemists and biologists on site to rapidly discover leads for further chemical synthesis. The ideal candidate will have:

- Ph.D. in biochemistry, biology or equivalent, plus 2 years post-doctoral experience
- Experience in receptor or enzyme structure and function or second messenger assays
- Excellent oral and written communication skills
- Understanding of molecular biology and computer modeling of proteins desirable

Please respond to Job Code 00151.

Microbiologist/Enzymologist

Requires involvement in the application of enzyme/ whole cell biotransformations for the synthesis of new pharmaceuticals. The ideal candidate will have:

- Ph.D. in microbiology or related discipline
- Post-doctoral or equivalent industrial experience is preferred
- A working knowledge in microbial screening, pathway analysis and molecular biology
- Excellent oral and written communication skills

Please respond to Job Code 03270.

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, Job Code: 07084, 03911, 00151 or 03270, P.O. Box 9627, Kansas City, MO 64134. Equal Opportunity Employer.



MARION MERRELL DOW INC.

Roche

POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY

In our Department of Pharmaceutical Research — New Technologies are several post-doctoral positions available.

The positions require a Ph.D. and experience in Molecular Biology.

Applications are invited from individuals interested to work in a basic research environment to study:

- Transcriptional control mechanisms in eukaryotic cells
- Receptor-ligand interactions
- Eukaryotic Expression Systems.

The positions are available immediately.

Please send a curriculum vitae, any representative reprints and a summary of research interests to the Personnel Officer, Dr. Suzanne Gräzer, quoting reference Science—94/92/Grä.

F. Hoffmann-La Roche Ltd, CH-4002 Basel

NASA

HEAD, GODDARD DISTRIBUTED ACTIVE ARCHIVE CENTER

The Goddard Space Flight Center is seeking candidates for the position of Head of the Goddard Distributed Active Archive Center (DAAC), an operational data center for the international Earth science community. The incumbent must have demonstrated ability to manage data archiving facilities and to define and implement Earth science mission data requirements for archiving and distribution while working closely with the Earth science community both within and outside of NASA.

The incumbent must have a bachelors degree (advanced degree preferred) in physical science, mathematics or engineering and indepth experience in the processing and analysis of spacecraft-acquired Earth science data.

Salary range \$54,607 to \$83,502 dependent on education and experience. Candidates should submit an Application for Federal Employment (SF-171) to NASA/Goddard Space Flight Center, Employment and Employee Services Branch, Code 115J, Greenbelt, MD 20771 by August 14, 1992.

General inquires should be directed to Dianne Hagerty at (301) 286-8319. Technical inquires should be directed to Dr. Robert Price at (301) 286-2239. U.S. Citizenship is required. Equal Opportunity Employer.

BROOKHAVEN NATIONAL LABORATORY

POSTDOCTORAL RESEARCH ASSOCIATES Biology Department

The Biology Department at Brookhaven National Laboratory has positions available for:

- (i) A **MOLECULAR BIOLOGIST** with experience in DNA cloning,

sequencing and expression to conduct research on regulatory enzymes associated with photosynthetic membranes. Previous experience with *in vitro* mutagenesis and a strong interest in protein structure/function relationships would be advantageous. (ii) A **PROTEIN BIOCHEMIST** with protein purification, peptide analysis and analysis of terminal covalent modifications to conduct research on proteins associated with the stromal surface of the thylakoid membrane. Experience with phosphoproteins would be desirable.

Candidates should forward a curriculum vitae, a list of publications and the names and addresses of three references to: Dr. Geoffrey Hind, Biology Department, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer M/F/D/V.



**BROOKHAVEN
NATIONAL LABORATORY**
ASSOCIATED UNIVERSITIES, INC.

*at the center of science,
beside the sea*



Sphinx Pharmaceuticals Corporation is a rapidly growing, Durham-based biopharmaceutical company working in the area of lipid second messengers and signal transduction. Continued growth has created an immediate opening for a

PROTEIN CHEMIST

Our Protein Chemistry section is responsible for diverse activities ranging from basic discovery research on lipid-mediated intracellular enzymes to large-scale purification of recombinant proteins. While interacting with several research teams within the company, the selected individual will be responsible for managing a section within our **Division of Biochemical Research**.

The successful candidate must have a Ph.D. in Biochemistry, or a related area, with a minimum of 3 years postdoctoral experience in protein purification and protein characterization. Experience in protein chemical modification and sequence determination would be helpful.

Sphinx Pharmaceuticals offers career advancement opportunities, competitive compensation, comprehensive benefits and relocation assistance, and excellent living conditions in the Research Triangle Park area of North Carolina. For confidential consideration, please forward your resume, with references, to: **Sphinx Pharmaceuticals Corporation, Position #197, P.O. Box 52330, Durham, NC 27717.** An Equal Opportunity Employer.

**SPHINX
PHARMACEUTICALS
CORPORATION**

DEPARTMENT OF MOLECULAR BIOLOGY

The Bristol-Myers Squibb Pharmaceutical Research Institute continues to expand its extensive research efforts in the area of molecular biology.

RESEARCH SCIENTISTS

Associate Research Scientist—Candidate will participate in the production of monoclonal antibodies within the department's core monoclonal antibody facility. Relevant experience for this position includes all technologies related to monoclonal antibody production including mouse immunization, cell fusion, cell cloning, ascites production, analysis of secreted immunoglobulins, and immunoglobulin purification. Applicants should possess a B.S./M.S. in a biological science and significant laboratory experience.

Associate Research Scientist—Candidate will participate in ongoing basic research programs exploring the molecular mechanisms that regulate normal and transformed cell signal transduction. Relevant experience for this position includes a strong background in mammalian gene expression systems (CHO cells, COS cells, etc.) along with basic knowledge of molecular biology techniques (cloning, PCR, site directed mutagenesis, etc.). Applicants should possess a B.S./M.S. in Molecular Biology or related field and substantial laboratory experience.

POSTDOCTORAL FELLOW

Postdoctoral position available immediately to join ongoing research utilizing transgenic mice and homologous recombination to study the developmental regulation and expression of the *trk* proto-oncogene family. Preference will be given to candidates with training in developmental biology or neuroscience with some knowledge of cell culture techniques. The applicant will join a large group of post-doctoral scientists actively working and publishing in this field. (Please include three letters of reference with your CV).

We offer an excellent salary and benefits package. Please forward your resume with salary requirements to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Department 341-BM, P.O. Box 4000, Princeton, NJ 08543-4000.** Equal Opportunity Employer M/F/D/V.



Bristol-Myers Squibb Company

POSITIONS OPEN

POSTDOCTORAL POSITIONS: Two positions available immediately to study the regulation and function of oxidative stress-inducible genes in *E. coli*. Send curriculum vitae and references to: **Dr. Spencer Farr, College of Pharmacy, University of New Mexico, Albuquerque, NM 87131.**

THEORETICAL NEUROBIOLOGY

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

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

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

Now located in New York, the Neurosciences Institute plans to move to the campus of The Scripps Research Institute in La Jolla, California, before June 1994.

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

POSTDOCTORAL FELLOW VACCINES FROM PHAGE DISPLAY LIBRARIES

"Epitope discovery" is a new strategy for finding protective epitopes, using epitope libraries (Scott & Smith, *Science* 249: 386, 1990) to bypass the need to identify and isolate natural antigens. The fellow should have a strong background in molecular biology, and will help develop new libraries, explore model diseases like mouse malaria, or work on some other aspect of the project. Send curriculum vitae and statement of research interests, and have three letters of reference forwarded directly to: **George P. Smith, Division of Biological Sciences, Tucker Hall, University of Missouri, Columbia, MO 65211; telephone: (314) 882-2720. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP. The Department of Urology is expanding its basic research efforts under George P. Hemstreet, M.D., Ph.D., and Robert E. Hurst, Ph.D., in several areas, including biomarkers for cancer and other urologic diseases, stromal-epithelial interactions, molecular genetics of urologic cancer, growth and differentiation of cells of the genitourinary tract and chemoprevention and tumor biology-metastasis. Send curriculum vitae, statement of background and goals, and names of three references to: **Postdoctoral Fellow Search, Department of Urology, Oklahoma University Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. Applications from women and minorities are encouraged.**

POSTDOCTORAL FELLOWSHIP IN VASCULAR BIOLOGY

A postdoctoral position is available immediately for a recent Ph.D., interested in the molecular biology of the endothelium. Our group is studying the molecular mechanisms underlying endothelial-smooth muscle cell interactions. The project involves characterization of transcriptional mechanisms controlling the expression of cytokines and related genes by oxygen tension. Candidates with strong background in molecular/cellular biology will be preferred. Please send curriculum vitae and names of references to: **Dr. Stella Kourembanas, Joint Program in Neonatology, Children's Hospital, Harvard Medical School, 300 Longwood Avenue, Boston, MA 02115. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP, MOLECULAR AND DEVELOPMENTAL NEUROBIOLOGY. A position is available now to investigate G protein-dependent control of the neuronal growth cone by gene knockout, site-directed mutagenesis, and expression cloning. Experience in molecular and cell biology preferred. Send curriculum vitae and names of three references to: **Stephen M. Strittmatter, M.D./Ph.D., Department of Neurology, Harvard Medical School, Massachusetts General Hospital-East, 149 13th Street, Charlestown, MA 02129.**

POSTDOCTORAL FELLOWSHIP available to study teratogenic effects of ethanol at the cell/membrane level. Fluorescence recovery after photobleaching (FRAP) will be utilized to compare membrane fluidity in vulnerable versus non-vulnerable mouse embryo neuronal cell populations. Ameliorative effects of antioxidants relative to ethanol-induced cell death will also be examined. A background in cell biology is desirable. Please send curriculum vitae and names of three references to:

**Dr. Kathleen K. Sulik
Department of Cell Biology and Anatomy
University of North Carolina
Chapel Hill, NC 27599-7090**

POSTDOCTORAL RESEARCH FELLOW. Perform schistosomal lab research in parasitology, immunology and cell biology. Requires: M.D. or Ph.D. in Immunology or Cell Biology plus two years of schistosomal research. Also: experience with snail breeding and maintenance of *Schistosoma mansoni* and *S. japonicum* life cycles. Hands-on background/experience with quantitative It and electron microscopy; protein and glycoprotein purification; HPLC; and analysis of serologic responses. \$35,816 per year. Job and interview site: Palo Alto, California. Clip ad and send with résumé to: **J.P. Caulfield, 59 Citation Drive, Los Altos, CA 94024.**

POSTDOCTORAL TRAINING POSITIONS to study signal transduction pathway from insulin receptor to MAP and S6 kinases (*J. Biol. Chem.* 267:3325, 1992) and nucleus (*Nature* 353:670, 1991). Experience with recombinant DNA, mammalian expression systems and/or protein purification/enzymology desired. Start September 1, 1992 and thereafter. Send curriculum vitae, summary of past work and three references to: **J. Avruch, Chief, Diabetes Research Labs, MGH East, Building 149, 13th Street, Charlestown, MA 02129 (telephone: 617-726-6909/FAX: 617-726-5669).**

INSECT MOLECULAR SYSTEMATICS. POSTDOCTORAL ASSOCIATE to join group addressing phylogenetic relationships within Lepidoptera and related orders using DNA sequences. Experience in systematics expected. Experience with Lepidoptera and training in PCR and DNA sequencing desirable. Send curriculum vitae, statement of interests, and names and telephone numbers of three references to: **Jerome Regier/Charles Mitter, Entomology Department, University of Maryland, College Park, MD 20742. FAX: 301-314-9075.**

POSTDOCTORAL ASSOCIATE

Position available for recent Ph.D. for projects involving characterizations of human homologues of the AKT oncogene (*Science* 254:271, 1991), human genome mapping and the molecular analysis of human tumors. Strong background in molecular cloning required. Experience in protein analysis desirable. Submit curriculum vitae and names of three references to: **J.T., c/o the Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.**

NEUROBIOLOGY RESEARCH ASSOCIATE

A Postdoctoral Research Associate position is immediately available to study Olfactory Physiology in vertebrates. The research involves a multidisciplinary approach to the anatomical, behavioral, and hormonal substrates of olfactory communication in the hamster and mouse. Experience in one or more of these areas is a requisite. Send résumé, statement of research interests, experiences, and the names of three references to: **Dr. Robert J. O'Connell, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545. An Affirmative Action/Equal Opportunity Employer M/F/H.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

The Arnold Arboretum of Harvard University requires a postdoctoral research associate with Ph.D. in plant systematics, and ability to work in rain forest and unfamiliar cultural environments, to coordinate a floristic inventory project in Indonesian Borneo, and to assist with production of check lists, field identification guides and keys. Send application to: **Dr. John Burley, The Arnold Arboretum of Harvard University, 22 Divinity Avenue, Cambridge, MA 02138.**

POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS to investigate molecular biology and biochemistry of NO synthase and guanylyl cyclase as applied to vascular physiology and pathophysiology. Molecular/biochemistry expertise required. Send curriculum vitae to: **Dr. Roger A. Johns, Box 238, University of Virginia Health Sciences Center, Charlottesville, VA 22908. An Equal Opportunity/Affirmative Action Employer.**



POSTDOCTORAL/RESEARCH ASSOCIATE, ANIMAL PHYSIOLOGIST—U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Columbia, Missouri. Ph.D. in Endocrinology, Immunology, or related field, is sought to conduct research on mechanisms of endocrine-immune interactions, in conjunction with an ongoing project studying the environmental physiology of the preweaning pig. Experience in molecular biology, hormone detection/quantitation, and cell culture is desired. Appointment will be for two years at a starting salary of \$32,423 per annum. Send three letters of reference and curriculum vitae/application to: **Dr. Robert L. Matteri, USDA, ARS, Animal Physiology Research Unit, Room S-143 Animal Science Research Center, University of Missouri, Columbia, MO 65211. Telephone: (314) 882-1047. Application must be marked 2N059. ARS is an Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATES BOSTON UNIVERSITY (BU)

The BioMolecular Engineering Research Center, in consortium with the Artificial Intelligence Lab at Massachusetts Institute of Technology (MIT), has available two positions in computational molecular biology. Problems under investigation include: comparative sequence and structural analyses; functional pattern recognition and discovery; protein folding domain modeling; protein structure prediction; machine learning and AI approaches; database mining; and harnessing massively parallel computation.

One position is for a **MOLECULAR BIOLOGIST** to apply advanced computational methods to problems of biological relevance, and to provide assistance in developing new methods. The second position is for a **COMPUTER SCIENTIST** to design and implement new computational methods, and to provide assistance in applying them to biological problems. This position will involve machine learning and biological structure modeling on a massively parallel computer. Both positions require active collaboration with experimental molecular biologists and computer software developers.

Candidates must have a strong background and a Ph.D. in molecular biology, computer science, or a related field. Salary: \$32,000 to \$42,000 commensurate with experience. Send curriculum vitae and three letters of reference to: **Dr. Temple F. Smith, BMERC, Boston University, 36 Cummington Street, Boston, MA 02215. BU and MIT are Affirmative Action/Equal Opportunity Employers.**

RESEARCH ASSOCIATE position available immediately in Molecular and Cellular Endocrinology, specialty in glycoprotein hormones and their receptors. Ph.D. degree with postdoctoral experience and demonstrated publication record in the above area will be preferred. Send curriculum vitae and references by 16 August 1992 to: **Dr. O. P. Bahl, Cooke 347, Department of Biology, SUNY at Buffalo, Buffalo, NY 14260.**

SCIENTIST POSITIONS AVAILABLE

We have immediate openings for energetic research scientists in Selectide Corporation's Departments of Biochemistry and Pharmacology. The scientists hired will play a major role in the discovery of peptides that are of pharmaceutical interest for treatment of human diseases using the new approach of random peptide libraries (Lam et al., see Nature 354 p. 82-84). Preference will be given to candidates who have completed 2 or more years of postdoctoral research in the following areas: Department of Biochemistry — enzymology, proteinase function, peptidomimetic chemistry, with focus on thrombosis-hemostasis, the complement system, or connective tissue degradation. Department of Pharmacology — Receptor-ligand interactions, and receptor signaling mechanisms, with focus on molecular approaches. The Company offers excellent career potential for creative scientists interested in participating in the development of a dynamic new biotechnology company. Selectide's headquarters and research laboratories are located in Oro Valley, just north of Tucson. Selectide has formal ties with the University of Arizona (UA) with opportunity for ongoing collaborations with participating UA investigators. Applicants should submit a cover letter to either Biochemistry or Pharmacology Department, including the names of two professional references and a copy of their curriculum vitae and biosketch by August 15, 1992 to:

Selectide Corporation
10900 N. Stallard Place, Suite 122
Tucson, AZ 85737
Fax (602) 575-8283

CLINICAL RESEARCH MANAGER

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

Our current opening, for a Clinical Research Manager, will join our Respiratory Clinical Research Team, and will assist in preparing, conducting and coordinating clinical trials and monitoring activities.

Major duties will include analyzing data, and writing/reviewing and presenting reports, protocols and manuscripts. This individual will also supervise and train personnel and select, evaluate and oversee contract groups.

Background must include a BA or BS Degree with a minimum of 6 years relevant experience; or preferably an MS, Pharm.D., or Ph.D. with at least 2 years relevant experience.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume, including salary history, to: Human Resources Department, Job # 8242B002-SC, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

Scientists Immunoassay Development

Genentech, Inc., an internationally recognized leader in the field of biotechnology, is currently seeking Scientists to work as part of multidisciplinary teams developing immunoassays for the research and development of therapeutic recombinant proteins. We also have active R&D programs in cardiovascular biology, immunology, endocrinology and neurobiology.

We require a PhD in Biochemistry, Molecular Biology, Immunology, or a related discipline and 2+ years' postdoctoral experience.

We offer an excellent salary and benefits package. For immediate consideration, please send your resume to Genentech, Inc., Human Resources, Dept. YSTC, 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.

Genentech, Inc.

2 New Research Positions

...are currently available at the American Health Foundation. To qualify, you will have a Ph.D., relevant postdoctoral experience, and desire to develop an independent, yet collaborative research program in either of the following areas:

♦ Carcinogenesis/Mutagenesis Mechanisms

A program focused upon the mutational consequences of specific DNA adducts will be developed.

♦ Mass Spectrometry

New methods applicable to structural and analytical studies in carcinogenesis and toxicology will be developed and applied.

The American Health Foundation provides an excellent opportunity for future independent research, within a modern environment in a pleasant Westchester County setting. We also offer a competitive salary plus benefits. If qualified, please send your "c.v." with references, to: Dr. Stephen Hecht, Director of Research, American Health Foundation, One Dana Road, Valhalla, New York 10595. We are an equal opportunity employer m/f/h/v.

American Health Foundation



RESEARCH SCIENTISTS TOXICOLOGY AND METABOLISM

Midwest Research Institute (MRI), a leading contract research organization with major research activities in the health sciences, has positions available in the Life Sciences Department.

SENIOR PRODUCT/DRUG DEVELOPMENT SCIENTIST

Responsible for the conduct of pharmacokinetics and metabolism studies to support product/drug registration.

SENIOR TOXICOLOGIST

Responsible for the conduct of animal toxicity studies. DABT or board eligible.

Successful candidates should possess PhD in pharmacology, toxicology, biochemistry, or other related discipline or DVM with minimum of 4 years experience in related field. Experience as study director/principal investigator is required and experience with submissions to government regulatory agencies is desired.

STAFF SCIENTIST

Will participate in pharmacokinetics, toxicology or metabolism studies. Requires BS or MS in relevant scientific discipline with minimum of 3 years experience in related field.

MRI offers competitive compensation, a comprehensive benefits package, paid relocation and a unique environment to meet personal challenges and enhance career growth. If you are interested in joining a talented team, please fax or send resumes to Jill M. Skaggs, Dept. DWA at:



MIDWEST RESEARCH INSTITUTE
"Serving Science and Society"
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Supragen, Inc., an emerging Denver-based biotechnology company, is seeking a distinguished group of senior scientists and research associates. The Company's scientists will be dedicated to vaccine and drug discovery/development based on the role of superantigens in immune/inflammatory disorders, infectious diseases and cancer.

SENIOR SCIENTISTS/ POSTDOCTORATES

Supragen is seeking scientists with PhDs and/or MDs; senior scientist applicants must have at least two years of postdoctoral experience. Candidates should have documented ability to conduct independent research and have a strong background in at least one of the following areas: molecular biology; protein chemistry; immunology; infectious disease; or virology.

RESEARCH ASSOCIATES

The Company requests applicants have BS or MS degrees and laboratory experience. Backgrounds in immunology, molecular biology, or biochemistry desired.

Supragen offers competitive salaries and benefits as well as the opportunity to work in a dynamic, highly motivating and interactive scientific environment. For consideration, please submit your curriculum vitae to: John Kappler, Philippa Marrack and Brian Kotzin, Recruitment Effort, Supragen, Inc., 3000 East Colfax Ave., Suite 311, Denver, CO 80206.

SUPRAGEN

VICE PRESIDENT AND DIRECTOR GEORGIA TECH RESEARCH INSTITUTE

Nominations and applications are invited for the position of Vice President and Director of the Georgia Tech Research Institute (GTRI). The GTRI Vice President reports to the Executive Vice President of Georgia Tech.

GTRI is a nonprofit, chartered organization with significant and expanding interactions with Georgia Tech's faculty and students. The GTRI Director will be responsible for the technical and administrative leadership of GTRI, enhancing the image of GTRI with outside funding sources, developing new funding sources, expanding Georgia Tech's research and development capabilities and promoting increased integration with Georgia Tech's academic programs. This position will be responsible for the management and supervision of a staff of approximately 1,500, which includes more than 600 full-time researchers, and a research program of over \$100 million annually. GTRI is internationally recognized for its expertise in areas such as aerospace science and technology, artificial intelligence, computer science and technology, electronic systems, electronic warfare, environmental science, infrared and electro-optics, manufacturing research, materials science, radar, signature control technology, and threat systems development.

The mission of GTRI includes public service, and outreach and technology transfer across a broad spectrum of scientific and technological endeavors in addition to research and development.

Candidates for the position should hold a degree in Engineering or Science, with a strong preference for a doctoral degree. The successful candidate should have a distinguished record of management and development of research, strategic planning, human resource development and Total Quality Management.

Nominations and applications should be sent to:

**Dr. Gary Poehlein, Office of Interdisciplinary Programs, Code SC183,
Georgia Institute of Technology, 400 Tenth Street, Centennial Research
Building, Room 282, Atlanta, GA 30332-0370, Telephone (404) 894-4826.**

Review of applications will begin as soon as they are received and continue until the position is filled. Georgia Institute of Technology is a part of the University System of Georgia and is an Equal Opportunity Employer.

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Qualified candidates will have a B.S./M.S. in Biochemistry, Biology, Biotechnology, Biochemical Engineering or Chemistry with 0-3 years related experience. Excellent written and oral communication skills are required.

Our state-of-the-art research facility is located in suburban Philadelphia near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, as well as a stimulating work environment in which to grow and excel. For confidential consideration, please submit your C.V., along with three references, to: Marilyn Leggieri, #L0136, Associate Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



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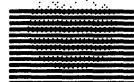
Neuropharmacologist

Molecular Devices is looking for a Neuropharmacologist to support its new silicon biosensor-based microphysiometer system Cytosensor. Early versions of the system have been used for pharmacodynamic studies of drug agonists and antagonists on a range of cells with native or transfected receptors.

Responsibilities will include designing and teaching training workshops at MDC, presenting seminars at outside sites, and maintaining close scientific relationships with our most innovative customers and academic collaborators. Additionally, you will troubleshoot and oversee the evaluation of cells and effector agents sent to us in the course of pre-sales activities.

A PhD and a minimum of three years' experience in pharmacodynamics in a major drug company, with hands-on experience in second messenger assays and/or electrophysiology, are required.

Molecular Devices offers a competitive compensation and benefits package. Please address inquiries plus curriculum vitae to: Dr. Gillian Humphries, Molecular Devices Corporation, 4700 Bohannon Drive, Menlo Park, CA 94025. FAX: (415) 322-2069. EOE.



**Molecular
Devices**

July 24, 1992

Volume 4

THE REPLIGEN

REPORT

Cambridge, Massachusetts, home to Harvard and MIT and just across the Charles River from Boston, is the site of one of the country's largest concentration of biotechnology firms. Repligen, located in East Cambridge, is a major player in this industry and area and has always been noted as a company on the leading edge in research committed to healthcare. Over the past year, results from our research have allowed us to identify product candidates for the prevention and treatment of AIDS and for the treatment of cancer and acute inflammation. In addition to several new research projects in the inflammation area, we have also recently begun clinical trials on our anticancer compound. The years ahead promise many new and exciting challenges for people seeking a research environment that rewards initiative and recognizes achievement. If you're looking for a biotech company that's going places, join us today.

Associate Scientist

This person will be responsible for fully characterizing new product candidates, especially monoclonal antibodies; analyzing process steps, recommending improvements as necessary and supervising a Research Technician. A Ph.D. in Chemistry/Biochemistry with up to 2 years of post doctoral experience. Expertise required in various areas of protein chemistry with especially strong protein analytical background.

Research Scientist

We seek a candidate to oversee the HIV vaccine preclinical development group; coordinate the evaluation of new immunogens, including live vectors and protein/peptide subunits; and implement capabilities in cellular immunology. A Ph.D. plus post doctoral expertise in cellular immunology, cell biology or biochemistry along with strong organizational and interpersonal skills.

Repligen offers competitive salaries, benefits and equity participation. Please submit or FAX a cover letter, resume and references to: Joan Curtice, Repligen Corporation, One Kendall Square, Building 700, Cambridge, MA 02139. FAX (617) 494-1786. An Equal Opportunity Employer, M/F/D/V.

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POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE

Position available for cytogeneticist to study interactions between DNA and carcinogenic and chemotherapeutic chemicals. Requires experience in DNA biochemistry, DNA adduct quantitation by immunoassay, chemical-DNA localization (in cells, tissues and chromosomes) by immuno-histochemistry, analysis of chromosomal abnormalities and cell culture. Salary range: \$40,500 to \$44,500. Send curriculum vitae and names of three references to:

Dr. Miriam C. Poirier
NCI, Building 37, Room 3B12
Bethesda, MD 20892

CELL BIOLOGIST. An innovative, growing pharmaceutical company is seeking a cell biologist (Ph.D.-level) with experience and interests in cell-cell and bacterium-cell adhesion. Candidates should be (1) experienced in cell and tissue culture methods, (2) capable of designing, initiating, and evaluating research programs, and (3) looking for a novel and exciting scientific position. Please send résumé and names of three references to:

Ms. Stacy Bardol, Personnel Manager
Neose Pharmaceuticals, Inc.
102 Witmer Road
Horsham, PA 19044

ENVIRONMENTAL MODELER ATMOSPHERIC SCIENTIST

AECL Research, Canada's leading agency for environmental research related to nuclear energy, has two immediate openings:

- Environmental transfer modeler with experience in uncertainty analysis, model validation, dose assessment and field/laboratory studies of radionuclide transport.
- Atmospheric scientist with experience in micrometeorology and short-range dispersion modeling.

Successful applicants will join a group of 35 staff in the Environmental Research Branch. Programs include theoretical, experimental and applied research on contaminant transport and modeling. Positions are open to postdoctoral, junior or senior staff. Applicants should send curriculum vitae and the names of three referees by August 14, 1992, by e-mail: (Cornett@NVE.CRL.AECL.CA), FAX: (613) 584-1221, or mail, to: **Dr. R.J. Cornett, Environmental Research, AECL Research, Chalk River Laboratories, Chalk River, Ontario, Canada K0J 1J0.**

IMMUNOLOGIST (RECENT Ph.D.)

For immunoassay development and enzyme/antibody conjugation (urease). The position will be available September 15, 1992. Applicants should submit full curriculum vitae and three references to: **Diane Kurtz, Manager-Administration, Hawaii Biotechnology Group, Inc., P.O. Box 1057, Honolulu, HI 96701.** Equal Opportunity Employer.

METALLURGICAL ENGINEER: Participate in research and development activities related to manufacturing processes for tantalum metal powder. Conduct experiments using Electron Microanalysis (EPMA), Scanning Electron Microscopy (SEM) and x-ray Diffraction.

Four years of college, B.S. degree in Physics. Two years of experience in the position or four years as Production Manager and/or Research Director and/or Research Associate required. Experience in related occupation must include participation in manufacture and related research and development activities of tantalum metal powder; two years of experience also required as Research Associate with responsibility for conducting research on semiconductive materials utilizing Electron Microanalysis (EPMA), Scanning Electron Microscopy (SEM) and x-ray Diffraction to identify interfacial phase diagram and morphology between metal powders and Ga As's.

Forty hours per week; 9:00 a.m. to 5:00 p.m.; \$36,000 per year. *Must have proof of legal authority to work permanently in the United States.*

Send résumés to: **Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605.** Attention P. Kula, Reference Number V-IL-5331-K. NO CALLS. AN EMPLOYER PAID AD. SEND TWO COPIES OF RÉSUMÉ.

POSITIONS OPEN

RESEARCH TECHNICIAN: Retinol-binding protein by HPLC; affinity column/low temperature chromatography, peptide mapping, sequencing, and in vitro translation.

Must have minimum M.S. in Organic Chemistry or B.S. with one year of graduate research and teaching assistant experience; be thoroughly familiar with, and proficient in, affinity column/low temperature chromatography, NMR, HPLC, GC Mass Spectroscopy, and FT/IR; as well as *present proof of legal authority for full time employment in the United States.*

Monday to Friday, 9:00 a.m. to 5:00 p.m. Salary: \$1,559.00 per month.

Those interested and qualified, send résumé, or apply in person, to: **Georgia Department of Labor, 2811 Lakewood Avenue SW, Atlanta, GA 30315** or to the nearest Georgia Job Service Center. Job Order #GA 5556087. Employer paid ad.

RESEARCH SCIENTIST to design, perform, evaluate and report biotechnologically focused experimentation interfacing immunoassays methods to electrochemical systems. Course of experimentation will consist of evaluating fluid dynamics of electrochemical flow systems, simulate electrochemical mechanisms using BASIC, Fortran and C languages, design and construction of potentiostats, luminometers and flow sensors, formulate and test epoxies for fabrication of electrochemical cells, and implementation of electrode surface modifications (e.g., electro-polymerization), synthesis and spectroscopy. Ph.D. in Chemistry with two years of experience as a Research Scientist/Electrochemistry required. Previous experience must include two years of hands-on experience evaluating fluid dynamics of electrochemical flow systems, simulation of electrochemical mechanisms using BASIC, Fortran and C languages, design and construction of potentiostats, formulation and testing epoxies for fabrication of electrochemical cells, and implementation of electrode surface modifications (e.g., electro-polymerization). Forty hours per week; 8:30 a.m. to 5:30 p.m., Monday to Friday. Salary: \$48,000.00 per year. Send résumés to: **IGEN, Inc., Attention: ECL, 1530 East Jefferson Street, Rockville, MD 20852.** Equal Opportunity Employer.

SUGEN, Inc.

Sugen is a biopharmaceutical development Company located in the San Francisco Bay Area. Suguen was formed around the research teams of Dr. Axel Ullrich at the Max-Planck-Institut in Munich and Dr. Joseph Schlesinger at the Department of Pharmacology at New York University Medical Center.

Sugen's drug development strategy is based on the identification of novel and proprietary targets for therapeutic intervention with primary emphasis on the tyrosine kinase and phosphatase receptor systems.

With the development pace of our lead programs accelerating, we are now looking for **SCIENTISTS** interested in these novel approaches.

Applicants should have a Ph.D. in Pharmacology/Experimental Pathology or related field with three to five years of experience in preclinical drug development and demonstrated expertise with in vitro and in vivo pharmacological methods. Experience with transgenic animal models is especially desirable.

If you have the energy and the commitment to excellence required to interact productively with our research teams, we invite you to write to:

Dr. Peter Hirth
Sugen, Inc.
515 Galveston Drive
Redwood City, CA 94063-4720

MEETINGS

STRUCTURES, CONFORMATIONS AND INTERACTIONS OF NUCLEIC ACIDS

Clinical Center, NIH, Bethesda, Maryland
NOVEMBER 18 TO 20, 1992

Conference sponsored by
the Fogarty International Center
and the National Cancer Institute

Preregistration suggested. For applications and information on program, contact: **Sheila Feldman, Fogarty International Center, Building 16, NIH, Bethesda, MD 20892.** Telephone: (301) 496-2968; FAX: (301) 496-8496.

ANNOUNCEMENTS



RESEARCH GRANTS

The American Health Assistance Foundation invites applications from researchers at non-profit institutions for the following programs:

Alzheimer's Disease Research: grant awards of up to \$100,000 per year for up to two years (renewable) for research into the causes and treatment of Alzheimer's disease. Application deadline: November 2.

Glaucoma Research: grant awards of up to \$25,000 per year for up to two years (renewable) for research into the causes and treatment of glaucoma. Application deadline: November 30.

National Heart Foundation Grants (formerly Coronary Heart Disease Research): starter grants of up to \$15,000 per year for one year (renewable) for research into the cause and treatment of stroke or cardiovascular disease. To qualify for a starter grant, the investigator must be an assistant professor (or equivalent) beginning an independent research career. Application deadline: November 2.

For information and application forms contact: **Research Grants Manager, American Health Assistance Foundation, 15825 Shady Grove Road, Suite 140, Rockville, MD 20850,** telephone: (301) 948-3244.

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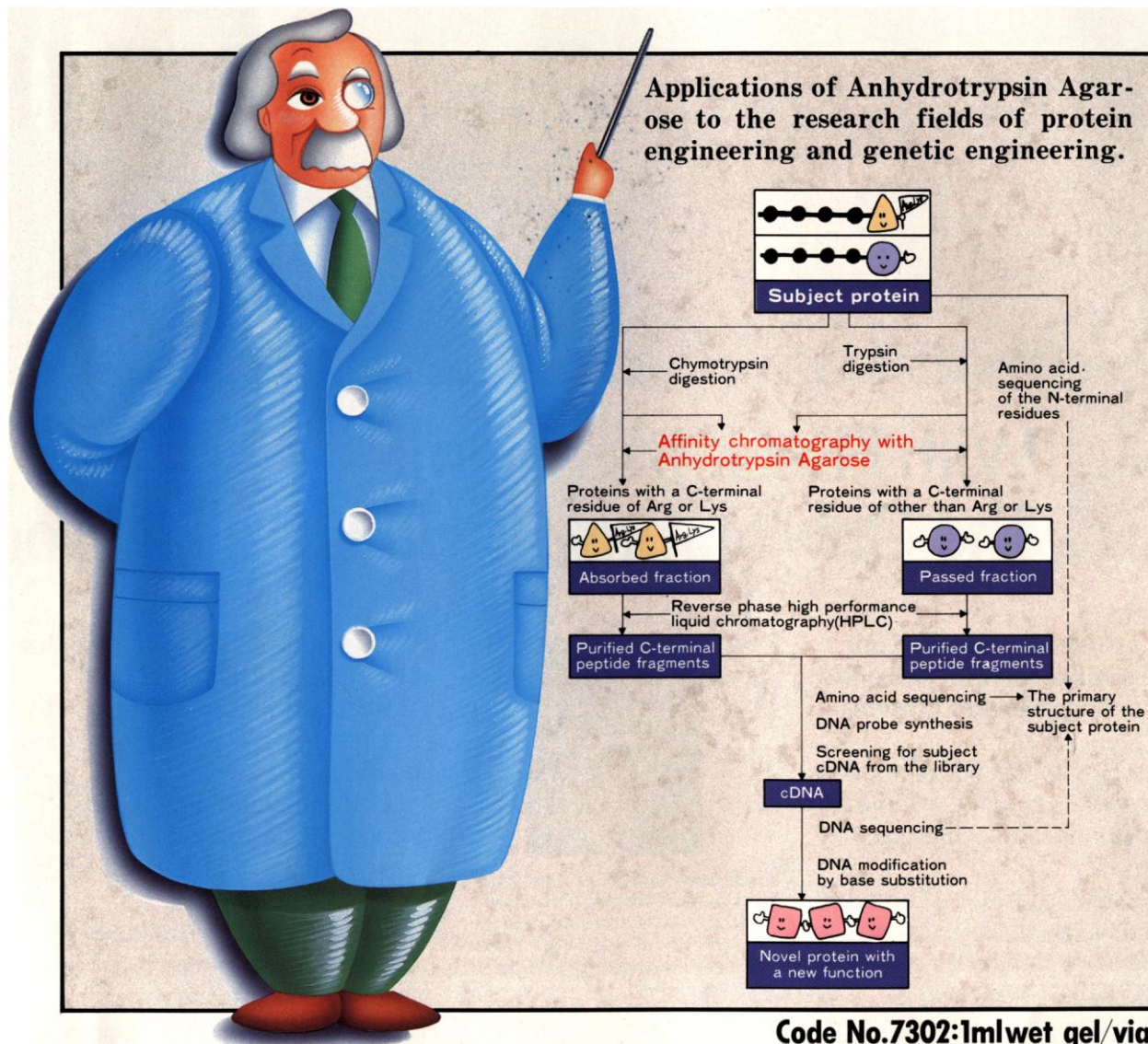
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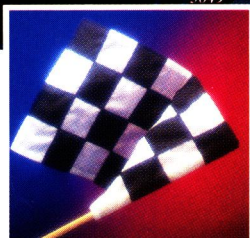
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