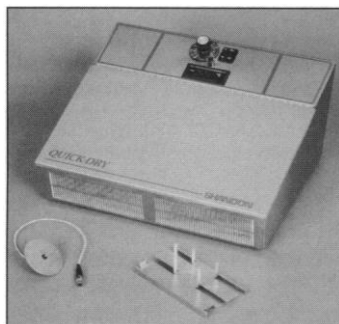


## Data and Graphing Software for the Mac

StatView 4.0 is an integrated data analysis and presentation graphing system for the Macintosh. It allows users to manage and analyze their data, then graph and create presentations of their results within a single program. It combines spreadsheet, statistics, graphing, and drawing applications. Abacus Concepts. Circle 87.

## Microscope Slide Dryer

Quick-Dry is designed to dry tissue samples quickly yet gently under controlled conditions that produce minimum sample shrinkage and morphologic change.



The user can set the temperature from ambient to 65°C. The 8 by 14 1/2 inch interior compartment is large enough to accommodate slide trays and Coplin jars. The air filtration system, composed of inlet air filters plus hydrophilic exit air filters, helps prevent particulates and aerosols from exiting to the outside environment. The dryer can also be used for in situ hybridization applications, electrophoresis, and incubations. A thermal probe is available to monitor reagent heating. Shandon. Circle 88.

## Monoclonal Antibodies

Four new monoclonal antibodies (MAbs) for the study of cell surface antigens include MAbs to CD56 (NKH-1), CD18 (LFA-1 $\beta$ ), CD11b (MAC-1), and CD7. They can be used in flow

cytometry or fluorescence microscopy. Exalpa Corp. Circle 89.

Oncoprotein marker MAbs are available to EGF/R, c-myc, N-myc, DNA Topoisomerase 11, bcl-2, and mutant and wild-type p53. Polyclonal antibodies to myc and estrogen receptor are also available. Cambridge Research Biochemicals. Circle 90.

Enzyme-conjugated secondary antibodies are available, including alkaline phosphatase, horseradish peroxidase, and unlabeled antibodies to sheep, mouse, and rabbit immunoglobulin and alkaline phosphatase and unlabeled antibodies to biotin and fluorescein. Cambridge Research Biochemicals. Circle 91.

## Growth Factors

Seven additions have been made to a line of cytokines and growth factors. New human recombinant products include IL-3, IL-5, stem cell factor, macrophage colony-stimulating factor, granulocyte colony-stimulating factor, and granulocyte-macrophage colony-stimulating factor (GM-CSF). A mouse recombinant GM-CSF has also been added. The products are intended for use in studies of hemopoiesis, receptor-ligand binding, signal transduction, the inflammatory response, or proto-oncogene expression. The purity of the growth factors is at least 95%. Sigma Cell Culture Reagents. Circle 92.

## Lab Management Software

*Hyperlab* is a program for automating and integrating common laboratory tasks. It simplifies laboratory chores by linking modules for laboratory notebook entries, order preparations, and scientific

calculations with databases containing laboratory supplies. *Hyperlab* features word-processing functions for preparation of notebook entries, including the capability of converting files to and from popular word-processing formats. Notebook entries are linked to information on chemicals, general supplies, samples, and vendors by *Hyperlab* databases. The program runs on IBM-compatible computers with a hard disk and 640K of memory. SEEG Scientific. Circle 93.

## Color CD Markers and Controls

The Bi-Test line of color products for the detection of cell surface antigens in flow cytometry and fluorescent microscopy can be used for the study of human immunodeficiency virus infection, T and B cell subsets, natural killer cells, T cell activation, cellular adhesion, and many other applications. The Bi-Test reagents are: CD4 FITC-CD8 PE; CD8 PE-CD4 FITC; CD5 FITC-CD19 PE; HLA-DR FITC-CD4 PE; and the corresponding controls IgG<sub>1</sub> FITC-IgG<sub>1</sub> PE and IgG<sub>2A</sub> FITC-IgG<sub>1</sub> PE. Exalpa Corp. Circle 94.

## Direct Cloning Kit for PCR

The pGEM-T Vector allows direct cloning of polymerase chain reaction (PCR) products without digestion, modification of primers, or purification of amplified DNA. The system is designed for cloning of PCR products, in vitro transcription experiments, generation of unidirectional deletions, generation of single-stranded DNA, and in vitro translation experiments. Promega Corp. Circle 95.

## Fast Manual Sequencing System

The GeneSprinter manual sequencer provides a finished sequence, from gel preparation to data acquisition, in less than 5



hours. With an electrophoretic run of less than 20 min, the system offers high resolution, sensitivity, and the ability to pour bubble-free gels as thin as 25  $\mu$ m. FOTODYNE Inc. Circle 96.

## Literature

ACER 2000 *Advanced Capillary Extrusion Rheometer System* describes an instrument for determining the flow behavior of medium- to high-viscosity materials, such as polymer melts, rubber compounds, and foodstuffs. Polymer Laboratories. Circle 97.

The summer 1992 issue of *Lab Reporter* looks at the analytical laboratory inside Biosphere 2, the \$150-million mega-terrarium in Arizona that houses seven artificial environments. Fisher Scientific International. Circle 98.

*Protein Blotting: A Guide to Transfer and Detection* describes the latest technologies for protein transfer and the most recent developments in detection chemistries. Bio-Rad Laboratories. Circle 99.

*Blue M Environmental Test Chambers* gives comprehensive application, operational, and dimensional specifications for a wide-ranging line of chambers. Blue M Electric, A General Signal Co. 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.

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## 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.*

The Department of Chemistry, Yale University, invites applications for a position at the **ASSISTANT PROFESSOR** level, effective academic year 1993. We seek bright teacher-scholars who show promise for developing outstanding research programs in the broad area of organic chemistry.

Applicants should send curriculum vitae, a statement of research interests and plans, and should arrange for the submission of three letters of recommendation. All materials should be received by 31 October 1992. Send applications to: **Chair, Faculty Search Committee, P.O. Box 6666, 225 Prospect Street, New Haven, CT 06511-8118.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

A tenure-track **ASSISTANT PROFESSOR** position is available in the Pulmonary Diseases and Critical Care Medicine Section, Department of Medicine for a Ph.D. with at least two years of postgraduate experience. Demonstrated expertise and previous research in cellular/molecular biology applicable to lung biology is required. The candidate will be expected to develop an independent research program. Send curriculum vitae and names of three references to: **Mitchell Friedman, M.D., Professor and Chief, Section of Pulmonary Diseases and Critical Care Medicine (SL9), Tulane University Medical Center, 1430 Tulane Avenue, New Orleans, LA 70112-2699.** Applications will be accepted until a qualified candidate is selected. *Tulane University is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR

Applicants are sought for two full-time positions in Medicinal Chemistry and Pharmacokinetics as Assistant Professor of Research. The proposed starting date of October 1, 1992 is contingent upon approval of a grant from the National Institutes of Health.

**Medicinal Chemist:** A medicinal/organic chemist with expertise in computer assisted molecular modeling is being sought to facilitate new drug design and build an up-to-date structure activity data base.

**Pharmacokineticist:** A pharmacologist with expertise in pharmacokinetics is needed to investigate the biotransformation of lead compounds in rats and mice.

The successful candidates will be expected to collaborate with other faculty members in the pharmacokinetic study of new anti-inflammatory and anti-HIV/anti-Cancer entities. Candidates must possess a Ph.D. in the appropriate discipline, with up to three years of postdoctoral experience. Please send a letter of application accompanied by curriculum vitae and three letters of references directed to: **Ms. Brenda J. Gooden, Program Assistant, College of Pharmacy and Pharmaceutical Sciences, Florida A&M University, Tallahassee, FL 32307.** *Florida A&M University is an Equal Employment Opportunity/Affirmative Action Institution.*

**INSECT GENETICIST:** Tenure track, 12-month, **ASSISTANT PROFESSORSHIP** with research emphasis in population genetics of insects. Experience with mosquito genetics and molecular techniques is desirable; candidates with expertise in other arthropod groups are encouraged to apply. Teaching responsibilities in "Ecological Genetics" and "Genetics of Pest Management." Ph.D. in Entomology or related field. 1 October 1992, closing date; 1 January 1993, availability. Forward curriculum vitae, details of interests, reprints, transcripts, and addresses of three references to: **Head, Department of Entomology, Mississippi State, MS 39762.** Telephone: (601) 325-2085; FAX: (601) 325-8837. *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**ASSISTANT SPECIALIST.** Full-time position is available in Molecular and Cell Biology, Division of Biochemistry and Molecular Biology. Duties are to conduct research and the topology of DNA and DNA-protein interaction in site-specific recombination as well as general recombination systems. Qualifications required include Ph.D. in biochemistry or related field, with detailed knowledge and technical skills in the field of biochemistry, biophysics, and molecular biology. Salary range is \$30,540 to \$34,968, depending on qualifications. Approximate starting date: November 1, 1992. Application deadline: September 21, 1992. Qualified candidates should send a letter of application and résumé to: **Dr. Nicholas Cozzarelli, University of California (UC), Molecular and Cell Biology, 401 Barker Hall, Berkeley, CA 94720.** *UC Berkeley is an Equal Opportunity/Affirmative Action Employer.*



## The University of Georgia

### ASSISTANT PROFESSOR EUKARYOTIC DEVELOPMENTAL GENETICS

The Department of Genetics, University of Georgia, invites applications and nominations for a tenure track faculty position at the assistant professor level in developmental genetics. Duties for the position include research as well as teaching at the undergraduate and graduate levels. We are particularly interested in individuals employing molecular and genetic approaches to significant problems in metazoan development. Candidates should have an outstanding record of research accomplishments and the potential to develop a strong, independent research program. The Department of Genetics currently consists of 16 faculty and is housed in a recently completed, state-of-the-art research building where the successful candidate will be provided with excellent laboratory facilities. The Department is committed to building a strong program in metazoan developmental genetics.

Applicants should send their curriculum vitae, a statement of research interests, and at least three letters of reference to:

**Dr. William Timberlake**  
Chairman, Search Committee  
Department of Genetics  
University of Georgia  
Athens, GA 30602-7223

Application deadline is November 20, 1992. *The University of Georgia is an Affirmative Action/Equal Opportunity Employer.*

### DEPARTMENT OF BIOCHEMISTRY MICHIGAN STATE UNIVERSITY

The Department of Biochemistry seeks applications for a tenure track position at the **ASSISTANT PROFESSOR** rank. Applicants should have demonstrated productivity and evidence of potential for independent research in an area related to protein structure. The successful applicant will be expected to participate in the Center for Protein Structure and Design, an area of emphasis developed with support of Research Excellence Funds provided by the State of Michigan. *The Biochemistry faculty has explicitly endorsed efforts to increase the diversity of its ranks, and accordingly, candidates from groups currently underrepresented in academic science are encouraged to apply.*

The Department of Biochemistry has a large faculty conducting research in most areas of contemporary biochemistry and molecular biology, providing both a stimulating scientific atmosphere and opportunities for research collaboration. The Department occupies a modern research building with well-equipped research and teaching laboratories, and has vigorous undergraduate, graduate, and postdoctoral training programs.

Applicants should submit curriculum vitae, a description of research accomplishments and future interests, and have three letters of recommendation sent on their behalf to: **Dr. John E. Wilson, Chair, Department of Biochemistry, Box S, Michigan State University, East Lansing, MI 48824.** To assure consideration, applications should be received by November 1, 1992. *Michigan State University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF CHEMISTRY AND BIOCHEMISTRY

The Department of Chemistry and Biochemistry at Utah State University seeks to hire one or two tenure-track faculty at the Assistant Professor level, who will actively participate in the Ph.D. degree program in biochemistry. A nucleic acid biochemist is sought for one of the positions; the second position is open to applicants in any area of biochemistry, but preference will be given to those whose research emphasis complements existing strengths in the department (these include areas such as free radicals and/or metals in animal or plant systems) and who can interact well with faculty in other areas of chemistry. Successful applicants are expected to develop a nationally recognized research program, teach biochemistry at the graduate level, and teach in the general chemistry program. A Ph.D. is required, and postdoctoral experience is highly desirable. Opportunities exist for interaction with the Molecular Biology Program, Biotechnology Center, Toxicology Program, Center for the Design of Molecular Function, and Agricultural Experiment Station. Curriculum vitae, graduate transcripts, outline of planned research, statement of teaching philosophy, and three letters of recommendation should be sent to: **Search Committee, Department of Chemistry and Biochemistry, Utah State University, Logan, UT 84322-0300.** Closing date is October 15, 1992. Logan is located in scenic Cache Valley (population approximately 70,000), which combines rural and small-city living adjacent to wilderness areas. *Utah State University is an Equal Opportunity/Affirmative Action Employer, and applications from women and minorities are especially encouraged.*

### ASSISTANT PROFESSOR, MOLECULAR BIOPHYSICS WESLEYAN UNIVERSITY

The Department of Molecular Biology and Biochemistry invites applications for a tenure-track position in molecular biophysics at the Assistant Professor level. We are searching for candidates with expertise in x-ray crystallography, spectroscopy (excluding magnetic resonance) or biological thermodynamics. Research areas of particular interest include the structure and interactions of regulatory proteins and the molecular basis of gene expression. Candidates are expected to initiate vigorous research programs and to participate in the departmental Ph.D. program supported, in part, by an NIH training grant in Molecular Biophysics. Excellence in research and in teaching at both the graduate and undergraduate levels is expected. Please send curriculum vitae, description of research plans and three letters of recommendation to: **Molecular Biophysics Search Committee, c/o Dr. Irina M. Russu, Department of Molecular Biology and Biochemistry, Wesleyan University, Middletown, CT 06459-0175.**

*Wesleyan University is an Equal Opportunity/Affirmative Action Employer. We encourage applications from minority candidates and women.*

**MOLECULAR BIOLOGIST: ASSISTANT PROFESSOR.** The Department of Biology, State University of New York (SUNY) College at Fredonia invites applications for a tenure track position available January, 1993. Qualifications include a Ph.D. in biological sciences, experience in recombinant DNA technology, and a commitment to undergraduate instruction and research. Postdoctoral experience is preferred. The two major teaching responsibilities will include laboratory courses in Recombinant Gene Technology and Biochemistry. Other teaching responsibilities may include upper-level specialty courses and Introductory Biology. The college has a student population of about 4,500 undergraduates and is located near Lake Erie, 40 miles southwest of Buffalo. The department has 10 faculty and about 250 undergraduate majors in Biology, Recombinant Gene Technology, and Medical Technology. M.S. degrees are offered in Biology and Biology Education. Applications should include curriculum vitae, three letters of recommendation, and a letter explaining teaching and research interests. Send applications to: **Search Committee, Department of Biology, SUNY College at Fredonia, Fredonia, NY 14063 (Telephone: 716-673-3280).** Application deadline is September 18, 1992 and applications will be reviewed as received. *SUNY College at Fredonia is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

## POSITIONS OPEN

**BIOLOGY:** Southwestern University announces a tenure track position for an **ASSISTANT PROFESSOR** of Biology. Primary teaching responsibilities include Cell Physiology, Organismic Physiology (Plant and Animal), and General Biology. The successful candidate will hold the Ph.D. degree and will show evidence of commitment to teaching and to guiding student research in a liberal arts environment.

Southwestern University is a selective, undergraduate institution committed to broad-based liberal arts and sciences education. Affiliated with the United Methodist Church, it has over 1200 students and a history of stable enrollment. Southwestern's endowment of more than \$150 million ranks among the highest per student of undergraduate institutions in the country. The University has a strong commitment to faculty support, with faculty salaries at the 92nd percentile for IIB institutions, and an endowment in excess of \$1 million for faculty development. The University is located in Georgetown, Texas, 28 miles north of Austin, the state capital, and site of The University of Texas.

Please send a letter of application, curriculum vitae, and the names, addresses and telephone numbers of three current references to: **Search Committee, Department of Biology, P.O. Box 770, Georgetown, TX 78627-0770.** Applications should be postmarked by October 30, 1992. *Women and minority candidates are encouraged to apply. Southwestern University is an Affirmative Action/Equal Opportunity Employer.*

**PLANT BIOCHEMIST.** Tenure-track **ASSISTANT PROFESSOR**, Fall 1993. Ph.D. required. Duties include participation in general biology, interdisciplinary biochemistry program, and plant sciences program, and supervision of master's candidates. Research in plant biochemistry is expected. Application, including curriculum vitae, a brief statement of teaching and research goals, graduate transcripts, and three letters of reference should be sent by 15 October 1992, to: **Dr. Lee Pike, Chair, Search Committee, Department of Biological Sciences, East Tennessee State University, P.O. Box 70,703, Johnson City, TN 37614-0703.**

**HEMATOLOGY FACULTY POSITION—ASSISTANT/ASSOCIATE PROFESSOR** Hematology Section at Boston University Medical Center. We are seeking an M.D. or M.D./Ph.D. whose primary responsibility will be to maintain an active research program addressing basic issues in cell differentiation, immunology, hemostasis, oncogenesis, cytokines or gene regulation. Minimal clinical and teaching duties. Send curriculum vitae to: **Lewis R. Weintraub, M.D., Room E-501, University Hospital, 75 East Newton Street, Boston, MA 02118.** Telephone: 617-638-7002, FAX: 617-638-7065.

### EXPERIMENTAL PATHOLOGIST/ IMMUNOLOGIST ASSISTANT OR ASSOCIATE PROFESSOR

Tenure-track position at the University of Florida Health Science Center beginning March 1, 1993. Applicants should have a Ph.D. degree or D.V.M., Ph.D. degrees and evidence of research accomplishment in molecular pathology, immunology, or related disciplines. The successful candidate will be expected to establish an independent research program and to contribute to graduate and professional student teaching. Send curriculum vitae and the names of three references before October 1, 1992 to: **Dr. William L. Castleman, Chairman, Department of Comparative and Experimental Pathology, College of Veterinary Medicine, P.O. Box 100145, University of Florida, Gainesville, FL 32610-0145.**

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

### VASCULAR BIOLOGIST

**ASSISTANT/ASSOCIATE PROFESSOR**, tenure track position, is available at the University of Texas Medical School at Houston for a scientist with experience and expertise in the cellular and molecular biology of the vascular system. Requirements are M.D. or Ph.D. and two to four years of postgraduate training in related fields. Send curriculum vitae and list of references to: **Dr. L. Maximilian Buja, Professor and Chairman, Department of Pathology and Laboratory Medicine, The University of Texas Medical School at Houston, 6431 Fannin, MSB 2.136, Houston, TX 77030.** The University of Texas Health Science Center at Houston is an Equal Opportunity Employer. *Women and minorities are encouraged to apply.*

## POSITIONS OPEN

### MEDICAL COLLEGE OF GEORGIA ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY AND TOXICOLOGY

Applications are invited from individuals with Ph.D. and/or M.D. degrees and strong research accomplishments for a tenure-track position at the Assistant or Associate Professor level. The successful candidate will be expected to establish an independent, extramurally funded research program utilizing modern techniques and to contribute to our team teaching programs. Opportunities exist for interfacing with programs in cardiovascular, behavioral and neuropharmacology and pathophysiology. The Department currently employs eighteen full time primary faculty. Competitive salary, laboratory space and start-up funds are available. Please send detailed curriculum vitae, a letter describing professional goals and the names of three references to: **R.W. Caldwell, Chairman, Department of Pharmacology and Toxicology, Medical College of Georgia, Augusta, GA 30912-2300.** *The Medical College of Georgia is an Affirmative Action/Equal Opportunity Employer.*

### MICROBIOLOGY

The Department of Biology at Indiana University, Bloomington, invites applications for two tenure-track positions in the general area of Microbiology. Appointments may be made at any level from **ASSISTANT TO FULL PROFESSOR**. Candidates with a Ph.D. and a strong background of independent research in the areas of virology, immunology, genetics, ecology, biochemistry, cell biology, host-parasite interactions or other area of microbiology are encouraged to apply. Responsibilities include both research and teaching of undergraduate and graduate students in biochemistry, molecular biology and microbiology programs. Interested candidates should submit curriculum vitae and a statement of research and teaching interests. Applicants at the junior level should also arrange for three letters of reference to be sent to: **Microbiology Search Committee, Department of Biology, Indiana University, Bloomington, IN 47405.** For full consideration applications should be received by December 1, 1992. *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

### BIOCHEMISTRY/MOLECULAR BIOLOGY MEHARRY MEDICAL COLLEGE

Faculty positions will be available 1992/93 in the Department of Biochemistry, at the level of **ASSISTANT OR ASSOCIATE PROFESSOR**. Applicants must have a Ph.D. or M.D. degree, or both, and appropriate formal postdoctoral research experience. Joint appointments in clinical science departments are possible. We are seeking individuals who have potential or demonstrated competence in the use of molecular biological approaches to conduct research in molecular medicine, or on fundamental biochemical/cell biological problems. Selected individuals must also be capable of, and committed to, making significant contributions to the teaching and administrative functions of the Department of Biochemistry. Successful applicants will be expected to develop/maintain a funded research program of high quality and to participate in the graduate and professional (medical, dental, and allied health) school teaching programs of the department. Applicants should send curriculum vitae, names of four individuals who may be contacted for reference, and a summary (not exceeding three pages) of potential research project(s) to: **Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208.** *Meharry Medical College is an Equal Opportunity/Affirmative Action Employer.*

**Yale University:** The Department of Chemistry invites applications for an anticipated position at the level of **PROFESSOR** of physical chemistry with an emphasis on the liquid phase. An outstanding, teacher-scholar is sought whose research interests will complement the current faculty. The position is expected to be filled in the 1993-1994 academic year.

Applicants should submit curriculum vitae and a list of publications to: **Professor R. James Cross, Physical Chemistry Search Chair, Department of Chemistry, Yale University, 225 Prospect Street, P.O. Box 6666, New Haven, CT 06511-8118** by September 30, 1992. *Yale University is an Equal Opportunity/Affirmative Action Employer.*

# POST DOCTORAL FELLOWSHIPS

**Immunex Corporation** is a Seattle-based biotechnology company focused on the research, development, manufacture and marketing of products to treat cancer and autoimmune disease and is a world leader in cytokine research (see references). We are seeking qualified candidates for 2-year postdoctoral positions available in the departments and disciplines of Molecular Biology, Biochemistry, Protein Chemistry, Transgenics, Immunology, Experimental Hematology, Cell Biology, and Biophysics, beginning in January 1993. ■ Successful candidates will be highly motivated Ph.Ds, who are able to work in a collaborative environment and have a significant research track record in one of these disciplines. ■ Research activities will be oriented toward the molecular basis of immune regulation and cytokine action, particularly the cloning of novel cytokines, cytokine receptors and other immunoregulatory molecules, analysis of the biological activities of these molecules, the signal transduction pathways by which they act and investigation of the structural basis of ligand-receptor interactions. A significant effort will be devoted to the study of *in vitro* and *in vivo* models of normal and abnormal immune regulation and hematopoiesis as a means to identify novel immunoregulatory molecules and to characterize their biological activities. ■ Immunex Corporation offers a fast paced, stimulating environment, competitive salaries and an excellent benefits package. We are located in downtown Seattle, in full view of Puget Sound and the Olympic Mountains. Many recreational and cultural activities are easily accessible. ■ For consideration, please send or fax your curriculum vitae, three letters of reference and a brief statement of research interests to: **IMMUNEX CORPORATION, Attn: Human Resources, 51 University Street, Seattle, WA 98101. Fax: (206) 623-4572.** Equal Opportunity Employer.

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### Clinical Research Scientist I/II

Refer to Positions #63389-3 and #64075-19

Clinical Research Scientist I—Must have a Master's degree in a biological, physical or health-related science or a Doctor of Pharmacy degree with a minimum of four years of clinical/research experience (e.g. employment in a patient care setting, such as nursing or pharmacy; clinical laboratory experience; experience as a clinical research monitor/coordinator) **OR** a Ph.D. in one of the disciplines described above, with a minimum of one year of clinical/research experience. Scientific writing assessment.

Clinical Research Scientist II—Must have a Master's degree or Doctor of Pharmacy with 6 years of clinical/research experience as described above **OR** a Ph.D. with 3 years of clinical/research experience. Scientific writing assessment.

Other Factors to be considered for both positions include experience with clinical research methodology/activities (e.g. study design, site monitoring); computer experience. Will require frequent travel.

Position will be filled at the Clinical Research Scientist I or Clinical Research Scientist II level. The level of responsibility to be assigned will depend upon the individual applicant's educational background and experience level.

### Clinical Research Associate III

Refer to Position #63946-19

Candidates need 2 years of postgraduate training in a health-related discipline (to include, but not be limited to, Master's or Pharm.D. degrees) **PLUS** 2 years of clinical/research experience (e.g. employment in a patient care setting such as nursing or pharmacy; clinical laboratory experience; experience as a clinical research monitor/coordinator) **OR** a Ph.D. in a biological, physical, health or other related science. Scientific writing assessment. Other factors to be considered include work experience in a multidisciplinary research/medical team setting, PC experience and data analysis experience. May require frequent travel.

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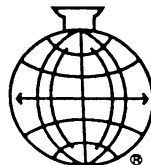
## STUDY DIRECTOR

**INTERNATIONAL RESEARCH AND DEVELOPMENT CORPORATION** is a leading independent contract research laboratory specializing in animal safety evaluation studies for the pharmaceutical, agricultural, chemical and consumer industries as well as governmental agencies.

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**INTERNATIONAL RESEARCH AND DEVELOPMENT CORPORATION** offers its employees continued career opportunities and provides competitive compensation and benefits including an attractive investment and stock ownership plan. We are located in a progressive urban area outside Kalamazoo, MI, midway between Detroit and Chicago.

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Director of Human Resources  
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We currently seek a meticulous, highly motivated Research Associate to test new growth factors for neurotropic activity (survival, neurite outgrowth, etc.) in primary neuronal cultures. Responsibilities include performing dissections under microscope, immunohistochemistry on cultured cells, and maintaining tissue culture laboratory equipment. The successful candidate must have a Bachelor's degree, demonstrated tissue culture skills the ability to interact well with others and a willingness to learn. Experience with microdissection desirable. A background in cell biology/neurobiology strongly preferred.

**Amgen offers a very competitive compensation and benefits package** in addition to a stimulating work environment. If you have the necessary qualifications and would like to be part of an organization that places its highest value on the contributions of its people, send your resume to: **Amgen, Inc., Staffing Department, Code #S-501, Amgen Center, Thousand Oaks, CA 91320-1789.** Amgen is an Equal Opportunity Employer.

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**The University Corporation for Atmospheric Research  
VICE PRESIDENT of UCAR and DIRECTOR  
of the WALTER ORR ROBERTS INSTITUTE**

The University Corporation for Atmospheric Research (UCAR) is a consortium of 59 institutions in the United States and Canada with doctoral programs in the atmospheric and related sciences. UCAR oversees a wide range of programs and facilities that serve its members and the world scientific community from its Boulder, Colorado location. Other activities include extensive support for visiting scientists and the management of interagency research programs.

**VICE PRESIDENT**

The Vice President will assist the UCAR President in representing UCAR and its programs in the constituent UCAR communities, with particular focus on maintaining excellent communications and relationships with the universities, public and private sponsors, legislative and executive branches of the Government, and the private sector. A secondary function will be identifying and developing new program opportunities consistent with UCAR's strategic plan.

The successful candidate will serve as one of six senior executives who act as advisors to the President of UCAR in matters related to strategic planning, policy development, and implementation of operational plans.

The Vice President will have oversight of the UCAR Office of Government Affairs (OGA), the Development Office, the Corporate Affiliates Program (CAP), and the Walter Orr Roberts Institute.

**DIRECTOR, WALTER ORR ROBERTS INSTITUTE**

The Vice President will also serve as the Director of the Walter Orr Roberts Institute, and will be responsible for the overall executive leadership and success of the Institute. Responsibilities include direct management of the Institute, including staff recruitment and formulation/execution of plans, budgets and priorities. The Institute is named in honor of the founder of the National Center for Atmospheric Research, and is devoted to the application of scientific research for the betterment of humankind. The Institute "translates" traditional research products into information of use to policy makers, corporate and government sectors, and the general public.

**QUALIFICATIONS NEEDED**

To be considered for this position, the successful candidate must have demonstrated ability in providing executive level leadership in a broad range of intellectual endeavors of significance to UCAR. This must include a demonstrated record of outstanding, national-level achievement in one or more of the following arenas: science, education, industry, technology or public policy.

Other desired qualifications include:

- Demonstrated ability in the areas of strategic and resource planning, management and administration of complex activities.
- Demonstrated understanding of national policies that affect the atmospheric and related sciences and ability to influence policy discussions/decisions.
- Highly developed and effective oral and written communication skills.
- Ability to motivate, lead and interact with a diverse work force.
- Ability to gain and hold the confidence of the atmospheric and related scientific community.
- Ability to deal effectively with the leadership of educational institutions, Federal agencies, corporations, private foundations, professional societies and consortia, and research centers.

The President of UCAR wishes to appoint the Vice President and Director of the Walter Orr Roberts Institute in the fall of 1992. Nominations should be made as soon as possible and **applications should be received by 30 September 1992**, to receive the fullest consideration. Applications should include a letter of interest, curriculum vitae, list of publications and a minimum of five references.

Applications should be mailed to **Dr. Warren M. Washington - Chair, Vice President Search Committee, c/o W. S. Shiver, University Corporation for Atmospheric Research, P.O. Box 3000, Boulder, CO 80307-3000.**

The Vice President position is a senior level management position within UCAR. The 1992 salary is \$94,720 to \$142,080, depending upon the qualifications and experience of the incumbent, plus an excellent benefits package. Terms of employment will be negotiated based on the experience and demonstrated capabilities of the candidate. Additional information can be obtained from Mr. Shiver at (303) 497-1674, or by facsimile at (303) 497-1654.

UCAR is committed to diversifying its workforce and invites nominations of, and applications from, women and minorities.



**University Corporation for Atmospheric Research**

# Wyeth-Ayerst Research

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Wyeth-Ayerst Laboratories is a Division of Fortune 100 American Home Products Corporation, a leading manufacturer and marketer of health care products with multi-billion dollar annual sales and an impressive record of growth and profitability. Due to our expansion, we have the following opportunities currently available in our Radnor, PA pharmaceutical research facility:

### Senior Molecular Biologists Senior Microbiologists Senior Biologists

Participate in the development of new vaccines against viral diseases and of new models for such diseases. Ideal candidates will have solid experience in basic techniques used in immunology, virology, tissue culture, or molecular biology and *in vivo* models of viral diseases. These positions require a B.S./M.S. in the appropriate scientific discipline (Molecular Biology, Biology, Immunology, Microbiology, Biochemistry) with 4-5 years related laboratory experience. Experience *in vitro* and *in vivo* papillomavirus models desired. Senior Molecular Biologists should have a strong background in Molecular Biology & Virology. Experience with most areas of recombinant DNA technology including construction of recombinant viral vectors, DNA sequencing. Northern & Southern hybridization is desirable.

Wyeth-Ayerst offers an attractive salary, comprehensive benefits package and opportunities for advancement for the right candidate. For immediate consideration, forward your resume and salary history/requirements to: **Wyeth-Ayerst Research Personnel, Dept. SG, P.O. Box 8299, Philadelphia, PA 19101-0082.** Equal Opportunity Employer, M/F/D/V responses encouraged.



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The R.W. Johnson Pharmaceutical Research Institute (PRI) is a first-class worldwide research and development organization within Johnson & Johnson, the world's largest and most comprehensive provider of health care products. PRI performs R&D activities for the Johnson & Johnson companies ... Cilag, McNeil Pharmaceutical, Ortho Pharmaceutical and Ortho Biotech.

Expanding programs in therapeutic areas such as hematology/ oncology, immunology, CNS and diagnostic imaging have created a significant career opportunity for a Senior Medical Writer with good written and oral communication skills, and demonstrated ability to handle diverse, multiple assignments simultaneously.

To qualify, you must have a Ph.D. or equivalent in the Biological Sciences with extensive publications, or an MS degree with at least five years of pharmaceutical research experience in clinical research or regulatory affairs, including extensive preparation and review of clinical documents for regulatory submission. You will be responsible for preparing investigational drug brochures, reports summarizing clinical trial results, and other summary documents for NDAs/product license applications/international registrations.

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No phone calls please. Submit curriculum vitae with salary requirements to: Mr. Thomas Hutton, Dept. 14, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, NJ 08869-0602.

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## POSITIONS OPEN

**MOLECULAR CYTOGENETICIST** at the University of Arizona Health Sciences Center. The position is non-tenure track at the level of **RESEARCH ASSISTANT** or **ASSOCIATE PROFESSOR** with an appointment in the Department of Pathology and at the Arizona Cancer Center. Applicants should have a Ph.D. or M.D. and have demonstrated expertise in the field. The successful candidate will be Laboratory Director of the Clinical Cytogenetics Laboratory at the University Medical Center and will be expected to develop an independent competitive research program in tumor cytogenetics and be interested in the application of state-of-the-art molecular cytogenetics to clinical problems. There will be the opportunity to be an active participant in the Cancer Center's NCI-funded Cytogenetic Oncology Program Project. Submit curriculum vitae and letter of interest to: **Dr. Garth Powis, Director of Basic Science, Arizona Cancer Center, Tucson, AZ 85724.** Applications will begin to be considered October 1, 1992 and continue until the position is filled. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer.*

## MOLECULAR BIOLOGY OF RESTENOSIS

Excellent opportunity in established Cardiovascular Research Laboratory to investigate fundamental basis and novel treatment strategies for atherosclerosis and recurrent arterial obstruction following balloon angioplasty (restenosis). Positions available at **ASSISTANT, ASSOCIATE, AND PROFESSOR** level, for M.D., Ph.D., or M.D./Ph.D. Newly renovated laboratory facilities include cell culture, organ culture, in situ hybridization, fully equipped molecular biology laboratory, and state-of-the-art animal laboratory. Generous start-up funds and salary. Multiple opportunities available for basic and clinical collaborations. A full range of benefits are available.

Please send curriculum vitae to: **Jeffrey M. Isner, M.D., St. Elizabeth's Hospital/Tufts University School of Medicine, 736 Cambridge Street, Boston, MA 02135.** An Equal Opportunity Employer.

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## PHARMACOLOGY FACULTY—TUFTS

The expanding department of Pharmacology and Experimental Therapeutics at Tufts University seeks an outstanding individual to fill the position of **ASSOCIATE** or **FULL PROFESSOR**. Areas of particular interest include molecular aspects of neuropharmacology, cardiovascular pharmacology and drug metabolism. The department is responsible for teaching medical, dental, and veterinary students, as well as graduate students. Candidates should send curriculum vitae and a statement of research interests, together with the names of three references, to: **Dr. Louis Shuster, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.** Tufts University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

## PRESIDENT NEW JERSEY MARINE SCIENCES CONSORTIUM

The New Jersey Marine Sciences Consortium (NJMSC) is a not-for-profit alliance of 30 colleges and universities in New Jersey, New York, and Pennsylvania. NJMSC is presently headquartered in Sandy Hook, New Jersey, and is the designated Sea Grant (College Status) institution in New Jersey. The Consortium is seeking a dynamic person to assume the position of President. Applicants must have a Ph.D. (or equivalent) in a marine related discipline, evidence of mature and sustained scholarship, and a record of management capability. In addition, the successful candidate should have a record of fund-raising (both public and private) including grant and contract development. The search will remain open until the position is filled. A letter of application, curriculum vitae, and contact information for three referees should be sent to: **Dr. Joseph E. Nadeau, Associate Dean of Liberal Arts and Science, Rider College, 2083 Lawrenceville Road, Lawrenceville, NJ 08648-3099.** An Equal Opportunity Employer.

## POSITIONS OPEN

### CLINICAL CYTOGENETICS

The Departments of Pathology, the University of Texas Health Science Center (UTHSC)—Houston, and Laboratory Services, Hermann Hospital are recruiting an experienced Ph.D. or M.D. as **ASSISTANT/ASSOCIATE SECTION CHIEF** of the Hermann Hospital Cytogenetics Laboratory. Candidates should be ABMG eligible or certified in cytogenetics. This position offers unique opportunities for clinical service, teaching, and research in a progressive academic/hospital setting in the Texas Medical Center. Send letter of application, curriculum vitae, and the names, addresses, and telephone numbers of five references to: **Frederick Elder, Ph.D., Department of Pathology, UTHSC-Houston, P.O. Box 20708, Houston, TX 77225.** The University of Texas and Hermann Hospital are Equal Opportunity/Affirmative Action Employers. Women and minorities are encouraged to apply.

**CYTOGENETICS LABORATORY HEAD**—The new and expanding Division of Human Genetics invites applications of experienced, board certified/eligible M.D. and/or Ph.D.'s. Major responsibilities and opportunities are directed to development and expansion of diagnostic and teaching services, FISH and molecular cytogenetics research. The institutional research environment includes over 50 faculty with major efforts in molecular biology and genetics. Send curriculum vitae and bibliography to: **Gregory A. Grabowski, M.D., Director of Human Genetics, Cincinnati Children's Hospital Medical Center, Elland and Bethesda Avenues, Cincinnati, OH 45229-2899.**

**DIRECTOR OF THE CLINICAL RESEARCH CENTER, UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD) MEDICAL CENTER**—Applications are invited for the position of Program Director of the Clinical Research Center at the University of California, San Diego School of Medicine, effective January 1, 1993. Candidates must be active and funded clinical investigators with an M.D. degree in well-established investigative programs. Familiarity with NIH-funded GCRCs is desirable, as is administrative experience and evidence of academic leadership. Faculty appointment at the Associate Professor or Full Professor in the In-Residence series will be commensurate with candidate's years of experience and based on UC pay scales.

Applications supported by curriculum vitae and a list of two to three potential references should be sent no later than September 15, 1992 to: **JERROLD M. OLEFSKY, M.D., Chair, CRC Director Search Committee, University of California, San Diego, Department of Medicine (9111G), 9500 Gilman Drive, La Jolla, CA 92093.** UCSD is an Equal Opportunity/Affirmative Action Employer.

### RETROVIROLOGISTS TENURE-TRACK FACULTY POSITIONS

The Cancer Center and  
the Departments of Microbiology and Pathology  
Medical College of Wisconsin

**Cancer Center:** Established scientist with research interests in molecular mechanisms of oncogenesis, involving retroviruses, oncogenes, or tumor suppressor genes.

**Microbiology:** Scientist at any level with research competence in the molecular biology, immunology, or pathogenesis of retroviruses.

**Pathology:** Virologist to direct an established clinical virology laboratory of a major medical center with bone marrow and organ transplantation programs.

Successful candidates will be expected to develop extramurally supported research programs and will have the opportunity to participate in multidisciplinary research efforts within the research facilities located on the 1,000 acre suburban campus of the Milwaukee Regional Medical Complex. Successful applicants will be provided with research space, equipment, and start-up funds. Faculty rank will be commensurate with qualifications.

Applicants should send the appropriate documentation to:

Virology Search Committee  
Cancer Center of the Medical College of Wisconsin  
8701 Watertown Plank Road  
Milwaukee, WI 53226

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## Research Biochemist

We require a MS or PhD in Biochemistry or related discipline, and 2+ years experience in the purification and characterization of proteins of bacterial origin. We strongly prefer research experience involving the mode of action of insecticidal toxins produced by *Bacillus thuringiensis* and analytical assay development. **Reply to Job# 2834.**

## Research Entomologist

You will design experiments and develop techniques associated with screening and evaluation of new product leads. We require a PhD and 2+ years training in insect pathology or microbiology. Experience with microbial insecticides is preferred, as is supervisory background. **Reply to Job# 5276.**

## Biochemist/Biochemical Engineer- Protein Isolation

You will support existing manufacturing efforts and develop process improvements and new process designs. We require a PhD or equivalent in Biochemistry or Biochemical Engineering and 3+ years in large-scale protein purification. Knowledge of cGMPs—especially regarding CBER-regulated products—is preferred, as is supervisory experience and assay development background. Knowledge of conventional methods of protein characterization and analysis is essential. **Reply to Job# 8082.**

## Cell Biologist/Biochemical Engineer- Mammalian Cell Culture

You will be involved in process development and support for large-scale mammalian cell culture. This includes monitoring production processes, performing lab scale studies, analyzing data, and identifying manufacturing improvements. Emphasis will be on optimization of cell growth and product formation. We expect a MS or PhD in Cell Biology or Biochemical Engineering, 3+ years in mammalian cell culture, and knowledge of databases and contamination control. **Reply to Job# 8084.**

## Bioprocess Development Purifications Specialist

You will develop isolation and purification processes for the recovery of pharmaceuticals and agricultural products sourced from fermentations. We require a PhD or equivalent in a related field of Chemistry and previous industrial experience in the practical application of extraction, crystallization, chromatography and analytical techniques. **Reply to Job# 4538.**

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located approximately 30 miles north of Chicago. For confidential consideration, please send a resume (indicating appropriate Job#) and salary history to: **TCN, Corporate Placement, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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### THE AUSTRALIAN NATIONAL UNIVERSITY DIRECTOR OF THE JOHN CURTIN SCHOOL OF MEDICAL RESEARCH Institute of Advanced Studies

The University seeks to appoint a Director of the John Curtin School of Medical Research to succeed Professor David Curtis AC FRACP FAA FRSc. The John Curtin School of Medical Research undertakes fundamental biomedical research of a long-term nature as well as shorter-term and applied projects. There are currently 24 research groups organised within four divisions: Biochemistry and Molecular Biology, Cell Biology, Clinical Sciences and Neuroscience. The Director of the John Curtin School of Medical Research is expected to be a research scientist with an outstanding reputation for excellence in one or more of the broad areas of biomedical science pursued in the School, and preferably with experience in management and policy development in scientific research and graduate training. The Director will be responsible for the leadership of the School as an academic enterprise and for the management of its human and financial resources. The University therefore wishes to appoint an intellectual leader of international distinction in one or more of the disciplines of the School, experienced in management, and with the ability to sustain and develop linkages with universities and research institutions in Australia and overseas and with government and industry. The Director is responsible through the Vice-Chancellor to the Council of the University for the operation and development of the School, for its leadership as an academic enterprise, and for its administration and financial management. The successful candidate will be offered a continuing appointment as Professor of the University. The term of office as Director (up to seven years) will be fixed by the University in consultation with the person recommended. The remuneration package will include a professorial salary of, currently, A\$82,712 per annum, a director's loading of A\$7,918 per annum, a clinical loading for a medically qualified appointee, along with superannuation and other benefits and use of a University vehicle. A market loading determined by the University may also be payable. Support for the Director's own research will be provided.

Contact officer: Professor G. M. Neutze, Deputy Vice-Chancellor and Director, Institute of Advanced Studies (tel. (61 6) 249 0180). Those interested in being considered for this appointment are invited to write to Warwick Williams, Secretary, Australian National University, GPO Box 4, Canberra, ACT 2601, Australia to obtain further information; this information is also available from Appointments (40905), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF.

Closing date: 31 October 1992

Ref: JC.16.7.1.

The University reserves the right not to make an appointment.

THE UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER

### DIRECTOR, DIVISION OF ELEMENTARY, SECONDARY AND INFORMAL EDUCATION NATIONAL SCIENCE FOUNDATION Washington, D.C. 20550

NSF's Directorate for Education and Human Resources seeks qualified applicants to direct and manage activities of Division responsible for funding K-12 science, mathematics and engineering education in areas of teacher education, materials development and research programs for K-12 students, and for initiation and support of informal science education projects in science, mathematics and technology. Division has a staff of 45 employees and a FY 1992 budget of \$197.4 million. Appointment to this Senior Executive Service position will be on a career or 2-3 year limited term appointment basis with a salary of ES-1 (\$90,000) to ES-4 (\$104,000). Alternatively, selectee may be assigned under Intergovernmental Personnel Act provisions, retaining current salary and benefits. Applicants must have ability in planning large, complex programs in areas related to K-12 science and engineering education; demonstrated supervisory skills; and knowledge of current capabilities and trends of the scientific/engineering K-12 and informal science education communities. Applicants should contact George Pittmon on 202-357-9565 (hearing impaired individuals may call TDD-357-7492) to request vacancy announcements EP 92-8 (SES career); EP 92-18 (SES limited term) and/or EP 92-28 (IPA) for complete qualification requirements and application procedures. Applications must be received by September 22, 1992.

**EQUAL OPPORTUNITY EMPLOYER**

National Institute of Allergy and Infectious Diseases

## NIH SEEKS 2 EXTRAMURAL SECTION CHIEFS

The Division of Allergy, Immunology and Transplantation is seeking outstanding physicians (M.D.), scientists (Ph.D.) or persons with equivalent experience for Chief of the Molecular Immunology Section, Basic Immunology Branch, and Chief of the Host Defense and Inflammation Section, Clinical Immunology Branch. Candidates should be broadly qualified and should have research experience in the fields of basic and/or clinical immunology.

Responsibilities include planning and conducting an extramural scientific research program and will permit the opportunity to maintain an academic affiliation. We offer a competitive salary and outstanding benefits.

This is a GS-14 position with a starting salary range between \$54,607 and \$63,707 per annum. Physicians comparability allowance up to \$20,000 may be applicable.

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**Dr. Robert A. Goldstein**  
DAIT, NIAID  
National Institutes of Health  
Public Health Service  
Solar Building, Room 4A18  
6003 Executive Boulevard  
Rockville, MD 20892  
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## FACULTY POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY THE UNIVERSITY OF CHICAGO

The Department of Biochemistry and Molecular Biology at The University of Chicago invites applications and nominations for several tenure-track and tenured faculty positions. Candidates should have a strong record of outstanding research accomplishment in an area of modern biochemistry and molecular biology. Applications should include a *Curriculum vitae*, a list of publications, a summary of current research activities and future research plans, and the names of at least three individuals from whom letters of references may be solicited. Although there is no deadline, we would appreciate receiving applications or nominations by November 1, 1992. Please send applications or nominations to:

**Kan Agarwal**  
Chairperson, Faculty Search Committee  
Department of Biochemistry and  
Molecular Biology  
The University of Chicago  
920 East 58th Street  
Chicago, IL 60637

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## NATIONAL INSTITUTE OF MENTAL HEALTH

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U.S. Public Health Service

Associate Director for Brain and Behavior  
Scientific Technology and Resource Program  
(BB/STAR), GM-15

Division of Basic Brain and Behavioral Sciences

Due to the National Institute of Mental Health's expanding commitment to basic neuroscience and behavioral sciences research, NIMH is currently seeking qualified candidates to fill the position of Associate Director for Brain and Behavior Scientific Technology and Resource Program (BB/STAR), Division of Basic Brain and Behavioral Sciences.

The Brain and Behavior Scientific Technology and Resource Program (BB/STAR) will address national policy issues in biomedical science. BB/STAR, an NIMH pioneering program, is directly responsible for implementing a comprehensive research program for the development of new technology, and the potential for transfer to solve biomedical problems. Specific areas of research and evaluation include: clinical efficacy, projecting utility of new scientific breakthroughs, or determining distribution of new technology-based research centers. In addition, the BB/STAR program will include the development and management of the Congressionally mandated "set-aside" NIMH Small Business Innovation Research Program and the Small Instrumentation Program.

This position requires a Ph.D. in one of the following: physics, mathematics, computer science, electric engineering, biotechnology, or a field closely related. In addition to an appropriate degree, the scope of these activities requires thorough knowledge in the areas of basic biomedical, behavioral and clinical science. The incumbent's accomplishments in the field must be sufficiently significant to allow him/her to attract the attention of the scientific community and to establish productive working relationships with private industry, national and international.

The salary range is from \$64,233 to \$83,502 per annum. Benefits include a retirement plan, health and life insurance, sick and annual leave. Relocation expenses may be paid. Duty station is Rockville, Maryland. U.S. citizenship is required.

Vacancies will be filled through the Civil Service or an appointment in the Commissioned Corps of the U.S. Public Health Service. Women and minority group members are invited to apply. Interested applicants should submit a current curriculum vitae and bibliography to: **Ms. Gerri Topaz, Personnel, NIMH, Room 15C-12, 5600 Fishers Lane, Rockville, Maryland 20857.** Applications will be accepted until December 30, 1992 or until filled. This position will not be filled before October 1, 1992. \* Under the ADAMHA reorganization effective October 1, 1992, NIMH will become an Institute of the National Institutes of Health.

**AN EQUAL OPPORTUNITY EMPLOYER**

## POSITIONS OPEN

The University of California, San Francisco School of Medicine. **TENURED TRACK FACULTY POSITION IN THE PROGRAM OF BIOLOGICAL SCIENCES.** The Department of Orthopaedic Surgery and the Program in Biological Sciences of the School of Medicine, University of California, San Francisco seek a molecular cell and/or developmental biologist whose primary interest is in the organization and function of bone and cartilage as tissues. The successful candidate for this tenure track position should have a demonstrated expertise in connective tissue research primarily in osteogenesis and chondrogenesis. The successful candidate should be able to develop an active and independently funded research program and teach professional and graduate students.

Letters of application should be accompanied by curriculum vitae and bibliography, narrative description of plans for future research, and the names, addresses and telephone numbers of three references. Please send all material by September 15, 1992 to: **Dr. Bruce Alberts, Chairman of the Search Committee, Professor of Biochemistry and Biophysics, Box 0448—HSE 920, University of California, Medical Center, San Francisco, CA 94143-0450 or Dr. David S. Bradford, M.D., Professor and Chairman, Department of Orthopaedic Surgery, University of California, Medical Center, San Francisco, CA 94143-0728.**

## FACULTY POSITION IN CHEMISTRY

The Department of Chemistry at Washington University in St. Louis invites applications for a tenure-track position, beginning September, 1993. Teaching responsibilities will be in organic chemistry, at both the undergraduate and graduate level. While the particular area of research focus is open, the Department has targeted the areas of biological chemistry and materials chemistry for growth. Primary consideration will be given to applicants at the assistant professor level, but candidates with distinguished records will be considered for higher-level appointments. Candidates should submit, by November 1, 1992, curriculum vitae and a concise, specific statement of research plans, and arrange to have three letters of reference sent to: **Professor Peter P. Gaspar, Chairman: Organic Search Committee, Department of Chemistry, Washington University, One Brookings Drive, St. Louis, MO 63130. Washington University is an Equal Opportunity/Affirmative Action Employer, and employment eligibility verification will be required of the successful candidate. Applicants for assistant professorships must be United States citizens or hold United States permanent resident status.**

**POSTDOCTORAL POSITION** available to study the structure, function and regulation of the genes responsible for the human X-linked immunodeficiencies, particularly X-linked agammaglobulinemia. The work combines cellular immunology and recombinant DNA technology. Please send curriculum vitae, statement of research interests, and the names, addresses and telephone numbers of three references to: **Dr. M. E. Conley, Department of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38117. The University of Tennessee is an Equal Employment Opportunity/Title IX/Section 504/ADA/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available immediately to study a correlation at molecular level between cytochrome P450 metabolic activation, DNA binding and mutations in oncogene during skin carcinogenesis. Experience in biochemistry and molecular biology techniques is desired. Send curriculum vitae with three references to: **Professor Hasan Mukhtar, Department of Dermatology, Case Western Reserve University, Cleveland, OH 44106.**

**POSTDOCTORAL POSITION in Developmental Neurobiology** available immediately for an NIH funded study of the role of neuronal activity in cerebellar development involving neonatal surgeries, Golgi staining, receptor autoradiography and anterograde labeling. Send curriculum vitae, brief statement of research interests, and names of three references to: **Dr. Michael W. Vogel, University of Maryland School of Medicine, MPRC, P.O. Box 21247, Baltimore, MD 21228. Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** for NSF-funded research involving quantitative and molecular studies of microbe-plant-insect interactions. Ph.D. required, experience with molecular techniques preferred. Send curriculum vitae and three letters of recommendation to either: **Dr. D. Kluepfel, Department of Plant Pathology (telephone: 803-656-5728) or Dr. D. Tonkyn, Department of Biological Sciences (telephone: 803-656-3588), Clemson University, Clemson, SC 29634. An Affirmative Action/Equal Opportunity Employer.**

## CELLULAR NEUROPHYSIOLOGY

Two NIMH-funded postdoctoral positions available immediately for individuals interested in studying the electrophysiological and pharmacological properties of CNS dopamine-containing neurons. Applicants with a strong background in cellular physiology or neuropharmacology with experience using conventional electrophysiological methods and/or brain slice techniques are encouraged to apply. Interested candidates should forward their curriculum vitae, the names of three references and a brief statement of research interests to: **Paul D. Shepard, University of Maryland School of Medicine-MPRC, P.O. Box 21247, Baltimore, MD 21228. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available for the study of ribosomes. Current research includes: (1) analysis of ribosomal protein-rRNA interaction by genetic and biophysical approaches; (2) study of structure-function relationships in r-proteins and rRNA by site-specific mutagenesis; (3) topography of ligand binding sites on ribosomes and other ribonucleoprotein complexes using site-directed cross-linking; (4) organization and expression of ribosomal genes in archaeobacteria and lower eukaryotes. Salary commensurate with experience. Review of applications begins 4 September 1992 until suitable candidate is identified. Send curriculum vitae and three letters of recommendation to: **Dr. Robert Zimmermann, Department of Biochemistry and Molecular Biology, University of Massachusetts, Amherst, MA 01003. An Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** to study the role of DNA repair in pediatric solid tumor resistance to chemotherapeutic alkylating agents. Projects involve development of antibody and gene probes for determining expression of human DNA repair activities in cell culture, xenografts and tissues. Experience in molecular biology and immunology is highly desirable. Contact: **Dr. Thomas P. Brent, Department of Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. Equal Employment Opportunity/Affirmative Action.**

**POSTDOCTORAL POSITION** available to study the interactions of *E. coli* LexA repressor with DNA. Relevant expertise in biophysical chemistry/biochemistry preferred. Send curriculum vitae and names of references to: **Dr. Sandra Shaner, Department of Chemistry, Wayne State University, Detroit, MI 48202; telephone: 313-577-3513; FAX: 313-577-1377. Wayne State University is an Equal Opportunity/Affirmative Action Employer.**

## POSTDOCTORAL POSITION ELECTROPHYSIOLOGY

A position is available immediately to study ion channel modulation by pharmacological agents and structure-function relationship using whole-cell and single channel recording techniques. Applicants with a strong background in electrophysiology preferred.

Candidates should submit their curriculum vitae, a statement of research interests, and the names of three references by September 28, 1992 to: **Dr. Gea Ny Tseng, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032.**

*Columbia University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**POSTDOCTORAL POSITION, TUMOUR BIOLOGY** available in fall of 1992 to study the effects of novel anti-cancer drugs. Experience in the development of animal models of tumour or leukemia, human xenograft in nude mice, and tissue culture of human primary tumours is required. Stipend is \$27,000 to \$30,000. Canadian dollars. Send résumé to: **Dr. H. Salari, Department of Medicine, University of British Columbia, 2660 Oak Street, Vancouver, BC. V6H 3Z6, Canada.**

**TWO POSTDOCTORAL POSITIONS.** Available immediately for joint research project at the Massachusetts Institute of Technology and Boston University to develop new biophysical and molecular biological methods for studying membrane proteins including bacteriorhodopsin. Strong background in molecular biology and/or nucleic acids desired. Opportunity to learn advanced biophysical techniques. Send curriculum vitae and letters of recommendation to: **Professor K.J. Rothschild, Department of Physics, 590 Commonwealth Avenue, Boston University, Boston, MA 02215.**

**TWO POSTDOCTORAL POSITIONS** are available immediately in the CV/CNS Section to study potassium channels cloned from the heart and brain using electrophysiological and molecular biological techniques. The first position involves patch clamp and/or two-electrode voltage clamp; the second position involves cDNA cloning, heterologous expression, and mutagenesis of cloned genes. Applicants should hold a Ph.D. and/or M.D. degree and have a strong related background. Please send curriculum vitae and names of references to: **American Cyanamid Company, Medical Research Division, Department YAB, Pearl River, NY 10965. Equal Opportunity Employer.**

## POSTDOCTORAL FELLOW, IMMUNOLOGY

Positions available in the following subjects: T cell receptor structure and superantigen recognition with Dr. Nicholas R. J. Gascoigne. Development and specificity of  $\lambda\delta$  T cells with Dr. Wendy L. Havran. Thymic selection and T cell receptor signalling with Dr. Jonathan Kaye. Send curriculum vitae, a brief statement of research interests and names of three references to: **Ms. Alicia Palestini, Department of Immunology/IMM-8, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, CA 92037. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately to work on the molecular biology of recombination and its application to the study of the Human Genome. Send curriculum vitae to: **Dr. William K. Holloman, Box 62 Department of Microbiology, Cornell University Medical College, New York, NY 10021.**

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## POTAMKIN PRIZE FOR ALZHEIMER'S DISEASE RESEARCH

A prize of \$100,000 will be awarded by the American Academy of Neurology to a person in recognition of major contributions to the understanding of the causes and the prevention, treatment, and ultimately the cure for Alzheimer's disease and related disorders.

Candidates may be nominated on a world-wide basis from any of the biological disciplines including biochemistry, molecular biology, molecular genetics, pharmacology, immunology, physiology, cell biology, neuropathology or epidemiology.

A nomination application, nominating letter citing the scientific accomplishments of the candidate in detail, two supporting nominating letters, a curriculum vitae, and up to six (6) selected reprints in nine (9) complete sets are required.

The deadline for receipt of materials is November 1, 1992. No nomination will be considered unless it is complete. The awardee must be present for the AAN Scientific Program, at its annual meeting in New York, New York, U.S.A., on Tuesday, April 27, 1993.

Request application and submit nomination to:

Potamkin Prize for Alzheimer's Disease Research  
Award Committee  
American Academy of Neurology  
2221 University Avenue S.E.—Suite 335  
Minneapolis, MN 55414  
(612) 623-8115

The Potamkin Prize is funded through the philanthropy of the Potamkin Foundation.

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Bristol-Myers Squibb provides a competitive salary and benefits program fully commensurate with your education and experience. For confidential consideration, please forward your curriculum vitae and salary history to:  
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5 Research Parkway, P.O. Box 5101, Wallingford, CT 06492-7661.** Equal Opportunity Employer, M/F/D/V.



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Qualified applicants will possess a B.S. (M.S. preferred) in Computer Science or a biomedical related field. Experience in electron microscopy, as well as work with image analysis and associated computers is required.

Searle offers an excellent salary/benefits package. For consideration, please send resume to: **Searle, Human Resources, Dept. PB41, 4901 Searle Parkway, Skokie, IL 60077.** An equal opportunity employer M/F/H.



## Postdoctoral Scientist NEUROBIOLOGY

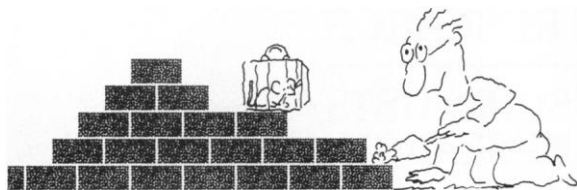
Amgen has distinguished itself as the industry leader in the development of human therapeutic products through applications of biotechnology. As a result of our continuing commitment to the discovery and characterization of novel neurotrophic factors, we are actively seeking a Postdoctoral Fellow to contribute to the development of this program. This position requires a background in the neurobiology of learning and memory, and experience with rodent models of cognitive dysfunction.

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Qualifications include a Ph.D. in immunology or related field with 2-4 years of postdoctoral research experience. Knowledge of current literature in areas of adhesion molecules, integrins and immunoassay development is preferred.

To apply or for further information, send a resume and salary history to: **Promega Corporation, Human Resources/SCI-CI, 2800 Woods Hollow Road, Madison, WI 53711-5399.** An Equal Opportunity Employer.

  
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**DIRECTOR, DIVISION OF  
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AND RESOURCES  
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Washington, D.C. 20550**

NSF's Directorate for Biological Sciences is seeking qualified candidates for the position of Director, Division of Biological Instrumentation and Resources. The Division is responsible for programs in multiuser instrumentation and instrument development; biological facilities, including marine and terrestrial laboratory refurbishment; living material stock centers and biological databases, and computational biology.

This Senior Executive Service position, with a salary range of ES-1 (\$90,000) to ES-4 (\$104,000), is announced on a two-to-three year limited term basis. Alternatively, selectee may be assigned under Intergovernmental Personnel Act provisions, retaining current salary and benefits at home institution. Applicants must have a Ph.D. or equivalent experience in biophysics, structural biology, or related disciplines (e.g. biochemistry, molecular biology); substantial research contributions or innovative leadership in research administration in the biological sciences; and the ability to achieve organizational objectives through the supervision and management of subordinates.

Applicants should contact George Pittmon, Jr. on 202-357-9565 (hearing impaired individuals may call TDD 202-357-7492) to request Announcement EP 92-10 (SES limited term) and/or EP 92-20 (IPA) for complete qualification requirements and application procedures. Applications must be received by 9/22/92.

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**DIRECTOR OF HEMATOLOGY** to oversee and implement all aspects of immunohematological research to develop new drugs protecting hemopoietic and immune systems from anticancer cytotoxic treatment, investigate their effects on various cells, and development of physiological regulators of hemopoiesis and immunogenesis. Research will utilize the study of mechanisms of action on animal model system and isolated human cells using *in vivo* and *in vitro* cell culture methods, testing effect of various compounds on hemopoietic precursors from murine bone marrow or model long term culture, cell proliferation and differentiation measurement using nonradioactive test system, immunofluorescent methods, gel electrophoresis and investigative analysis of drug pharmacokinetics and pharmacology. PhD in Biological Sciences plus 2 years experience as Director of Hematology. Previous experience must include two years hands-on experience performing immunohematological cancer research utilizing study of mechanisms of action on animal model systems and isolated human cells using *in vivo* and *in vitro* cell culture methods, testing effect of various compounds on hemopoietic precursors from murine bone marrow or model long term culture, cell proliferation and differentiation measurement using nonradioactive test system, immunofluorescent methods, gel electrophoresis and investigative analysis of drug pharmacokinetics and pharmacology, 40 hours per week. M-F, 8:30 AM-5:30 PM, \$60,000.00 per year. Send resume to Pro-Neuron, Inc., ATTN: KH, 1530 East Jefferson Street, Rockville, MD 20852. EOE.

## Regulatory Affairs Managers

Procter & Gamble has immediate openings for experienced Regulatory Affairs Managers to be based in the worldwide headquarters for Corporate Regulatory and Clinical Development in Cincinnati. These positions are in both our prescription drug and OTC product areas.

Successful candidates for the regulatory positions will have a degree in Pharmacy, Life Sciences or Physical Sciences with 2-5 years of regulatory experience in the pharmaceutical industry. Excellent oral and written communication skills are of primary importance. Prior experience with drug regulations and regulatory submissions in the U.S. or other countries is desired. Experience with prescription or OTC products and monographs is also important.

Professionals selected for these positions will work in liaison with R&D and Marketing and participate in the design and implementation of drug development plans. They will be responsible for and act as the interfaces with the FDA for U.S. submissions and compliance, and with Procter & Gamble regulatory managers worldwide for international regulatory submissions.

Procter & Gamble is a world leader in the research, development, manufacture and marketing of a wide variety of consumer products in the health and beauty care, food and beverage, laundry and cleaning and paper products areas. Annual sales exceed 30 billion dollars, and the R&D budget is over \$800 million.

P&G is the leading OTC product marketing company in the U.S. and also has a growing prescription drug business. Through a major commitment to building our strong health care businesses, the research and development organizations have established aggressive drug development programs which will provide excellent opportunities for personal and professional growth. P&G offers competitive salary and benefits packages placing us among the top 5% of U.S. firms.

For confidential consideration, please send a letter of introduction, resume and list of publications to:

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## Procter & Gamble

Lecturer/Senior Lecturer in Biochemical Parasitology, (Academic Level B), Continuing (on probation), DIVISION OF BIOCHEMISTRY AND MOLECULAR BIOLOGY, SCHOOL OF LIFE SCIENCES, FACULTY OF SCIENCE, THE AUSTRALIAN NATIONAL UNIVERSITY. The Division of Biochemistry and Molecular Biology in the School of Life Sciences is seeking applicants for the post of continuing on probation (tenurable) Lecturer or Senior Lecturer in biochemical parasitology. The successful applicant, who should have a strong research background in biochemical or molecular parasitology, will be required to teach parasitology and microbiological and biochemical topics in his/her area of expertise. He/She will be expected to have, or to develop, an active research program capable of attracting independent funding in an area compatible with existing research programs in the Division (host-parasite interaction, parasite metabolism, parasite variation, immunology and pathology of parasite infection), and to supervise honours and postgraduate students in that area. Opportunities also exist for interaction with research programs in nearby Research Schools and CSIRO Divisions. Applications are invited from qualified people with experience in biochemical or molecular parasitology. Enquiries: Professor C Bryant, Division of Biochemistry and Molecular Biology, Faculty of Science, Australian National University, Canberra, ACT 2601, AUSTRALIA. Telephone: (61 6) 249 2284; Fax: (61 6) 249 0313. Closing Date: 15 September 1992 Ref: FS 29.7.1.

LECTURER IN MICROBIOLOGY (Academic Level B) Continuing (on probation). The Division of Biochemistry and Molecular Biology of the School of Life Sciences is seeking applicants for the post of continuing on probation (tenurable) Lecturer in microbiology. The successful applicant, who should have a strong research background in biochemical or molecular microbiology, will be required to teach introductory and general microbiology and other topics in his/her area of expertise. He/She will be expected to have, or to develop, an active research program capable of attracting independent funding in an area compatible with existing microbiological research programs in the Division (molecular virology, plant-microbe interaction, parasitology, cyanobacteriology), and to supervise honours and postgraduate students in that area. Opportunities also exist for interaction with research programs in nearby Research Schools and Cooperative Research Centres. Applications are invited from qualified people with experience in biochemical or molecular microbiology. Enquiries: Dr M J Weidemann, Head of Division of Biochemistry and Molecular Biology, Faculty of Science, Australian National University, Canberra ACT 2601, AUSTRALIA. Telephone: (61 6) 249 2284; Fax: (61 6) 249 0313. Closing Date: 15 September 1992 Ref: FS 29.7.2. Appointment for both positions will be until retirement, subject to a four year probationary period. The University reserves the right to make a non-continuing appointment.

DIVISION OF BOTANY AND ZOOLOGY. The Division of Botany and Zoology of the School of Life Sciences is seeking to fill two continuing on probation lectureships from among the following three research areas. LECTURER IN BOTANY (Academic Level B) Continuing (on probation), (Plant Reproductive Biology). The successful applicant will be involved in developing, organizing and contributing to undergraduate units in botany, supervision of honours and graduate students, and will be expected to develop a strong independent research program. Applications are welcomed from qualified botanists, but preference may be given to applicants whose research interest is the reproductive biology of angiosperms, and who are likely to be able to contribute to the four major research strengths of the Division (evolutionary and behavioural ecology, population and community ecology, systematics, and functional botany). Closing Date: 15 September 1992 Ref: FS 29.7.3.

LECTURER IN ECOLOGICAL OR CONSERVATION GENETICS (Academic Level B) Continuing (on probation). The successful applicant will be involved in developing, organizing and contributing to undergraduate units in genetics and conservation biology, supervision of honours and graduate students, and will be expected to develop a strong independent research program. Applications are welcomed from qualified ecological geneticists, but preference may be given to applicants whose research interest is in conservation biology, or who are likely to be able to contribute to the four major research strengths of the Division (evolutionary and behavioural ecology, population and community ecology, systematics, and functional botany). Closing Date: 15 September 1992 Ref: FS 29.7.4.

LECTURER IN MICROBIAL ECOLOGY OR SYSTEMATICS (Academic Level B) Continuing (on probation). The successful applicant will be involved in developing, organizing and contributing to undergraduate units in microbiology, ecology or systematics, supervision of honours and graduate students, and will be expected to develop a strong independent research program. Applications are welcomed from qualified ecologists or systematists working with fungi, bacteria or protists, but preference may be given to applicants whose principal interest is either the biodiversity of microorganisms or in plant/microorganism interactions. Closing Date: 15 September 1992 Ref: FS 29.7.5 Enquiries on all three positions should be directed to Professor Andrew Cockburn (Telephone (61 6) 249 2866; Fax (61 6) 249 5573; e-mail: axc656@csc2.anu.edu.au). Salary: Lecturer A\$41,000-A\$48,688 p.a.; Senior Lecturer A\$50,225-A\$57,913. Applications addressing the selection criteria should be submitted in duplicate to the Secretary, The Australian National University, GPO Box 4, Canberra ACT 2601, AUSTRALIA, quoting reference numbers and including a curriculum vitae, list of publications and the names of at least three referees. The University has a "no smoking" policy effective in all university buildings and vehicles. THE UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER

## Executive Director COMMISSION ON LIFE SCIENCES

The National Research Council (NRC), the principal operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, a national non-profit, non-government institution, located in Washington, DC, invites applicants for the position of Executive Director of the Commission on Life Sciences (CLS). CLS activities include providing authoritative analysis of science and technology policy issues and problems arising in the life sciences. In pursuing its purpose, the CLS is expected to: (1) keep abreast of scientific, technological, and practical developments related to the life sciences; (2) identify emerging problems and opportunities; (3) respond to requests for analyses and studies from public or private organizations; and (4) be a source of authoritative information to the general public. The National Research Council advises the government and others on technical and policy issues across all issues in the life sciences.

The Executive Director, in cooperation with the CLS chairman, manages the CLS as one of ten major program units of the NRC, including all scientific, financial, and administrative operations of the unit, in coordination with cognizant chairmen and subject to the policy directives of the Chairman, Vice Chairman, and Executive Officer of the NRC. The incumbent plans and oversees the ongoing program of technical activities and studies, supervises staff, and is expected to stay abreast of major developments.

Applicants should have the following qualifications: Ph.D. or equivalent, preferably, in the life or physical sciences and at least 10 years experience related broadly to the Commission's activities with recognized expertise in relevant areas of research and demonstrated effectiveness in matters of national significance. Candidate must demonstrate excellence in scientific program management and administrative, supervisory, and fundraising performance. Candidates must also have a demonstrated ability to maintain positive, credible communications with various constituencies, including the research community, government officials, and representatives of sponsors and Academy staff. Please send resume in confidence to: National Research Council, Executive Officer - NAS 213, 2101 Constitution Avenue, N.W., Washington, DC 20418. An Equal Opportunity Employer.

NATIONAL RESEARCH  
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## DEAN OF THE COLLEGE OF LETTERS AND SCIENCE UNIVERSITY OF WISCONSIN-MADISON

The University of Wisconsin-Madison, one of the most distinguished educational and research institutions in the nation, invites applications and nominations for the position of Dean of the College of Letters and Science. The College of Letters and Science is the largest academic unit within the University. The College consists of 45 academic and professional departments, a wide array of academic programs abroad, and interdisciplinary instructional and research centers. The College has approximately 900 faculty, 700 academic staff, 4,700 graduate students, and 17,400 undergraduate students. The total budget is \$150 million, of which \$117 million is for instruction and research. In 1991, the College received 464 federal awards totaling nearly \$48 million. The College has a long-standing commitment to excellence. Thirty-one departments and programs within the College of Letters and Science are ranked in the top ten nationally, and five departments and programs are ranked number one. Five Nobel Prizes have been awarded to College faculty and alumni, and 14 current faculty are members of the National Academy of Sciences.

The Dean of the College of Letters and Science serves as the chief academic and executive officer of the College with responsibility for staffing, budget, curriculum, student academic affairs, and space management. Primary qualifications for the position include a successful record of administrative management and leadership in higher education; academic accomplishments as a scholar and teacher that meet the standards for a tenured appointment at the rank of full professor in the University of Wisconsin-Madison faculty; a commitment to the diverse mission of a major public university, including undergraduate and graduate instruction, research, public service, and outreach; and the ability to relate to external constituencies.

The position is available January 1, 1993. Applications and nominations should be received by September 30, 1992, to ensure consideration.

Submit applications and nominations to: Professor Peter D. Spear, Chair, Search and Screen Committee, Dean of the College of Letters and Science, University of Wisconsin-Madison, 134 Bascom Hall, 500 Lincoln Drive, Madison, WI 53706. Telephone: (608) 262-9337.

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We currently seek a highly motivated Scientist with HPLC expertise to lead our expanding analytical Process Development efforts. Methods include amino acid analysis, peptide mapping, and carbohydrate analysis. Ideally you will have a strong background in creative troubleshooting, assay development, and computer literacy as well as excellent written and oral communication skills. Qualified candidates will possess a Ph.D. in Chemistry/Biochemistry, 3-5 years' industrial experience, and at least 2 years' supervisory experience. This position requires expertise in protein chemistry.

#### **Process Biochemistry - Ph.D.**

This position will challenge the highly motivated scientist to develop efficient purification methods through the fundamental understanding of product and process biochemistry. The successful candidate will have a Ph.D. in Biochemistry/Chemistry (or equivalent) with a proven expertise in Protein Biochemistry and Chromatographic Sciences. Previous experience in development of Large Scale Processes for cGMP production will be advantageous.

#### **Process Biochemistry - BS/MS**

This scientist will assist in the development of processes for the large scale purification of biopharmaceuticals. This work will include the rational development of separation steps and biophysical analysis of products. A BS/MS in Biochemistry or Chemistry (or equivalent) and laboratory experience is required. The ability to work in a multi-disciplinary environment is essential.

#### **Analytical Biochemistry - BS/MS**

This scientist will assist in the development and performance of HPLC assay techniques for protein and peptide biopharmaceuticals. A BS/MS in Analytical Biochemistry (or equivalent) is required. A strong technical background in analytical chemistry and the ability to work in a multi-disciplinary environment is essential.

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Ph.D. and M.S. level applicants trained in the life sciences, biochemistry or a related field coupled with 2-4 years of relevant experience are encouraged to apply. Experience in the field of human allergic responses or immunology is highly desired.

Sanofi Diagnostics Pasteur, Inc. is located in a western suburb of Minneapolis. We offer an excellent salary, benefits and relocation package and the opportunity for continued professional growth. For confidential consideration, please forward your resume to: Sanofi Diagnostics Pasteur, Inc., 1000 Lake Hazeltine Drive, Chaska, MN 55318. Attn: Human Resources. Equal Opportunity Employer.



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**Research Associate...**The qualified candidate will have a Bachelor's or Master's degree in Microbiology or Biochemistry, and experience in gene transfer systems, general microbiology and basic gene cloning techniques. Reply to Job#60679

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**Dr. Leonard A. Cohen, Section Head, Division of Nutrition and Endocrinology, American Health Foundation, One Dana Road, Valhalla, New York 10595.** We are an equal opportunity employer m/f/h/v.

**American Health  
Foundation**



## CALGENE

Calgene, Inc., is a plant biotechnology company located in Davis, CA. The company's Medium-Chain Fatty Acid group is engineering the production of commercially important fatty acids in rapeseed. The pursuit of this objective requires continuing efforts in plant enzyme purification, gene isolation, and expression in transgenic plants.

### Research Scientist in Biochemistry/Molecular Biology

Calgene seeks a highly motivated individual, able to take responsibility for part of its rapidly expanding research activities in this field. The successful candidate will work in a highly interactive, interdisciplinary group encompassing expertise in enzymology, analytical biochemistry, molecular biology and tissue culture, and will also interact with the company's product development and regulatory divisions. A Ph.D. in an area of plant metabolic biochemistry and enzymology, along with at least one year of molecular biology is preferred. For more information, please contact Toni Voelker at Calgene, (916) 753-6313.

For consideration, submit your resume, a list of publications, and three references to Human Resources, Calgene, 1920 Fifth Street, Davis, CA 95616, AN-120-HR  
EOE M/F/H/V

### ASSOCIATE DIRECTOR OF CLINICAL MICROBIOLOGY

The Department of Pathology, Division of Clinical Microbiology, Medical College of Virginia/Virginia Commonwealth University invites applications from Ph.D. or M.D. clinical microbiologists to share in the direction of a full service Clinical Microbiology Laboratory. The associate director will assist in directing the virology, chlamydiaology, bacteriology, mycobacteriology, mycology, and serology laboratories. Additional responsibilities include teaching microbiology to medical, dental and graduate students, and laboratory aspects of Infectious Disease to residents and fellows. The associate director will develop an active basic and/or applied research program. The level of academic appointment will depend on qualifications. ABMM-AAM or M-ABP certification or eligibility required. A detailed job description will be provided to all applicants. Applications should include a curriculum vitae with names of three references and should be sent to:

**Harry P. Dalton, Ph.D.  
Chairman, Search Committee  
Department of Pathology  
Medical College of Virginia/VCU  
MCV Station, Box 597  
Richmond, VA 23298-0597**

Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and persons with disabilities are encouraged to apply.

**CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE  
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**Research Unit on Molecular Genetics and  
Developmental Biology**

**POST-DOCTORAL POSITIONS  
are open to work in one of the research areas:**

1. **Immunogenetics:** chicken major histocompatibility complex, T cell development in chicken and mouse (C. AUFRAY).
2. **Cell adhesion in the immune system:** interaction of CD4 with HLA class II antigens and the HIV gp120 glycoprotein (D. PIATIER-TONNEAU).
3. **Neurobiology:** molecular genetics and structure-function of the neurotrophins (M-D. DEVIGNES).
4. **Bioinformatics:** 3D modeling as an aid to site-directed mutagenesis (R. HOULGATTE).
5. **The Genexpress cDNA program:** towards an inventory of human gene transcripts (C. AUFRAY).

Other research teams working on cellular immunology and transplantation, and on T cell development and apoptosis are scheduled to join the research unit during the coming year. There are advanced on site facilities for molecular and cellular biology. The Genexpress cDNA program is a joint CNRS/AFM operation largely performed at the Genethon laboratory in Evry with large scale sequencing and mapping facilities.

**JUNIOR TEAM**

The research Unit has space available for one junior team and is inviting applications from young outstanding scientists willing to develop their own research program in a stimulating environment on areas related and complementary to those described above.

Send curriculum vitae, résumé of research interest and plans, and at least two letters of recommendation to Pr. Charles AUFRAY, Director, CNRS UPR 420 BP 8. 94801 Villejuif Cedex, FRANCE or call for further information 33-1-49-58-11-11—Fax: 33-1-49-58-11-22.

# Research Scientist

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

We currently have an opening for a Formulation Scientist to study the stability of Amgen's proteins and to develop aqueous and/or lyophilized formulations for our products. The ideal candidate will have a Ph.D. and postdoctoral experience in biochemistry, pharmaceutical chemistry or a related field. Research experience in areas of protein structure, analytical techniques (e.g. HPLC, electrophoresis, and others), and protein degradation pathways is essential. Industrial experience in preformulation and/or formulation development is preferred.

In addition to exciting, unique challenges, Amgen offers Research Scientists strong support for external collaborations and interactions with peers in the academic community. We offer an excellent compensation and benefit package. For consideration, please send your CV to: Amgen, Inc., Staffing Department, Code #S-400, Amgen Center, Thousand Oaks, CA 91320-1789. Amgen is an equal opportunity employer.

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## Universität Ulm

The **Department of Neural Information Processing** at the University of Ulm offers a position on the level of

### Associate Professor (C3).

Applicants should have some research experience in **neural networks for signal-processing or data-analysis**, for example in the fields of image- or speech-processing. They should also be interested in interdisciplinary work relating computer science and neuroscience.

Applicants should have teaching-experience and be ready to participate in the teaching of computer science courses.

Applications should be addressed to:

Dekanat der Fakultät für Informatik  
z.H. Herrn Prof. Dr. G. Palm  
Universität Ulm  
Postfach 40 66  
W-7900 Ulm  
Germany

until October 10th, 1992.

The Program for Developmental Neurosciences, Division of Basic Brain and Behavioral Sciences at the National Institutes of Mental Health is committed to studies which address basic principles in:

## DEVELOPMENTAL NEUROSCIENCES

The scope of the program includes studies using a wide range of techniques which explore conceptual issues of fundamental importance in the developmental neurobiology of neural systems pivotal to mental health. Specific topics include, but are not limited to: genetic factors in the developing brain; growth factors; cellular and molecular mechanisms involved in cell-cell interaction, target specificity, phenotype determination and functional specification; transplantation studies; sexual dimorphism in the CNS; developmental events leading to learning and cognitive disorders. Of particular interest are studies of the development of brain areas involved in cognitive and mental disorders such as the cerebral cortex.

For further information contact:

Douglas L. Meinecke Ph.D.  
Program Chief, Developmental Neurosciences  
Molecular, Cellular, and Developmental Neuroscience Program  
Division of Basic Brain and Behavioral Sciences  
National Institute of Mental Health  
5600 Fishers Lane Room 11C-05  
Rockville, Maryland 20857  
(301) 443-5288



## CHAIRPERSON DEPARTMENT OF MOLECULAR BIOLOGY

The Department of Molecular Biology of UMDNJ-School of Osteopathic Medicine, seeks applications and nominations of distinguished academic scientists qualified to serve as the founding departmental chairperson. The School of Osteopathic Medicine has recently undergone a major expansion and is now in the process of constructing its new campus in Stratford, close to the cultural and recreational centers of Philadelphia, the Jersey Shore and the mountains.

The Basic Science Departments have an emphasis in molecular biology and cellular function, and are housed in a modern, fully-equipped research building. The new department consists of 6 faculty and is expected to grow to 15. The present faculty are young and vigorous and encompass research programs in muscle protein, biochemistry, cellular DNA repair processes and cell motility. The Department will have responsibility for the instruction of medical students in the disciplines of Biochemistry, Microbiology, Genetics and Pharmacology.

We are seeking candidates who have an outstanding record of research achievements, are dedicated to high-quality educational programs and have administrative experience. Although we are seeking individuals with research interests in any area of modern molecular biology, we are particularly emphasizing the recruitment of individuals with research interests in mechanisms of oncogene expression, control of growth factor receptors, and molecular immunology. Appointment will be made at the Professor level with a starting date as early as April 1, 1993 and no later than July 1, 1993.

Letters of application, CV and the names, addresses and telephone numbers of 4 references should be submitted to: **Richard Schimmel, PhD, Assistant Dean for Basic Sciences, UMDNJ-School of Osteopathic Medicine, 401 South Central Plaza, Stratford, NJ 08084.** UMDNJ, NJ's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.



## POSITIONS OPEN

**POSTDOCTORAL FELLOW.** Available immediately for M.D. or Ph.D. with background in molecular biology or genetic research. Candidate to work with team to map loci predisposing to cancer, refine linkages, develop physical and genetic map around loci and isolate them. Position for two years minimum, competitive salary. Send curriculum vitae and three letters of reference to: **Mark Skolnick, Ph.D., Genetic Epidemiology, University of Utah, 420 Chipeta Way, Room 180, Salt Lake City, UT 84108.** *Equal Opportunity Employer.*

### POSTDOCTORAL FELLOW

Position available to investigate the response elements required for endotoxin-induction of the interleukin-1  $\beta$  gene. Position requires background in southern and northern blot analysis, reporter gene assays, gel mobility shift assays, transfection, etc. Level of Ph.D. degree, *American citizenship, permanent resident or noncitizen national required.* Forward curriculum vitae and names of three references to: **Dr. Charles E. McCall, Department of Medicine, Microbiology and Immunology, Bowman Gray School of Medicine of Wake Forest University.** FAX: 919-716-7492. *We are an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE-POSTDOCTORAL.

Biological weed control and the regulation of plant populations by herbivores. Requires strong background in population ecology of plant/insect interactions and Ph.D. degree in biological science with an emphasis in ecology. Experience in spatial statistics and geographic information systems (GIS) desirable. Application deadline is September 11, 1992. Starting date is September 21, 1992. Full-time appointment, minimum \$24,000 per year. Send résumé, statement of qualifications, transcripts, and three letters of reference to: **P.B. McEvoy, Department of Entomology, Oregon State University (OSU), Corvallis, OR 97331-2907.** *OSU is an Affirmative Action/Equal Opportunity Employer and is responsive to dual-career needs.*

### POSTDOCTORAL/RESEARCH ASSOCIATE POSITION IN AVIAN IMMUNOLOGY.

The University of Minnesota, College of Veterinary Medicine is currently seeking applicants for a postdoctoral/research associate position available January 2, 1993. This position will involve research on immunology of recombinant avian viral vaccines. Although the incumbent will conduct independent research, he/she will be a member of a team actively engaged in avian infectious disease and immunology research. The qualified candidate will hold a Ph.D. in Immunology, Virology, Microbiology, or a related field. If the Ph.D. has been received within the past three years, the individual will be appointed as a Postdoctoral Associate; if the Ph.D. was received more than three years ago, the individual will be appointed as a Research Associate. The outstanding candidate will hold both a D.V.M. (or foreign equivalent) and a Ph.D. The position is a renewable, 12-month appointment with a salary of up to \$23,508 per year. A letter of application, curriculum vitae, and names, addresses and telephone numbers of three references should be sent to: **Dr. J. M. Sharma, University of Minnesota, College of Veterinary Medicine, 1971 Commonwealth Avenue, 258 Veterinary Science Building, St. Paul, MN 55108.** Application deadline: October 31, 1992. **THE UNIVERSITY OF MINNESOTA IS AN EQUAL OPPORTUNITY EDUCATOR AND EMPLOYER.**

## ENZON, Inc.

**A**t ENZON, a rapidly growing biopharmaceutical company, we've developed a core technology that enhances the delivery of protein-based drugs. The first phase of our new expansion — our protein engineering lab — is facilitating the rapid development of further applications of our technology. We offer a fast-paced environment where creativity is valued, and independent thinking, as well as collaboration, is encouraged. In addition to strategic industry and academic affiliations, we offer unparalleled support for your scientific standing.

If you are a highly motivated research professional who's interested in developing new therapies for life threatening diseases, join us:

**RESEARCH ASSOCIATES/SCIENTISTS BS/MS/Ph.D. level**

### Mammalian and Insect Cell Culture

Working with Molecular Biologists and Protein Chemists, you'll develop and optimize lab-scale cell culture processes, using recombinant and non-recombinant DNA-derived mammalian and insect cell lines; and assist in the scale-up of cell culture-derived products from lab to pilot plant scale. Degree in Cell Biology, Microbiology or Biochemical Engineering, and 2+ years' experience operating bioreactors. **Dept. MICC.**

### Fermentation

**Downstream Processing** You will be responsible for downstream processing and scaleup of protein recovery methods for microbial derived or mammalian/insect cell derived recombinant proteins. This position involves responsibility for close interaction with Fermentation, Cell culture groups as well as molecular biologists and protein chemists. The successful candidate will have an MS., Ph.D degree in Biochemistry, Protein Chemistry, or Cell/Molecular Biology with 2-5 years of experience in purification of proteins expressed in prokaryotic or eukaryotic expression systems. Expression in purification of products from insect cells would be a plus. Supervision of supporting staff will be required. You must be highly motivated and have the ability to work in an interactive environment. You must be a team player and be able to meet deadlines and schedules. **Dept. DP**

### Analytical and Assay Support

You will primarily be involved in providing analytical support and assay development support to the fermentation and cell culture group. This position requires that you be proficient with analytical methods including HPLC, SDS PAGE, isoelectric focusing, protein assay methods and enzyme assay methods. Experience with immunological methods will be a plus. This position also requires close interaction with molecular biologists and protein chemists. The successful candidate will have a BS/MS degree in Biology, Microbiology or Biochemistry with minimum of 2-5 years of experience using above techniques. You will also provide assistance in protein recovery scaleup efforts from lab scale to pilot plant scale. You must be highly motivated and have ability to work in an interactive environment. You must be a team player and be able to meet deadlines and schedules. **Dept. AAS**

For a generous compensation and benefits package please send your resume, referencing the appropriate department, to: **Corporate Human Resources, Enzon, Inc., 40 Cragwood Road, South Plainfield, NJ 07080.** An equal opportunity employer.

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## POSITIONS OPEN

**POSTDOCTORAL RESEARCH FELLOW-SHIP:** A position is available to study the molecular biology of human thromboxane  $A_2$  receptors. Recombinant DNA technology, protein purification and ligand binding techniques are used. A background in molecular biology and/or protein chemistry is required. Send curriculum vitae to: **Perry V. Halushka, Ph.D., M.D., Department of Cell and Molecular Pharmacology, Medical University of South Carolina (MUSC), 171 Ashley Avenue, Charleston, SC 29425. MUSC is an Equal Opportunity/Affirmative Action Employer.**

### LOYOLA UNIVERSITY MEDICAL CENTER/ HINES VA HOSPITAL DEPARTMENT OF PATHOLOGY

**POSTDOCTORAL RESEARCH ASSOCIATE:** A postdoctoral position is currently available to study immune suppressive mechanisms induced by tumors. Candidates must have a Ph.D. with training and experience in either biochemistry, molecular biology or cellular immunology. Send letters of inquiry, current curriculum vitae, and names of three references to: **Dr. M. Rita Young, Research (151-Z2), Hines VA Hospital, Hines, IL 60141.**

**POSTDOCTORAL RESEARCH ASSOCIATE:** A postdoctoral position is currently available in the area of molecular pathology of human cancer. Candidates must have a Ph.D. in biochemistry or molecular biology with training and experience in immunology. Send letters of inquiry, current curriculum vitae, and names of three references to: **Dr. John Nawrocki, Research (151-Z2), Hines VA Hospital, Hines, IL 60141.**

Candidates can also send inquiries to: **Department Office, Department of Pathology, Loyola University Medical Center, 2160 South First Avenue, Maywood, IL 60151.**

### RESEARCH ASSOCIATE

Ph.D., M.D. or equivalent degrees in Biomedical Science. Knowledge in cardiovascular research especially in hemodynamic (sonomienmeter, pressure, flow ...) and metabolic (HPLC, adenosine, electrophoresis, enzymatic analysis ...) studies. Experience in cardiopulmonary bypass, experimental heart transplantation, and isolated perfused heart helpful. Interested applicants are invited to send current curriculum vitae to: **Dr. Race Kao, Department of Surgery, East Tennessee State University (ETSU), James H. Quillen College of Medicine, Box 70575, Johnson City, TN 37614. ETSU is an Affirmative Action/Equal Opportunity Employer.**

**RESEARCH ASSOCIATE** (Savannah, Georgia): Perform research on marine organic biogeochemistry, specially on the study of sources, behavior and alteration of organic compounds in marine systems both in water and recent sediments using organic biomarkers and compound-specific carbon isotope analysis as tracers of biochemical processes, and techniques of sea sampling and analysis, chromatography (GC, TLC, and HPLC), structural instruments (UV, FI, MS and GC-MS), and isotope techniques (labelling and determination). Forty hours per week, 9:00 a.m. to 5:00 p.m.; \$29,000 per year. Requires: Ph.D. in Chemical Oceanography plus one year of experience in the job offered or two years of experience as a Researcher in Marine Organic Geochemistry. Ph.D. studies must involve experience at sea, extraction and separation techniques, qualitative and quantitative analyses of organic tracers, isotope techniques, experimental methods of kinetics and mechanism study, and modeling methods geochemistry processes. Send résumé or apply in person to: **Georgia Department of Labor, Job Order # GA 5561789, 5520 White Bluff Road, P.O. Box 22069, Savannah, GA 31403-2069** or to the nearest Georgia Job Service Center. An Employer Paid Ad.

A **RESEARCH ASSOCIATE** position for a behavioral pharmacologist is immediately available within a multidisciplinary team engaged in the study and design of opiate, benzodiazepine and  $\alpha_2$  agonists drugs at a small nonprofit research institute near Stanford University. The applicant must be able to function independently and have broad preparation in psychopharmacology and some exposure to physiology. Send curriculum vitae and names of three references to: **Dr. M. Frances Davies, Molecular Research Institute, 845 Page Mill Road, Palo Alto, CA 94304.**

# PHARMACEUTICAL RESEARCH INSTITUTE

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The Pharmaceutical Research Institute in Wallingford, CT is embarking upon a major expansion in infectious disease research programs. Bristol-Myers Squibb is firmly committed to the continued enhancement of worldwide clinical research programs. This commitment has created several exceptional opportunities. Candidates should have an MD Degree and extensive clinical or clinical research experience in the areas of infectious diseases, clinical trials and/or drug development. This position also requires a strong interest in providing leadership to a multi-disciplinary group of scientific, clinical and regulatory professionals.

Bristol-Myers Squibb provides a competitive salary and benefits program fully commensurate with your education and experience. For confidential consideration, please forward your curriculum vitae to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Mark G. Hecklinger, (203) 284-6059, 5 Research Parkway, P.O. Box 5101, Wallingford, CT 06492-7661. Equal Opportunity Employer, M/F/D/V.**



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### THE GENOME DATA BASE (GDB) Hosted at the Johns Hopkins University School of Medicine SCIENTIST/ADMINISTRATOR

We seek an energetic individual to oversee the administration of the Genome Data Base (GDB) and to participate in the strategic planning that will determine the future scientific directions of the project.

This individual will represent the GDB at national and international levels, with responsibility for organizing and coordinating both regular and ad hoc scientific advisory meetings that will inform GDB design and development to permit the rapid evolution of the GDB system in response to the needs of the scientific community. Additional responsibilities include: general grant management, including interactions with funding agencies, proposal writing, budget planning, oversight of subcontracts, and coordination with collaborators; direction of GDB publicity and public relations; and facilitation of the growing international network of GDB nodes and sites. Extensive travel will be required.

The successful applicant will work closely with the Directors of the Informatics and Data Management core groups. In addition to advanced training in biological or life sciences, specific familiarity with genomic research and computer applications in biology are essential. Strong interpersonal and communication skills as well as successful project management experience are critical.

This is a senior management position with a faculty appointment in the School of Medicine. The level of appointment and salary will be commensurate with experience. Nominations are welcome. The position is available immediately.

Mail, fax, or e-mail a letter of nomination or a letter of application with cv and the names of three references. Closing date for applications is September 30, 1992.

Nina W. Matheson, Asst. Dir. for Administration  
Genome Data Base (GDB)  
The Johns Hopkins University, School of Medicine  
1830 E. Monument St. Third Floor  
Baltimore, MD 21201 U.S.A.  
voice: 410-955-9705  
fax: 410-955-0054  
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# **SCIENCE's 2nd Annual CAREERS IN SCIENCE**

**18 September 1992**

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With a recruitment ad in SCIENCE, you are guaranteed a worldwide circulation of 155,000 qualified, paid subscribers, and a pass-along readership of over 470,000 total readers.\* SCIENCE, in its 112th year of publication, is the most respected journal in the industry, ensuring that your ad will be well-read.

**For more information or to place your ad, please call  
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**Reservation Deadline: Tuesday, 1 September 1992**

\*Harvey Research

## POSTDOCTORAL FELLOWSHIP

A 2-year postdoctoral position in pulmonary pharmacology is currently available in the Pharmacology Department at ICI Pharmaceuticals Group.

Candidate will be involved in ongoing research concerning effects and mechanisms of effects of C-fiber activation in the airways. Studies will also involve modulation of C-fiber responses.

PhD or equivalent in a biological science is required. Experience with isolated tissue preparations and measurement of physiological or pharmacological responses is preferred.

Interested candidates should submit a.c.v. to: **Melanie M. Lewis, Human Resources, ICI Pharmaceuticals Group, Concord Pike and New Murphy Road, Wilmington, DE 19897.**



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Our commitment to attracting the most dedicated professionals is exemplified by our highly competitive compensation and benefits package.

For consideration, please send resume and salary requirements to: Dept. MH-1S-236, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877-0368. As a progressive health care company, we have a nonsmoking environment. We are an equal opportunity employer m/f/h/v.



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Applicants should send their C.V., a one page description of their research interests, copies of up to three representative publications, and the names and addresses of three potential references to:



**Fernando Nottebohm**  
**Rockefeller University**  
**Field Research Center**  
**Tyrrel Road, RR2, Box 38B**  
**Millbrook, NY 12545**

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**THE ROCKEFELLER UNIVERSITY**

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## Neurobiology Research Assistants

Regeneron Pharmaceuticals is committed to the research of neuronal growth factors and developing these proteins for the treatment of nervous system disorders. We seek a professional with Master's level or B.A. and several (4-5) years experience with animal experimentation. Experience with small animal surgeries and histology is requisite. Knowledge of such biomedical techniques as SDS-PAGE, Western blotting, enzyme assays and data management is desirable.

Regeneron's modern facility is located on an expansive wooded campus in Westchester County, 25 miles north of Manhattan. The highly collaborative and supportive Regeneron community offers considerable scientific and professional growth potential.

Please send your resume and a cover letter indicating your research experience and interests, immediate career goals, desired starting date, salary expectations, and the names of two or more references to:  
**Human Resources Dept., BIN PD, Regeneron Pharmaceuticals, 777 Old Saw Mill River Road, Tarrytown, N.Y. 10591-6707. Equal Opportunity Employer m/f.**

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**Pharmaceuticals, Inc.**



# Adhesion Immunologist

## Cellular or Molecular Immunology Scientist/Sr. Scientist

PARKE-DAVIS Pharmaceutical Research Division, Warner Lambert Company, has an opening for a Cellular or Molecular Immunologist at the Scientist/ Sr. Scientist level to join our drug-discovery program in inflammation/immunology in the Immunopathology Department at our Ann Arbor, Michigan facility.

The successful candidate will perform research to elucidate the cellular and molecular processes mediating lymphocyte adhesion to various substrata and cell types. The candidate will investigate the effect of adhesive interactions on subsequent lymphocyte signaling events and functional responses. As a member of a large multi-disciplinary team oriented around the study of adhesion, the candidate will interface with scientists representing a number of potential therapeutic indications.

Requirements include:

- Ph.D. or equivalent in immunology
- Graduate or post-doctoral experience in the study of lymphocyte adhesion processes
- Documentation of accomplishments via publication in peer-reviewed journals
- Knowledge of current concepts involving lymphocyte activation and signal transduction mechanisms
- Desire to continue making significant contributions to the scientific literature

Interested persons should forward their CV and list of references to **Human Resources, Box JDM-92274, PARKE-DAVIS Pharmaceutical Research Division, 2800 Plymouth Road, Ann Arbor, MI 48105.** "Smoke-Free Work Environment"



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### Columbia University College of Physicians and Surgeons Department of Biochemistry and Molecular Biophysics

The Department continues its search for outstanding new **FACULTY MEMBERS**. Both tenured and tenure track positions are available.

Applications are invited from candidates with the Ph.D. degree or its equivalent and appropriate postdoctoral experience for positions in biochemistry and molecular biophysics. In the area of biochemistry we are seeking persons with research interests in developmental biology, neurobiology, and regulation of gene expression. We are particularly interested in persons whose research in these areas focuses on nucleic acid-protein interactions. In molecular biophysics, the areas of particular interest are three-dimensional structural analysis, protein folding, enzyme mechanisms, and protein-protein interactions.

Preference will be given to those people with strong records of research accomplishments. Interested candidates should submit a curriculum vitae, bibliography, reprints, summary of current and future research goals as well as letters of recommendation from three references. *The Department is especially interested in women and minority candidates.* All applications should be addressed to: **Chairman, Department of Biochemistry & Molecular Biophysics, Columbia University, Health Sciences, 630 West 168th Street, New York, NY 10032.**

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### POST-DOCTORAL POSITIONS NIA Drug Discovery Group Alzheimer's Disease

**Bio-Organic Chemistry...** You will be responsible for design and synthesis of probe and inhibitor molecules to study proteases and protein kinases involved in neurodegenerative processes. Experience in synthetic chemistry and inhibitor enzymology is essential. Familiarity with protein biochemistry, molecular biology, and protein molecular modeling is desirable. **Reply to Job# 48647A.**

**Protein Biochemistry/Immunochemistry...** You will be responsible for identification and isolation of proteases and kinases involved in neurodegenerative diseases. Experience in protein biochemistry and immunochemistry is essential. Familiarity with immunoassay development, production of antibodies, chromatography, and molecular biology is desirable. **Reply to Job# 48647B.**

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban setting, approximately 30 miles north of Chicago. For confidential consideration, please forward a resume (indicating appropriate Job#) and salary history to: **Patricia Handy, Corporate Placement, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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Requirements include a Ph.D. with up to 5 years PK/PD technical experience. Primary emphasis will be on design and implementation of preclinical/clinical protocols, ADME studies of peptide-copper drugs, data interpretation and FDA reporting.

ProCyt offers an opportunity to build a PK program in a fast-paced, product-oriented environment. Competitive salaries and benefits, and the quality of life found only in the Pacific Northwest complete the package. For confidential consideration, please forward your resume to: ProCyt Corporation, Human Resources, 12040 115th Avenue N.E., Suite 210, Kirkland, WA 98034-6900. An Equal Opportunity Employer.

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#### **PANLABS, INC.**

**Attn: Human Resources Manager  
(Include Position Number)  
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Bothell, Washington 98011-8805**

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### U.S.-FORMER SOVIET UNION EXCHANGE ON RADIOACTIVE WASTE MANAGEMENT

On behalf of the U.S. Department of Energy, the National Academy of Sciences is sponsoring an exchange program on radioactive waste management between scientists from the United States and the former Soviet Union.

The following areas of research are eligible for this program:

1. Policy and practices regarding environmental restoration and waste management associated with past and current operations related to the nuclear fuel cycle.
2. Problems of process design, development, and operations related to environmental remediation and control of materials contaminated by radioactive and other hazardous waste.
3. Research directed at improving the effectiveness, economics, safety, and public acceptability of methods of handling, storing, and permanently disposing of radioactive and associated hazardous waste.
4. Analyses and investigations related to waste partitioning to facilitate permanent disposal.
5. Analyses and investigations related to geological disposal of wastes.

Awards will cover the costs of international airfare, living allowance (\$1000 per month for beginning graduate student in U.S., \$1500-\$2000 for senior scientist), and some scientific supplies (up to \$300 per month) for a period of up to nine months. Applications must be received by September 15 for inclusion in a peer reviewed selection process; notification of awards will be made by October 15. Applications should include a description of the proposed research and its benefits, the proposed program for the participants, the qualifications (including CVs and publication lists) of the participants, the final research product, and the proposed budget. Recipients may use the funds for the 1992-1993 academic year. Please send applications and two recommendations to:

Peter MacDonald  
Office for Central Europe and Eurasia  
FO-2014  
National Academy of Sciences  
2101 Constitution Ave., NW  
Washington, DC 20418

## MICROBIOLOGICAL ASSOCIATES, INC.

MICROBIOLOGICAL ASSOCIATES, INC. (MA) is a leading international provider of toxicological and biotechnology safety testing services. With our growing commercial and contract services businesses, we have immediate openings for Ph.D.s and other professionals to join our scientific, marketing and sales staffs.

The **STUDY DIRECTOR** positions will be responsible for direct interaction with clients and for the supervision of testing programs. The newly created **MARKETING** and **SALES** positions are part of MA's global expansion plans.

### IN VITRO TOXICOLOGY

MA has an expanding program to provide the latest *in vitro* techniques for not only skin and eye irritation but also more complex biological toxicities. We require a Study Director with postdoctoral training and 2-5 yrs. experience in toxicology or cell biology. Experience in the cosmetic or personal care products industries would be a positive asset.

### MAMMALIAN TOXICOLOGY

Our Mammalian Toxicology Division performs specialty toxicology tests such as analysis of cell proliferation, infectivity of microbial pesticides and chemically induced alterations in gene expression. Individuals with 2-5 yrs. experience in a GLP-compliant industry or contract lab would be preferred.

### CYTOGENETICS

A Study Director in Cytogenetics is required to manage *in vitro* and *in vivo* assay systems for the detection of chemically-induced chromosome damage. The ideal candidate will have excellent communication skills, knowledge of GLPs, and 2-5 yrs. experience in a testing environment.

### TOXICOLOGY MARKETING MANAGER

Reporting to the VP, Marketing & Sales, the successful candidate will have 2-5 yrs. experience in marketing and/or sales of toxicology products or services and a B.S./M.S. degree in the biological sciences. Technical knowledge of genetic, mammalian or *in vitro* toxicology will be a plus.

### WEST COAST REGIONAL ACCOUNT MANAGER

MA's client base in the biotechnology and toxicology areas is expanding rapidly in the Western U.S. We require an experienced sales person to manage current accounts and further expand the client base. Preference will be given to individuals with demonstrated sales skills in a service oriented business. Technical knowledge of toxicology or biosafety testing will be required. The position will be located on the West Coast.

Join us as we build on our 40-year tradition of scientific excellence. Our state-of-the-art facilities are located in the Washington, D.C. suburbs. We offer attractive compensation packages that include relocation assistance. Please send your C.V. or resume to:

**MICROBIOLOGICAL ASSOCIATES, INC.**  
9900 Blackwell Road  
Rockville, MD 20850  
Fax: 301/738-1036

EOE M/F/H/V

## POSITIONS OPEN

**RESEARCH ASSOCIATE** position available immediately in Molecular and Cellular Endocrinology, subspecialty 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 to: **Dr. O. P. Bahl, Cooke 347, Department of Biology, SUNY at Buffalo, Buffalo, NY 14260.**

## RESEARCH ASSOCIATE

Postdoctoral position to apply a plant-soil-water model to investigate the response of soil, water and vegetation to changes in atmospheric deposition of sulfur and nitrogen. The model will be applied to intensive study sites at the Hubbard Brook Experimental Forest in New Hampshire and the Adirondack Mountain Region of New York State. Strong background in computer modeling, data management, and biogeochemistry of terrestrial ecosystems is required as well as a demonstrated ability to conduct independent research. Submit curriculum vitae and three letters of reference to: **Charles T. Driscoll, Department of Civil and Environmental Engineering, 220 Hinds Hall, SYRACUSE UNIVERSITY, Syracuse, NY 13244-1190; telephone: (315) 443-2311; FAX: (315) 443-1243. Affirmative Action/Equal Opportunity Employer.**

**BIOGEOCHEMICAL MODELER.** Research Support Specialist, minimum one year, full time, temporary position for studying forest ecosystems including data synthesis and simulation modeling. M.S./Ph.D. with background in soil chemistry, hydrology or plant-atmosphere interactions desirable. Experience in SAS and spreadsheet programming preferred. Send letter of application, three letters of reference, résumé and transcripts by September 15, 1992 to: **Dr. M. J. Mitchell, SUNY-CESF, Syracuse, NY 13210. SUNY-Research Foundation is an Equal Opportunity/Affirmative Action Employer.**

**MYCOLOGIST.** Responsible for development and implementation of an antifungal drug screening program using plant extracts as starting materials—including design and implementation of antifungal mechanism of action studies and preparation/validation of standard operating procedure for all assays and mechanism of action studies. Ph.D. or Equivalent in Plant Pathology. Must have coursework in advanced mycology, microbiology, plant physiology, cell biology and biochemistry. Must be familiar with electron microscopy and isolation/purification of biomolecules. Salary: \$37,000 per year. Job site/Interview: San Carlos, California. Clip ad and send with résumé no later than September 4 to:

**Shaman Pharmaceuticals**  
887 Industrial Road, Suite G  
San Carlos, CA 94070

## STAFF POSITION

Available immediately for Ph.D. in cytokine research. The individual will join a research team studying the cellular and molecular mechanisms of human B cell differentiation. The candidate should have at least two years of postdoctoral training in immunology. Salary is negotiable. The interested candidate is encouraged to send curriculum vitae to:

**Dr. Y. S. Choi**  
Director, Laboratory of Cellular Immunology  
Alton Ochsner Medical Foundation  
1520 Jefferson Highway  
New Orleans, LA 70121  
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## WOUND HEALING RESEARCHER

Position available at the level of Ph.D. or Master's level with two years of experience in related fields. We are ideally seeking a postdoctoral researcher to direct projects related to wound healing growth factors, and the immunological response to biologic implants. Please send curriculum vitae and letter stating career goals and areas of interest to: **Suman K. Das, M.D., Professor, Division of Plastic Surgery, 2500 North State Street, Jackson, MS 39216.**

## POSITIONS OPEN

### LAB TECHNICIAN

**Annual Salary: \$26,838 to \$32,237  
Plus Health Benefits**

To perform surgical techniques and assemble miniature sensors to study neurotransmitters within the context of biomedical research, under the direction of Dr. Broderick, CUNY Medical School.

a) Education: B.S. or B.A. with major in Science preferred.

b) Experience: Laboratory or Veterinary Research: Applicants with undergraduate or graduate courses in Neuropsychology or Neurobiology are encouraged to apply.

Please send: postmarked by October 15, 1992: a) Letter of Application b) Curriculum Vitae and c) Names, Addresses and Telephone Numbers of three (3) references to: **Dr. Patricia A. Broderick, Department of Pharmacology, Room J-910.**

**The City University  
of New York Medical School  
138th Street and Convent Avenue  
New York, NY 10031**

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### RESEARCH SCIENTIST

Research Scientist position available at Cedars-Sinai Research Institute, a UCLA affiliated facility, to study the biochemistry and cell biology of connective tissue pathology and microvascular disease of ocular tissues.

Ph.D. in biochemistry or cell biology required; knowledge of microvascular disease and diabetes helpful, as is experience with protein analysis and purification and gene expression.

Send curriculum vitae and three references to: **Donald Brown, Ph.D., Search Committee, Ophthalmology Research, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Halper Building, Room 111, Los Angeles, CA 90048. Affirmative Action/Equal Opportunity Employer.**

### STAFF SCIENTIST

Fast growing biotechnology company in Gaithersburg, Maryland dedicated to the development of innovative drugs against cancer is seeking an individual with a Ph.D. in Biochemistry, Molecular Biology or related Science. The applicant should have at least two years of postdoctoral experience in gene cloning, DNA manipulation and sequencing, and expressing genes in bacteria or eukaryotic systems.

At Molecular Oncology you'll enjoy working in a professional atmosphere with a highly competitive salary and a comprehensive benefits program. For confidential consideration, please send two (2) copies of your résumé to:

**Molecular Oncology  
Attn: BB  
19 Firstfield Road  
Gaithersburg, MD 20878**

## MEETINGS

### AIDS SYMPOSIUM MEHARRY MEDICAL COLLEGE OCTOBER 21, 1992

In honor of Dr. C.W. Johnson, Sr., an outstanding physician, scientist and administrator, an AIDS Symposium featuring some of the most outstanding researchers in the field will be held. The speakers and their topics are: **Dani Bolognesi—Duke University—Status of AIDS Vaccine Development; James Curran—CDC—Epidemiology and Prevention of HIV Infection; Dr. Leon Epstein—University of Rochester—HIV Infection of the Nervous System; Dr. Helene Gayle—AID—International AIDS Crisis; Dr. Michael Glick—Temple—Oral Manifestation of HIV Disease; Dr. Phillip Pizzo—NIH—Pediatric AIDS; Dr. Steven Wolinsky—Northwestern University—HIV Transmission and Genetic Variation.**

Continuing Education credits are available. The registration fee is \$100—no charge to students. Contact **Sylvia Wright** for additional information at (615) 327-6177 or (800) 835-2391.

Program Director: **Dr. George C. Hill, Meharry Medical College, 1005 D.B. Todd Boulevard, Nashville, TN 37208.**

## POSITIONS OPEN

**BIOTECHNICAL CONSULTANT. DUTIES:** Provide technical expertise to attorneys and clients in evaluating biotechnical processes and products for possible patent protection; determine whether processes or products are novel by reviewing literature and utilizing background and expertise; assist attorneys in drafting patent applications by describing processes and defining claims; assist attorneys in evaluating Patent Office objections and competing patent claims; assist attorneys in preparation of litigation involving claims of infringement of biotechnological patents. **REQUIREMENTS:** Bachelor of Science in Microbiology. Ph.D. in Biochemistry. Three years of experience of research in microbiology, genetics and biochemistry as evidenced by at least three published research papers. **SALARY:** \$35,000 per year. Full-time position. 40 hours per week. Work location: Portland, Oregon. Direct résumés and references to: **Oregon State Employment Division, Job Order No. 5550350, Department of Human Resources, 875 Union Street, N.E., Salem, OR 97311.**

## COMPUTER MARKETPLACE

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This DNA manipulation, design, and drawing tool automatically tracks construct history and produces publication quality output from your Macintosh. Allows graphical manipulation of DNAs while tracking ligations. DNA can be displayed as sequence or graphics. Call about a free demo offer. **Textco, Inc., 27 Gilson Road, W. Lebanon, N.H. 03784, U.S.A. voice or FAX: (603) 643-1471**

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## MARKETPLACE

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### Life Scientist in Nuclear Medicine

The successful candidate will design and implement fundamental studies aimed at gaining understanding of the mechanisms of uptake and biodistribution of biomolecules in cellular and animal models with emphasis on mechanisms of uptake of radiolabeled compounds and development of targeting strategies to deliver radioisotopes to target tissues. The candidate will also perform studies of the behavior of these radiolabeled compounds in vitro and in vivo. These studies will lead to applications for new radiopharmaceuticals prepared from the wide variety of radioisotopes available from our accelerators and reactor. Will pursue research at the interfaces of nuclear medicine and structural/molecular biology.

The successful candidate must possess a Ph.D. or equivalent in the chemical, biological or pharmacological sciences. In addition, you must have demonstrated experience through publications and presentations in one or more of the following areas: molecular biology, cell biology, radiation biology, biochemistry or medicinal chemistry. A demonstrated knowledge of quantitation and mechanisms of uptake of compounds in cells, tissues, and animals is also required. It is also required that you have had experience with imaging analysis and related technologies. It is desirable that you have had experience with nuclear medicine or related biomedical field, plus experience handling radioactive compounds. Please respond to Job # **100188-AN** when responding

### Nuclear Medicine Research Position

Research will involve the following:

- Experiments directed at the preparation of labeled biomolecules and performance of fundamental studies of the behavior of these radiolabeled compounds in vitro and in vivo.
- Development of new radiopharmaceuticals using the wide variety of radioisotopes available from our accelerators and reactor production efforts.
- Research at the interfaces of nuclear medicine and structural/molecular biology.
- Design and implement targeting strategies to delivery radioisotopes to target tissues.

The successful candidate must possess a Ph.D. or equivalent in the chemical, biological or pharmacological sciences. In addition, you must have demonstrated experience through publications and presentations in one or more of the following areas: bioinorganic chemistry, bioorganic chemistry, biochemistry, medicinal chemistry, molecular biology or radiation biology. A demonstrated knowledge of biological and biochemical separation and characterization of compounds is also required. It is desirable that you have had experience with quantitation and mechanisms of uptake of compounds in cells, tissues and animals, as well as having experience handling radioactive compounds. It is also desirable that you have had experience with imaging analysis and related technologies, plus experience in nuclear medicine or related biomedical field. Please indicate Job # **100034-AM** when responding.

To formally apply for these position, interested candidates should forward a resume, indicating appropriate job number, to James Trout (MS P280), Personnel Services Division, Los Alamos National Laboratory, Los Alamos, NM 87545. Affirmative Action/Equal Opportunity Employer. Must be able to obtain a Department of Energy "Q" Security Clearance, which normally requires U. S. citizenship. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy.

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Just supply us with the peptide sequence and Research Genetics does the rest! Your peptide will be synthesized using the latest FMOC solid phase methods utilizing MAP resin technology<sup>1-7</sup> which increases the antigenic response.

Using proven procedures, Research Genetics will generate antibodies in two rabbits over a 10 week period. A minimum of ~100 ml of antiserum is delivered in ~16 weeks. When requested, first bleed serum is available upon collection for the cost of shipment.

Also available from Research Genetics - High quality, custom peptides synthesized at small scale using FMOC chemistry. Typically 50% to 75% pure, yields run from 8 to 12 mg. of crude peptide. At \$30 a residue with no setup charge, they are the best value available anywhere. Peptides may be from six to eighteen residues in length and while designed primarily for immunologists requiring only small quantities of peptides, anyone with similar needs will find this service attractive.

1. Tam, J.P. (1988) Proc. Natl. Aca. Sci., USA **85**, 5409-5413.
2. Posnett, D.N., et al. (1988) J. Biol. Chem. **263**, 1719-1725.
3. Tam, J.P. and F. Zavala. (1989) J. Immunol. Methods **124**, 53-61.
4. Tam, J.P. and Y.A. Ly. (1989) Proc. Natl. Aca. Sci., USA **86**, 9084-9088.
5. Lal, K. et al. (1989) J. Dental Research, Abstract **68**: 405.
6. Santarpia III, R.P., et al. (1988) Archs. Oral Biol. **33**, 567.
7. Chang, C.C. et al. (1990) European Peptide Symp. Proc.

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