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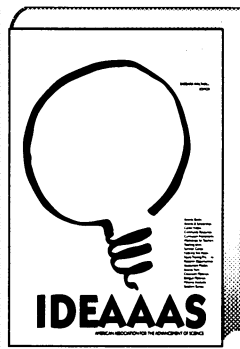


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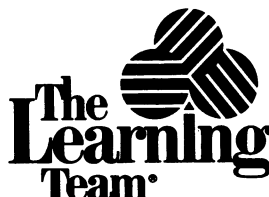
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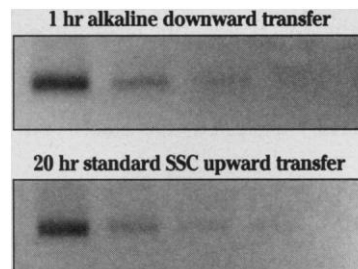
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Data courtesy of Dietlind Stapel, University of Hannover

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Antibodies

The protein kinase C (PKC) family plays a key regulatory role in a number of signal transduction pathways controlling a wide variety of cellular functions including cell proliferation and differentiation. Antibodies to PKC α , $\beta 1$, $\beta 2$, δ , and η are available. **The Binding Site. Circle 138.**

Monoclonal antibodies (mAbs) to PKC isoforms δ , μ , and ζ , for use in protein immunoblotting and other immunological techniques, have been added to a line of other mAbs to PKC isoforms. **Transduction Laboratories. Circle 139.**

A polyclonal antibody to the aryl hydrocarbon (dioxin) receptor can be used for immunoprecipitation and protein immunoblotting experiments. **Affinity Bioreagents. Circle 140.**

Ultracentrifuge

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nm transilluminator commonly used for ethidium bromide-stained nucleic acid gels. Both dyes can be used with native SDS and gradient gels. These orange and red dyes give a linear response from about 1 ng of protein per band to greater than 1 µg per band. **Molecular Probes. Circle 143.**

Plasmid DNA Isolation

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Protein Concentrators

Ultrafree-15 centrifugal filters can concentrate 15 ml of protein to 150 µl in just one spin. Users can concentrate, desalt, or purify



aqueous biological samples within 15 to 60 min with high recoveries. The one-spin method reduces hands-on time because there is no need to decant filtrate several times during the process. **Millipore. Circle 145.**

Literature

Paratherm HE High Efficiency Heat Transfer Fluid provides technical information on a fluid that provides precise and uniform temperature control in process applications. **Paratherm Corp. Circle 146.**

TechNOTES: Information and Case Studies Involving Monoclonal Antibody Production, Purification, and Processing is a newsletter for antibody users. **TSD BioServices. Circle 147.**

Proteam L describes a low-pressure liquid chromatography system for protein purification in which the programmable fraction collector provides unified control of elution and collection procedures. **Isco. Circle 148.**

ASTED XL System is a 12-page brochure on a membrane-based, robotic sampling injector designed to automate on-line deproteinization of complex sample matrices prior to high-performance liquid chromatography injection. **Gilson. Circle 149.**

Turbo GC Lite highlights a system for gas chromatography analysis and data handling. **Perkin Elmer. Circle 150.**

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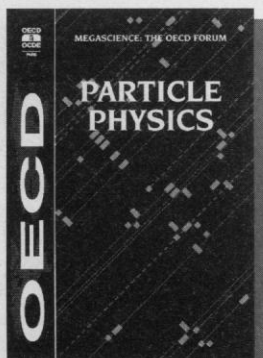
The OECD Megascience Forum

The OECD Megascience Forum was established in June 1992 to help ensure the exchange of information and promote open and substantive discussion of issues relating to existing and potential megascience projects among Member country governments and the scientific communities involved in very large scientific undertakings. It organised a series of expert meeting in disciplines in which megaprojects (facilities or programmes) play a key role. The results of these meetings and of related policy issue discussions are published in the following series of books, in both French and English:

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Science reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

POSITIONS OPEN

ASSOCIATE/FULL PROFESSOR Cell or Developmental Biology

The University of Iowa invites applications from cell or developmental biologists for the position of **ASSOCIATE or FULL PROFESSOR** in the Department of Biological Sciences. The successful candidate must have significant experience directing a strong, independent research program with high visibility in the research community, and the capacity to forge strong intra-university collaborations in research programs and centers. Teaching responsibilities will be in the area of cell or developmental biology. Preference will be given to applicants with research interests in vertebrate development or molecular cytology, but outstanding researchers in related areas are encouraged to apply. Please send curriculum vitae with a statement of research interests and names of three references to: **Dr. David R. Soll, Cell and Development Search Committee, Department of Biological Sciences, University of Iowa, 138 Biology Building, Iowa City, IA 52242-1324.** *The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.*

FLORIDA ATLANTIC UNIVERSITY Assistant/Associate Professor in Botany

Applicants are invited for a tenure-track position of **ASSISTANT/ASSOCIATE PROFESSOR** in the Division of Science at the College of Liberal Arts, beginning January 1996. Preference will be given to candidates with primary interest in botany and environmental sciences. The successful candidate will teach subjects in botany, environmental science and related subjects. She/he will provide leadership in botany and environmental science programs, and participate actively in planning and execution of research programs in the Division of Sciences. The successful candidate will have a Ph.D. degree and demonstrated excellence in college and university teaching and research. Send curriculum vitae and three letters of reference to: **Dr. J. Kumi-Diaka, Search Committee Chair, College of Liberal Arts F.A.U. Southeast Campus, 3912 College Avenue, Davie, FL 33314.** Closing Date: October 15, 1995. *Equal Opportunity/Affirmative Action Employer.*

PLANT EVOLUTION

The Department of Botany of The University of Texas at Austin invites applications for a tenure-track faculty position in Evolutionary Botany at the **ASSISTANT PROFESSOR** level starting September 1996. We are particularly interested in applicants who study mechanisms and processes of evolution using molecular and/or quantitative genetic approaches. Candidates may pursue empirical and/or theoretical research. A Ph.D. degree is required. Postdoctoral experience is preferred. The successful candidate will be expected to have a vigorous research program which will gain extramural funding and to participate in undergraduate and graduate teaching in their areas of expertise.

Candidates should submit a curriculum vitae, the names and addresses of three references, and statements of research and teaching interests by October 1, 1995, to: **Prof. Donald A. Levin, Department of Botany, The University of Texas, Austin, TX 78713.**

The University of Texas, Austin is an Affirmative Action/Equal Opportunity Employer.

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Interested applicants should submit a résumé with a list of publications and the names of three professional references to: **K. J. Vahala, MS 128-95, Caltech, Pasadena, CA 91125.** The term of the initial appointment is normally four years, and appointment is contingent upon completion of Ph.D.

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ASSISTANT PROFESSOR AND DIRECTOR Otolaryngology Laser Research Laboratory

The Department of Otolaryngology at Tufts University School of Medicine and New England Medical Center Hospital, Boston, Massachusetts, is seeking a candidate for a **FACULTY POSITION** in the Laser Research Laboratory. Research experience and a special interest in optics and computerized imaging is desirable. A Ph.D. is required, preferably in biomedical engineering, although candidates with varied experimental backgrounds will be considered. This facility is dedicated to the development of noninvasive surgical technology in the treatment of diseases of the head and neck. Current programs include research in advanced applications using lasers, fiberoptics, computerized imaging and virtual reality. The successful applicant will direct the research activities of an active and innovative otolaryngology faculty. Applicants should send a curriculum vitae, a brief description of current research and three letters of recommendation to: **Stanley M. Shapshay, M.D., Professor and Chairman, Department of Otolaryngology, New England Medical Center, 750 Washington Street, Box 850, Boston, MA 02111.** *Tufts University and New England Medical Center are Equal Opportunity/Affirmative Action Employers.*

ENVIRONMENTAL MICROBIOLOGIST

The Department of Plant Pathology and Microbiology invites applications for a 12-month tenure-track position at the level of **ASSISTANT PROFESSOR**. The individual will be expected to establish a self-supporting research program with emphasis in environmental microbiology. Teaching responsibilities will be primarily in our expanding undergraduate Bioenvironmental Sciences program. Applicants should have a Ph.D. in microbiology, microbial ecology, biochemistry, or a related environmental field and two years of relevant postdoctoral experience. Screening of applications will begin on November 15, 1995. Send a letter of application, curriculum vitae, a statement of research and teaching goals, and three letters of reference to: **Dr. Carlos F. Gonzalez, Chair, Search Committee, Department of Plant Pathology and Microbiology, Texas A&M University, College Station, TX 77843-2132.** Email: cfg2536@zeus.tamu.edu. For departmental information see: http://cygnus.tamu.edu/PLPA/dept_toc.html. *An Equal Employment Opportunity/Affirmative Action Employer.*

Virginia Commonwealth University's Department of Pharmacology and Toxicology seeks a non-tenurable **ASSISTANT PROFESSOR** to investigate chemical-induced hypersensitivity responses. Required are a Ph.D. in a related field and at least one year of academic postdoctoral experience in the area of immunotoxicology. Highly desirable are a D.V.M. and clinical experience. Send a curriculum vitae and names of three references, by October 9, 1995, to: **Dr. Albert Munson, P.O. Box 980613, Richmond, VA 23298-0613.** Position description available. *Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.*

POSITIONS OPEN

ASSISTANT PROFESSOR BIOCHEMISTRY

The Department of Biology at The Johns Hopkins University invites applicants to fill a **TENURE-TRACK FACULTY** position within the broad area of biochemistry. This would include but is not limited to enzyme mechanisms, macromolecular structure with respect to function and recognition, and biochemical/biophysical approaches to understanding cell function or regulation. The successful candidate will be expected to establish a vigorous and well-recognized research program and to participate in both graduate and undergraduate teaching in biochemistry or physical biochemistry.

Applicants should send a curriculum vitae with a statement of current and future research interests, and arrange to have three letters of recommendation sent to:

Dr. Robert Maier
Search Committee Chair
Department of Biology—Mudd Hall
The Johns Hopkins University
Charles & 34th Streets
Baltimore, MD 21218

Deadline for receipt of applications is November 1, 1995.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.

BIOCHEMISTRY/MOLECULAR BIOLOGY MEHARRY MEDICAL COLLEGE

Faculty positions are available in 1995/1996 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 are possible. We are seeking individuals who have potential or demonstrated competence in the use of molecular biological or biophysical approaches to conduct research in molecular medicine, or on fundamental biochemical/cell biological problem(s). Selected individuals must also be capable of, and committed to making significant contributions to 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 substantially participate in the graduate and professional (medical, dental and applied health) school teaching programs of the Department. Applicants should send curriculum vitae, a statement on teaching interests, names of four individuals who may be contacted for reference, and a summary (not exceeding four pages) of potential research project(s) to: **Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208.** *An Equal Opportunity/Affirmative Action Employer.*

DIRECTOR CVRI

DIRECTOR, Cardiovascular Research Institute (CVRI), University of California, San Francisco. The CVRI is an interdepartmental, interdisciplinary research and teaching Organized Research Unit. The director should have a demonstrated research track record in contemporary biology and the vision to direct programs in cardiovascular and pulmonary research at the interface between fundamental science and medicine. Send curriculum vitae to: **Robert B. Jaffe, M.D., Chair, Search Committee c/o Dean's Office, School of Medicine, University of California, San Francisco, San Francisco, CA 94143-0410.** *UCSF is an Affirmative Action Employer. Women and minorities are encouraged to apply.*

UNIVERSITY OF CALIFORNIA AT BERKELEY Department of Chemistry Faculty Position in Chemistry

The Chemistry Department at the University of California at Berkeley, solicits applications for a senior position as **PROFESSOR** of Chemistry, beginning in the fall of 1996. Creative and energetic candidates in organic chemistry with outstanding qualifications and sufficient experience in research and teaching are specifically sought. Candidates should send a curriculum vitae and synopsis of their research program to: **Chairman, Faculty Recruiting Committee (66), Department of Chemistry, University of California, Berkeley, CA 94720-1460.** The deadline for receipt of application is December 1, 1995. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION IN MOLECULAR MINERAL NUTRITION

The University of Missouri-Columbia invites applications for a tenure-track **ASSISTANT PROFESSOR** in Nutritional Sciences. Applicants should have a Ph.D. in biochemistry, molecular biology, nutritional sciences or related area, with postdoctoral research experience. The successful candidate is expected to develop a nationally funded, innovative research program utilizing modern molecular and/or biochemical techniques to study problems of nutritional importance. Preference will be given for individuals focused on aspects of metal-related nutrient regulation of gene expression or genetics of in-born errors of metabolism. The position will be housed in newly remodeled facilities as part of our Food for the 21st Century emphasis in nutritional biochemistry of minerals, and includes competitive salary, start-up funds, support for technical staff, and some teaching responsibilities. Send curriculum vitae, representative publications, summary of past research and teaching accomplishments, statement of future research plans, and arrange for at least three letters of reference to be sent to: **R. A. Sunde, Search Committee Chair, Nutritional Sciences Program, 217 Gwynn Hall, University of Missouri, Columbia, MO 65211.** Applications accepted until October 31, 1995, or until position is filled. *The University of Missouri is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR of Nutrition. Nine-month, tenure-track appointment. Requires doctorate in appropriate field, postdoctoral research experience mandatory. Responsibilities include teaching undergraduate and graduate courses, development of an externally funded research program related to chronic diseases or food safety. Submit letter of application, curriculum vitae, three letters of reference to: **David M. Klurfeld, Ph.D., Professor and Chairman, Department of Nutrition & Food Science, Wayne State University, 3009 Science Hall, Detroit, MI 48202.** Email: dklurfe@lifesci.wayne.edu. *Wayne State University is an Affirmative Action/Equal Opportunity Employer.*

PROFESSOR OF METALLOBIOCHEMISTRY/ DIRECTOR, NEBRASKA CENTER OF METALLOBIOCHEMISTRY (Re-advertisement)

University of Nebraska-Lincoln seeks applications from leaders in the field of metallobiochemistry to fill a full **PROFESSOR** position and serve as **DIRECTOR** for the Nebraska Center of Metallobiochemistry. Requires an active research program with an outstanding record of funding and publications in bioinorganic chemistry. Research focus will incorporate modern physical methods, molecular biology, and/or synthesis and study of inorganic model systems. Preference given to candidates whose research interests complement those of current faculty. Successful candidate will be member of the Center for Biological Chemistry with academic appointments in the Departments of Biochemistry (Institute of Agriculture and Natural Resources) and Chemistry (College of Arts and Sciences). This nine-month, academic-year appointment will play a key role in providing leadership for the Nebraska program in Metallobiochemistry taking the initiative to obtain traineeships, cooperative grants, center grants, and other activities to continue and strengthen the program. Review of applications will begin November 1, 1995, with an anticipated starting date of September 1, 1996. Submit letter of application, curriculum vitae, and names and addresses of references to: **Chair, Metallobiochemistry Search Committee, University of Nebraska-Lincoln, Department of Biochemistry, Beadle Center, N200, Lincoln, NE 68588-0664.** Telephone: 402-472-2932. *University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans With Disabilities Act.*

DIRECTOR, Cytogenetics Laboratory: The Division of Human Genetics of the Children's Hospital Research Foundation (CHRF) seeks a ABMG Clinical Cytogenetics certified or eligible M.D. or Ph.D. to direct its service and research activities. Responsibilities include amniotic cells, CVS, blood and tumor karyotype and FISH analyses, and development of research program. Academic rank determined by qualifications. Send curriculum vitae, bibliography and three letters of recommendation to: **Gregory A. Grabowski, M.D., Director, Division of Human Genetics, CHRF, 3333 Burnet Avenue, Cincinnati, OH 45229-3039.** *Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.*

POSITIONS OPEN

CHILDREN'S HOSPITAL UNIVERSITY OF CINCINNATI Director, Developmental Biology

Applications are invited for the position of **DIRECTOR** of Developmental Biology and Albert Sabin Professor of Pediatrics to lead a well-established program in molecular and developmental biology. Candidates will be expected to direct their own outstanding research program, lead the Division of Developmental Biology (a 10 member Ph.D. faculty with primary focus to the molecular biology of mammalian development), participate in a well-established graduate program in developmental biology and interact with research activities in developmental sciences at the Children's Hospital Research Foundation and the University of Cincinnati College of Medicine. Candidates will have an M.D. and/or Ph.D. degree and an internationally recognized program in developmental molecular biology. Outstanding support facilities are available for the Director and the program. Send a letter of interest and curriculum vitae to: **Jeffrey A. Whitsett, Associate Chair of Pediatrics, c/o Search Committee, Children's Hospital Medical Center, Division of Pulmonary Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039.** *Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.*

DIRECTOR

Department of Pharmacology and Molecular Science

The Johns Hopkins University School of Medicine is seeking an exceptional individual to lead our Department of Pharmacology and Molecular Science. Applicants should have evidence of leadership qualities and demonstrated outstanding abilities in research and teaching.

Please send letter of application, curriculum vitae and bibliography to:

Jeremy M. Berg, Ph.D.
Chairman, Pharmacology & Molecular Science Search
Johns Hopkins University School of Medicine
720 Rutland Avenue, SOM 100
Baltimore, MD 21205-2196

An Affirmative Action/Equal Opportunity Employer.

The Blood Center of Southeastern Wisconsin, Milwaukee announces a search for the **PRESIDENT** and Chief Executive Officer who will be responsible for all of the Center's operational units: Blood Services, Clinical Laboratories and Research and for a separate entity, The Blood Center Research Foundation. An M.D. degree is preferred but not required, as are experience with biomedical research, laboratory diagnosis, and awareness of trends in American health care. Demonstrating leadership and management expertise, the President must be a high energy executive with commitment to maintain The Blood Center in a position of leadership among blood service organizations. Please send curriculum vitae to: **John H. Moxley, III, M.D., Managing Director, North American Health Care, Korn/Ferry International, 1800 Century Park East, Suite 900, Los Angeles, CA 90067.** *The Center is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION Eukaryotic Gene Expression Colorado State University

The Department of Biochemistry and Molecular Biology seeks applicants for a **TENURE-TRACK POSITION** from individuals at any level working on the molecular regulation or mechanism of transcription or mRNA utilization. The department has considerable expertise in the areas of gene expression, neurobiology, and structural biology. It occupies a modern building containing a full complement of core facilities and shared instrumentation. Candidates must have a Ph.D. degree, postdoctoral experience and the ability to sustain an independent and productive research program. The successful applicant must also effectively participate in undergraduate and graduate teaching of biochemistry and molecular biology. Complete applications consisting of a curriculum vitae, a statement of research interest and three reference letters must be received by October 31, 1995. Send to: **Dr. N. P. Curthoys, Department of Biochemistry and Molecular Biology, Colorado State University, Fort Collins, CO 80523.** *Colorado State University is an Equal Employment Opportunity/Affirmative Action Employer, Employment Opportunity Office: 21 Spruce Hall.*

Howard Hughes Medical Institute

Fellowships for Biological and Biomedical Sciences

The Howard Hughes Medical Institute announces the 1996 competitions for fellowship programs that support training in fundamental biological and biomedical research. Awards, based on international competitions, focus on research directed to understanding basic biological processes and disease mechanisms. Fellowships may be held at academic or nonprofit research institutions.

Predocctoral Fellowships in Biological Sciences

Up to five years of support for full-time graduate study toward a Ph.D. degree in biostatistics, cell biology and regulation, epidemiology, genetics, immunology, neuroscience, or structural biology. Applicants must not have completed the first year of postbaccalaureate graduate study in biology. *Application deadline: early November.*

Postdoctoral Research Fellowships for Physicians

Three years of support for training in fundamental research subsequent to at least two years of postgraduate clinical training and no more than two years of postdoctoral research training. *Application deadline: mid-December.*

Research Training Fellowships for Medical Students

An opportunity for medical students in the United States to explore a burgeoning interest in fundamental research. Support is awarded for one year of full-time fundamental research in a laboratory at the student's medical school or another institution (except NIH in Bethesda, Maryland). *Application deadline: early December.*

Research Scholars at the National Institutes of Health

Under this joint HHMI-NIH program, medical students in the United States spend an intensive year in research in the intramural program at NIH in Bethesda, Maryland. Residence is provided at the Cloister on the NIH campus. *Application deadline: early January.*

1996 Program Announcements and Applications

For Predocctoral Fellowships:

Hughes Fellowship Program
The Fellowship Office
National Research Council
2101 Constitution Avenue
Washington, DC 20418
United States of America
Telephone: (202) 334-2872
Fax: (202) 334-3419
E-mail: infofell@nas.edu

For Other Programs:

Howard Hughes Medical Institute
Office of Grants and Special Programs
Department AL96
4000 Jones Bridge Road
Chevy Chase MD 20815-6789
United States of America
Telephone: (301) 215-8889
Fax: (301) 215-8888
E-mail: fellows@hq.hhmi.org

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

POSITIONS OPEN

CHAIRMAN

Department of Medical and Molecular Genetics

Indiana University seeks candidates for the tenure-track position of **CHAIRMAN** of the Department of Medical and Molecular Genetics. Candidates must hold an M.D. and/or Ph.D. degree, be knowledgeable in scientific research, and experienced in medical education and administration. Send curriculum vitae and references to: **C. Conrad Johnston, Jr., M.D., Professor of Medicine, Chairman, Search and Screen Committee, Indiana University School of Medicine, Fesler Hall 302, 1120 South Drive, Indianapolis, IN 46202-5114.**

Indiana University is an Affirmative Action/Equal Opportunity Employer/Minority/Female.

RESEARCH DIRECTOR

Midwestern specialty agricultural chemical firm seeks an executive level **RESEARCH DIRECTOR** to head its 85 member Technical Department. This person will report directly to the President. Principal duties will be to direct all research, quality assurance and government regulatory efforts. The successful candidate will thrive in a sales-driven environment. Excellent communication skills, Ph.D. in Biochemistry, experience in microbiology, analytical chemistry and organic chemistry required. Must have industry experience. Please send résumé in confidence to: **Mr. Dwaine Francis, Francis & Associates, 6923 Vista Drive, West Des Moines, IA 50266.** Physical with drug test required. Non-smokers only.

FACULTY POSITION RADIATION BIOLOGY

The University of Maryland Cancer Center is expanding its research program in radiation oncology and biology. We are seeking an individual to develop and lead a preclinical research program on hematopoietic function, inflammation and sepsis as it relates to radiation exposure *in vivo*; it is expected that the individual will lead a translational research team focussed on the treatment of radiation-induced bone marrow aplasia with primary emphasis on restoration of the hematopoietic system through the use of cytokines with or without bone marrow or peripheral blood transplantation. This research effort must include initiating investigation into radiation-induced gastrointestinal cell aplasia and use of cytokines or cytokine antagonists in modulating sepsis and endotoxin-induced inflammation.

Candidates should have a Ph.D. in Radiation Biology and 10 or more years of experience in leading a laboratory program in radiation research, with primary emphasis on radiation effects and cellular intervention/restoration in both small and large animal models. Experience in research with non-human primate models is desired.

Qualified applicants should submit their curriculum vitae to: **Dr. Ernest C. Borden, Director, University of Maryland Cancer Center, c/o Ms. Pamela Henderson, 22 South Greene Street, Baltimore, MD 21201.**

The University of Maryland at Baltimore encourages women and minorities to apply and is an Affirmative Action/Equal Employment Opportunity/ADA Employer.

The Chemistry Department at Michigan State University seeks to fill three **TENURE-TRACK POSITIONS** in Physical Chemistry at the junior or senior levels. Outstanding candidates in all areas of Physical Chemistry are encouraged to apply. We are particularly interested in biomacromolecular structure (e.g., protein crystallography, NMR, etc.) and solid state chemistry. A shared X-ray diffraction laboratory with three area detectors is available for crystallography. In addition to the 500 MHz NMR available in the Department's NMR facility, there are NSF funds for the purchase of a second high field instrument. Candidates are expected to establish a vigorous research program and to pursue excellence in research and teaching at both the graduate and undergraduate levels. Applicants should send a curriculum vitae, a list of publications, and a description of research plans to: **Gerald T. Babcock, Chair, Department of Chemistry, Michigan State University, East Lansing, MI 48824.** Applicants should also arrange to have three letters of recommendation submitted on their behalf. Applications will be reviewed as received and will continue until the positions are filled. *Michigan State University is an Affirmative Action/Equal Opportunity Institution. Applications from women and underrepresented minorities are particularly welcome.*

POSITIONS OPEN

Chemistry Department, University of Utah. Applications are invited for two **TENURE-TRACK FACULTY** positions at the junior level in the areas of biological chemistry and organic chemistry. Candidates should have the background, ability and motivation to establish vigorous, competitive research programs and to excel as teachers. For the biological chemistry position, preference will be given to candidates in the area of bioinorganic chemistry and those with the ability to teach undergraduate biochemistry as well as graduate and undergraduate courses in their area of specialty. For the organic chemistry position, candidates in all subdisciplines will be considered, but we have particular interest in the areas of physical organic or theoretical organic chemistry. A Ph.D. degree is required, and postdoctoral experience is desirable. Applicants should have three letters of recommendation sent directly to the appropriate search committee. Initial correspondence should include a detailed curriculum vitae and a statement of proposed research. Reply to: **Biological Search Committee or Organic Search Committee, Department of Chemistry, 2040 Henry Eyring Building, University of Utah, Salt Lake City, UT 84112.** Deadline for receipt of applications is November 15, 1995, or until a suitable candidate is identified. *The University of Utah is an Affirmative Action/Equal Opportunity Employer, encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.*

BIOCHEMISTRY FACULTY POSITION MACROMOLECULAR CRYSTALLOGRAPHY

The University of Toledo has received a major award from the Ohio Board of Regents to create a regional crystallography center: The Ohio Crystallography Consortium at The University of Toledo. Part of this funding will be used to establish a modern laboratory for macromolecular crystallography. The Department of Chemistry at the University of Toledo invites applications for a **TENURE-TRACK FACULTY** position in the field of biological chemistry in the area of macromolecular crystallography. The position requires a Ph.D. in chemistry, biochemistry, or crystallography and relevant postdoctoral experience with an outstanding record of achievement in research. The successful candidate will be expected to establish an externally funded research program while participating in the activities of the consortium and to demonstrate a commitment to excellent instruction in chemistry at all levels. Applications will consist of a detailed résumé, a short synopsis of future research plans, and three or more letters of reference. All application materials should be sent to: **Professor Max O. Funk, Jr., Department of Chemistry, University of Toledo, 2801 West Bancroft Street, Toledo, OH 43606.** Review of applications will begin on October 1, 1995, and continue until the position is filled. *The University of Toledo is an Affirmative Action and Equal Employment Opportunity Employer/Minority/Female/Disabled/Veteran.*

EDUCATOR

Assistant/Associate/Full Professor

The Department of Microbiology and Immunology at Wright State University is seeking applications for a **TENURE-TRACK EDUCATOR**. Applicants should demonstrate expertise in teaching with an in-depth and current knowledge of general medical microbiology, experience in teaching laboratory aspects of microbiology, excellent communication and teaching skills, and evidence of leadership in educational development. The successful candidate will have the opportunity to participate in ongoing research programs within the department, will be expected to seek funding for teaching/education from appropriate sources and to publish in educational journals. A Ph.D. in microbiology or related science is required; rank will be determined by experience and accomplishments. Applicants should forward a résumé and the names of three references to: **Dr. Neal S. Rote, Chair, Department of Microbiology and Immunology, 002 Mathematics & Microbiology Building, Wright State University, Dayton, OH 45435.** Initial review of applications will begin October 16, 1995, and continue until the position is filled. *Wright State University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



RESEARCH FACULTY TRANSPLANT IMMUNOLOGY

The Division of Cardiovascular Medicine, Department of Medicine and the Cardiovascular Research Center invite applications for a full-time, service, **ASSISTANT** or **ASSOCIATE PROFESSOR** holding a Ph.D. with an interest in transplantation biology/immunology. A major interest is the development of a program in xenotransplantation, although individuals with related research interests will be considered. The successful candidate will also participate in the education of graduate and medical students as well as other trainees at the Medical College.

Direct inquiries and curriculum vitae to:

Jeffrey Hosenpud, M.D.
Division of Cardiovascular Medicine
Medical College of Wisconsin
8700 West Wisconsin Avenue
Milwaukee, WI 53226

Equal Opportunity/Affirmative Action Employer/Minorities/Female/Disabled/Veterans.

UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE

Tenure-Track Positions in Molecular Biology

The University of Virginia School of Medicine is undergoing a major expansion of its basic science faculty. As a part of this effort, the Department of Biochemistry will make several new **JUNIOR**- and **SENIOR-LEVEL TENURE-TRACK** appointments to outstanding individuals whose research efforts focus on mechanisms of transcription, RNA processing, DNA replication, or genome rearrangement. Candidates should hold a Ph.D. and/or M.D. in an appropriate discipline and should have demonstrated the capacity to develop and/or maintain a very high quality, independent research program. Support for these positions includes attractive laboratory space and start-up packages, as well as an interactive research community.

Interested individuals should have a curriculum vitae and three letters of recommendation forwarded no later than October 15, 1995, to: **Chairperson, Biochemistry Search, Box 440 Jordan Hall, University of Virginia HSC, Charlottesville, VA 22908.** *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

Yale University School of Medicine announces plans to establish a new, free-standing Section of Microbial Pathogenesis, to carry out basic studies in the molecular pathogenesis of infectious diseases. Recruitment is underway for a senior individual with a record of outstanding research in viral or bacterial pathogenesis to head and develop this section. The opportunity to recruit new faculty, with concomitant resources, will be provided, and newly renovated space is available. The Section of Microbial Pathogenesis will have a major responsibility for predoctoral and postdoctoral training programs in microbiology. The successful candidate will be appointed at the level of **PROFESSOR**. Interested candidates should send curriculum vitae, a statement of research interests, and three references to: **Keith Joiner, Chair, Microbiology Search Committee, LCI 808, Yale University School of Medicine, 333 Cedar Street, P.O. Box 208022, New Haven, CT 06520-8022.** Application deadline is November 1, 1995. *Yale University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

Penn State, Chemistry Department, **FACULTY POSITIONS.** Tenure-track faculty positions are available starting fall 1996 in any area of chemistry. The appointee is expected to establish an exceptionally strong and highly visible research program. Commitment to excellence in undergraduate and graduate teaching is also essential. Postdoctoral experience is preferred. A complete résumé, a synopsis of research plans and three letters of recommendation are required. Review of applications will begin October 4, 1995, and continue until the positions are filled. Send information to: **Chairman of the Search Committee, Box 8, The Pennsylvania State University, Department of Chemistry, 152 Davey Laboratory, University Park, PA 16802.** *An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

Genomics to antibiotics— ensuring a healthy future.

This is the challenge at SmithKline Beecham Pharmaceuticals' newly organized Microbiology Research Department. This recent initiative represents a consolidation of resources committed to intensive research on new antimicrobial targets. The rapid emergence of bacterial resistance to antibiotics has spurred the exploitation of the bacterial genome sequencing initiatives to discover the drugs that will shape and influence the future of worldwide health programs.

SmithKline Beecham is at the forefront in this dynamic arena, and our major recruiting effort for this initiative presents many opportunities for leading scientists to contribute significantly to anti-infectives research. It also offers the chance to collaborate with leading academic departments and strategic alliance partners.

Department of Molecular Pathogenicity

PhD, MS and BS positions available in Microbiology, Microbial Genetics and Molecular Biology.

Department of Molecular Microbiology

PhD, MS and BS positions available in Microbial Biochemistry, Microbial Genetics and Molecular Biology.

Department of Microbial Infectivity and Clinical Microbiology

PhD, MS and BS positions available in Microbiology.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers an excellent compensation/benefits/relocation package. For confidential consideration please send your resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Department MR/AS-995, PO Box 2645, Bala Cynwyd, PA 19004.

We are an Equal Opportunity Employer. M/F/D/V



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.

POSITIONS OPEN

THE UNIVERSITY OF WESTERN ONTARIO FACULTY OF MEDICINE CHAIR

Department of Pharmacology and Toxicology

The Department of Pharmacology and Toxicology is a research and teaching intensive department in the Faculty of Medicine. Its ten full-time and fourteen part-time faculty are committed to basic and applied research, a strong graduate program, and extensive undergraduate teaching. The three major areas of research are: cardiovascular pharmacology/toxicology, molecular pharmacology/toxicology, and neuropharmacology/neurotoxicology. Through a number of cross appointments the Department is also contributing significantly to research in clinical pharmacology.

Candidates should hold a Ph.D. (or equivalent) in Pharmacology/Toxicology and have demonstrated excellence in research, academic leadership, and management skills, and a commitment to excellence in teaching.

Please send application with curriculum vitae and the names and addresses of three persons prepared to provide a reference to:

Dr. R. Y. McMurtry, Dean
Faculty of Medicine
Health Sciences Centre
The University of Western Ontario
London, Ontario N6A 5C1

Positions are subject to University budget approval. *In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian Citizens and Permanent Residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities.* Deadline for submission: October 30, 1995.

ASSISTANT/ASSOCIATE PROFESSOR CELL/DEVELOPMENTAL BIOLOGY

The Department of Anatomy at the Louisiana State University Medical Center-New Orleans seeks to identify a **TENURE-TRACK FACULTY** candidate with a Ph.D. and at least three years of postdoctoral experience. Scientists with research programs in the general areas of cell and developmental biology using a molecular approach are especially encouraged to apply. Salary levels are competitive, with ample space and start-up funds. Teaching responsibilities will be in the area of dental/medical histology. For consideration, send a curriculum vitae, research interests, and names of three references to: **Dr. R. Ranney Mize, Head, Department of Anatomy P6-2, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. Department of Internal Medicine at University of Texas Southwestern Medical Center at Dallas. Candidates should have an earned doctorate in an appropriate discipline, three years of postdoctoral experience, and a strong background in human systems/integrative physiology. The documented ability to conduct independent research, and experience in the techniques required to study neural control of the circulation is highly desirable. Candidates will be expected to develop a strong externally funded research program and participate in interdisciplinary research activities. Qualified applicants should send cover letter, curriculum vitae, letter(s) of reference, and summary of professional goals to: **Tony G. Babb, Ph.D., Chair, Search Committee, Institute for Exercise and Environmental Medicine, 7232 Greenville Avenue, Dallas, TX 75231-5129.** *University of Texas Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer and applications from women and minorities are encouraged.*

FACULTY MEMBER (Orangeburg, New York)

Teach biological subjects to undergraduate students, prepare/deliver lectures to students. Prepare exam papers, academic advise/registration of students, committee work, attend faculty workshops, compile bibliographies of specialized materials for outside reading assignments.

Ph.D. in Biological Science plus two years of experience in job offered. 40 hours per week, 8:00 a.m. to 4:00 p.m. (varying schedule), \$34,125 per year. Send résumé/letter in duplicate to: **M.W.D. No. 1107, Room 501, One Main Street, Brooklyn, NY 11201.**

POSITIONS OPEN

Five, tenure-track positions at the level of **ASSISTANT PROFESSOR.** A Microbiologist and a Geneticist to teach general and upper division courses in these specialty areas; a Developmental Biologist to teach mammalian anatomy and embryology; an Animal Cell Biologist to teach cell biology and help coordinate the use of a Macintosh computer laboratory; a Zoologist to teach general biology for non-majors and animal biology for majors. Each individual will be expected to train Master's students, teach a graduate level course in their specialty and develop a research program with potential for extramural funding. Ph.D. required and postdoctoral training preferred. Submit curriculum vitae, including graduate transcripts, teaching experience and three letters of recommendation by November 15, 1995, to: **Dr. Anthony E. Sobota, Department of Biological Sciences, Youngstown State University, 410 Wick Avenue, Youngstown, OH 44555.** Please note in your introductory letter for which position you are applying.

Youngstown State University is an Affirmative Action/Equal Opportunity Employer.

California Institute of Technology invites applications for a position as **ASSISTANT PROFESSOR** of Chemical Physics with an initial appointment for four years. Exceptionally well-qualified applicants may also be considered at the associate or full professor level. Outstanding individuals with a Ph.D. and strong commitment to research and teaching excellence are encouraged to apply. Submit curriculum vitae, publication list, a description of proposed research, and three letters of recommendation to: **Professor Ahmed Zewail, Arthur Amos Noyes Laboratory of Chemical Physics, 127-72, California Institute of Technology, Pasadena, CA 91125.** *The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.*

POSTDOCTORAL POSITION is available for studies on the mechanisms of axonal growth and synaptic plasticity. Studies will employ patch-clamp technique, video microscopy and molecular biology approaches. Experience in one of these areas and in primary neuronal cultures is desirable. Send curriculum vitae and names of three references to: **Dr. Sergey Popov, Department of Physiology and Biophysics (M/C 901), University of Illinois at Chicago, 901 South Wolcott Avenue, Chicago, IL 60612.** FAX: 312-996-1414. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL and RESEARCH ASSISTANT POSITIONS are available in a yeast genetics and molecular biology lab starting September 1995 in the Department of Biology at New York University. A multidisciplinary approach, consisting of biochemical, genetic and fluorescence microscopic analyses, will be carried out to study functions of proteins that interact with Ras-like G proteins in yeast. A minimal commitment of two years is required. Please send a curriculum vitae and list of three references to: **Eric C. Chang, Department of Biology, New York University, 1009 Main Building, New York, NY 10003-6688.** FAX: 212-995-4015. *NYU encourages applications from women and members of minority groups.*

POSTDOCTORAL POSITION (visiting, one to three years) available October 1, 1995, for ATP-funded research to develop transformation and heterologous gene expression systems in non-*Saccharomyces* yeast(s) for the purpose of altering specific metabolic pathways. Ph.D. in molecular biology or related field and a strong background in yeast molecular biology required. Experience in DNA cloning techniques and heterologous gene expression desirable. Mycogen offers a competitive salary and full range of benefits. Please send curriculum vitae and names and addresses of three references to: **Mycogen Corporation, HR/PD-SC, 5501 Oberlin Drive, San Diego, CA 92121.** FAX: 619-453-2753. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION at Children's Hospital and Harvard Medical School available immediately to study how growth factors regulate the growth and differentiation of childhood brain tumors. Applicants should have an outstanding research background in cellular or molecular biology. Send a curriculum vitae and three letters of reference to: **Scott L. Pomeroy, M.D., Ph.D., Division of Neuroscience, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.** *Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.*

POSITIONS OPEN

TULANE UNIVERSITY MEDICAL CENTER Tulane Regional Primate Research Center Department of Parasitology

POSTDOCTORAL ASSOCIATE is sought to join a multidisciplinary group working on the development of vaccines against Lyme disease. The task is to investigate the mechanism that regulates the expression of surface antigens of *Borrelia burgdorferi*. A background in molecular biology/microbiology would be advantageous. Please send curriculum vitae and names of three references by September 15, 1995, to: **Dr. Mario T. Philipp, Head, Department of Parasitology, Tulane Regional Primate Research Center, Covington, LA 70433.** Email: philipp@tpc.tulane.edu. *Tulane University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS IN SYNTHETIC PROTEIN CHEMISTRY

POSTDOCTORAL POSITIONS are now available to apply novel synthetic protein chemistries to the study of proteins and protein assemblies involved in signal transduction. Recently developed biosynthetic and bio-analytic techniques will be employed in an integrated approach to the design and study of protein targets. Enthusiastic applicants should have a strong background in bio-organic chemistry and importantly must be interested in working at the true interface of chemistry with biology. Please contact: **Tom Muir, Ph.D., Synthetic Protein Chemistry Laboratory, The Rockefeller University, Box 223, 1230 York Avenue, New York, NY 10021.**

The Rockefeller University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION is available immediately to study a recently discovered growth factor action, rapid activation of the hexose monophosphate shunt by a novel activation mechanism of glucose 6-phosphate dehydrogenase. Candidate should have a Ph.D. or M.D. with background in protein biochemistry, cell biology, and molecular biology techniques. Send curriculum vitae, cover letter, and three references to: **Robert C. Stanton, M.D., Acting Chief, Renal Division, Deaconess Hospital and Joslin Diabetes Center, Harvard Medical School, 99 Brookline Avenue, Boston, MA 02215.** FAX: 617-632-1861.

POSTDOCTORAL POSITION available to study the molecular basis of circadian (24 hour) rhythms. The research will focus on the characterization of genes that control rhythmic behavior in *Drosophila* (see *Science*, 263: 1603; 263:1606, 1994). Send curriculum vitae and names of three references to: **Amita Sehgal, Department of Neuroscience, University of Pennsylvania Medical Center, Philadelphia, PA 19104.**

HOWARD HUGHES MEDICAL INSTITUTE PROGRAM ANALYST

The Howard Hughes Medical Institute (HHMI), the nation's largest private philanthropic organization, conducts scientific research in leading academic medical centers. Currently, we are seeking a **PROGRAM ANALYST** for the office of Grants and Special Programs in our headquarters in Chevy Chase, Maryland.

Responsibilities involve assisting in the development and implementation of policies and procedures for the international research grants program. In addition, you will assist with recruiting review panel members and coordinating scientific meetings. Additional duties include reviewing financial and program reports; conducting research relevant to the international program, and preparing reports.

Requirements include a minimum of two years of related experience; a Master's, Ph.D. or equivalent in biological sciences; and strong computer skills including word processing, spreadsheet and database software for Windows and familiarity with the Internet. In addition, strong managerial, organizational, communication and research skills as well as attention to detail are necessary. Previous laboratory research experience is a plus.

HHMI offers a competitive salary and excellent benefits package. Please send your résumé to: **Howard Hughes Medical Institute, Attn: Human Resources, 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789.** *Equal Opportunity Employer.*

Postdoctoral Fellows

The Skin Biology Research Center of Johnson & Johnson seeks candidates to join a group of scientists investigating the basic mechanisms underlying the structural and molecular biology of skin, scarring and hair growth. Scientists interested in the biology of growth and development at a molecular level are encouraged to apply. In the planned experiments, the approaches of positional cloning and differential gene screening will be taken.

The laboratories are located in a beautiful part of New Jersey, near Princeton and halfway between New York City and Philadelphia. Liberal research support, excellent library facilities, and a good benefits package are provided. Although outside grant support is not required, publication of experimental results is strongly encouraged.

Ours is a smoke-free workplace. To apply, send your CV with three references to: Dept. 361, Johnson & Johnson Recruiting, Employment Management Center, P. O. Box 16597, New Brunswick, NJ 08906-6597. We are an equal opportunity employer and support diversity in the workplace.

Johnson & Johnson

"Leadership Beyond Compliance"

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

CLINICAL DIRECTOR

An outstanding clinician-investigator to establish an independent research program and oversee intramural clinical research is sought by the Division of Intramural Clinical and Biological Research (DICBR), National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health (NIH). The position is located in Bethesda, Maryland.

The Clinical Director oversees a research program of national and international scope and importance, including a 10-bed research ward, an outpatient research facility and a positron emission tomographic (PET) program. Salary range to \$148,400 depends on qualifications, with relocation expenses available.

The position must be filled by a physician. Applicants with certification in internal medicine, psychiatry, neurology or related specialties, and demonstrated research and clinical excellence are encouraged to apply to:

NIAAA Personnel
Attn: Kathleen Hanratty
NIH Bldg 31/1B58
31 CENTER DR MSC 2088
BETHESDA MD 20892-2088

NIH is an Equal Opportunity Employer. Applications from women, minorities, and persons with disabilities are strongly encouraged. The DICBR/NIAAA is a smoke-free environment.

POSTDOCTORAL POSITION

Environmental Research Division

A post-doctoral position in the Environmental Research Division at Argonne National Laboratory is available starting October 1, 1995 for an Ecological Modeler. The project involves the modeling of forest growth using an individual tree gap-type model. The model will be used to assess effects of climate change on forest ecosystems. Focus of this project is to improve existing model functions for mortality, seedling production, crowding, life history factors, and others, based on field and literature data, to make the model more realistic. Particular attention will be focused on characterizing transient responses of the model, developing historical test data sets, testing model output against demographic and life history data, and comparing model response to forests under known stresses such as severe droughts. Initial appointment is one year with the possibility of renewal for three years. Desired starting date is Oct. 1, 1995. The applicant should have a Ph.D. degree not more than three years prior to the beginning of the appointment, in Forestry, Ecology, or a related field, with experience in ecological modeling and forest growth analysis.

At Argonne, you'll find an environment that encourages both personal and professional career growth. We welcome applications from candidates who can contribute to our EEO/Affirmative Action goals. Salary for post-doc positions at Argonne is competitive. Send c.v., names, addresses and phone numbers of four references, transcripts, copies of relevant publications (including in press), and a summary of the Ph.D. thesis, to: Susan Walker, Box ER-POSTDOC4--55, Employment and Placement, Argonne National Laboratory, 9700 S. Cass Ave., Argonne, IL 60439. Telecommunications Device for the Deaf-(708) 252-7722. *Argonne is an equal opportunity/affirmative action employer.*

Roche

Drug Metabolism

RESEARCH INVESTIGATOR

Hoffmann-La Roche, a major force in the international pharmaceutical field, is inviting applications for a Ph.D. Pharmacokinetics and Pharmacokinetics/Pharmacodynamics (PK/PD) position in the Department of Drug Metabolism and Pharmacokinetics at our Nutley, New Jersey campus.

Among your primary responsibilities, you will: design, conduct and evaluate pharmacokinetic and PK/PD experiments to aid in the selection of new drug candidates; provide protocol design, data assessment and reporting for toxicokinetic studies; present results and write technical and regulatory submissions.

To qualify, you must have a Ph.D. in Pharmacokinetics, Pharmaceutical Sciences or a related discipline and 8+ years post-doctoral industrial or academic experience in animal pharmacology and pharmacokinetics. An understanding of the drug development process and related scientific disciplines, with a knowledge of pharmacokinetic and PK/PD data analysis techniques, are musts. Excellent scientific accomplishments with demonstrated managerial, interpersonal and written/oral communication skills, as well as the ability to work in a team environment, are essential.

We offer a competitive salary and a progressive benefits package. To apply, please send your resume with present salary to: **Ms. Lynn Harac, Staffing Dept. LH255DL, Hoffmann-La Roche Inc., Nutley, New Jersey 07110-1199. PRINCIPALS ONLY.** No phone calls, please. We are an equal opportunity employer.

Roche

Hoffmann-La Roche

A Member of the Roche Group

POSITIONS OPEN

POSTDOCTORAL POSITION MOLECULAR BIOLOGY

Position available to elucidate structure/function properties of the EKLF erythroid cell-specific transcription factor and their relationship to transactivation (*MCB*, 15: 852, 1995) and globin switching (*JBC*, 270: 1955, 1995). Expertise in molecular biology, murine embryology, and cell culture are desirable. Please send a curriculum vitae, a brief summary of research experience, and three reference letters to: Dr. James J. Bieker, Brookdale Center for Molecular Biology, Mount Sinai School of Medicine, Box 1126, One Gustave L. Levy Place, New York, NY 10029-6574. FAX: 212-860-9279; Email: jbieker@smplink.mssm.edu. An Equal Opportunity Employer.

A POSTDOCTORAL POSITION is immediately available to work on a NSF-funded project examining the integration of mechanoreceptive and nociceptive sensory input within the mammalian spinal cord. Expertise in single-unit neurophysiological techniques *in vivo* is highly desirable. This two-to-three year position pays according to NIH guidelines for postdoctoral fellows. Applicants should submit a curriculum vitae, with names of references and a statement of research interests to: Dr. Joel D. Greenspan, Institute for Sensory Research, Merrill Lane, Syracuse University, Syracuse, NY 13244. Internet Email: Joel.Greenspan@isr.syr.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study molecular mechanisms of circadian rhythms in insects. Research includes identification and characterization of novel genes and proteins involved in circadian clocks. Requires experience in molecular biology. Send résumé with research skills and interests and three letters of reference to: Dr. J. Giebultowicz, Department of Entomology, Cordley 2046, Oregon State University, Corvallis, OR 97331. Closing date August 31, 1995, or until filled. Oregon State University is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.

A POSTDOCTORAL TRAINING POSITION is available to a qualified individual at Boston University School of Medicine. U.S. citizens or permanent residents only. The work involves research on aging and Alzheimer's disease. Only candidates with strong background in biochemistry, cell biology and molecular biology will be considered. Please send curriculum vitae and names of three references to: Dr. Carmela R. Abraham, K-5, 80 East Concord Street, Boston, MA 02118. FAX: 617-638-5226; Email: cabraham@acs.bu.edu.

POSTDOCTORAL POSITION available immediately to work on the cellular and developmental functions of vasoactive hormones. Experience in molecular biology i.e. subcloning, sequencing and gene expression preferred. Send or FAX curriculum vitae with three references to: Dr. J. E. Kalinyak, M.D., Ph.D., Medicine Department/Endocrine Division, University of California, SFGH, 1001 Potrero Avenue, Building 100, Room 286, San Francisco, CA 94110. FAX: 415-476-4918. Equal Opportunity Employer.

POSTDOCTORAL AND RESEARCH ASSISTANT POSITIONS

POSTDOCTORAL POSITION will involve the production and analysis of transgenic peanut plants. Experience with plant tissue culture and transformation vector construction desirable. Research assistant will be responsible for DNA isolation, PCR and RFLP analysis, and DNA sequencing. Send curriculum vitae and names/addresses/telephone numbers of three references to: Peggy Ozias-Akins, Department of Horticulture, University of Georgia Coastal Plain Experiment Station, Tifton, GA 31793. Email: ozias@tifton.cpes.peachnet.edu. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION is immediately available in the Center for Research in Reproductive Physiology to study the cell biology of spermatogenesis in the primate using *in situ* hybridization, Northern blot analysis, and immunocytochemistry. Training in molecular or cell biology is a requirement. Send curriculum vitae and names of three references to: Gary R. Marshall, Ph.D., Associate Professor, University of Pittsburgh, Children's Hospital of Pittsburgh, Division of Pediatric Endocrinology, 3705 Fifth Avenue at DeSoto Street, Pittsburgh, PA 15213.

POSITIONS OPEN

GENE TRANSFER/GENE THERAPY

Two POSTDOCTORAL POSITIONS available immediately for two to four years to study AAV-mediated transduction and long-term *in vivo* expression of genes in murine and human hematopoietic stem cell-derived progeny. Ph.D.'s and/or M.D.'s with experience in molecular biology, cell biology, and/or immunology are encouraged to apply. Send curriculum vitae and name/telephone number of three references to: Dr. Arun Srivastava, Department of Microbiology & Immunology, Indiana University School of Medicine, 635 Barnhill Drive, Indianapolis, IN 46202. FAX: 317-274-4090, or Dr. Mervin C. Yoder, Herman B. Wells Center for Pediatric Research, Indiana University School of Medicine, 702 Barnhill Drive, Indianapolis, IN 46202. FAX: 317-274-2064. Indiana University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION: USDA, Agricultural Research Service, National Animal Disease Center, Ames, Iowa, has an opening for a Microbiologist to study the pathogenesis of mycobacterial infection in animals. Candidate will investigate mechanisms for intracellular survival of *Mycobacterium bovis* and *M. paratuberculosis* in macrophages; and be part of a team consisting of a microbiologist, a pathologist, and an immunologist. Ph.D. degree required. Knowledge of tissue culture, cell biology and skill in electron microscopy is desirable. Appointment is for two years and includes benefits. Salary commensurate with experience (\$35,578 to \$42,641 per annum). Send curriculum vitae and names of three references to: Diana L. Whipple, USDA, ARS, NADC, P.O. Box 70, Ames, IA 50010. Telephone: 515-239-8377; FAX: 515-239-8458. Applications accepted until position is filled. USDA/ARS is an Equal Opportunity Employer.

RNA EDITING OF GluR ION CHANNELS

POSTDOCTORAL POSITION is available to study the RNA editing of GluR ion channel gene transcripts in mammalian brain; the molecular mechanism and its relevance to neurodegenerative diseases such as Alzheimer's. Previous experience in molecular techniques and a strong background in protein purification are essential. Degree received within last three years preferred. Send curriculum vitae and three letters of reference with telephone numbers to: Dr. Kazuko Nishikura, The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. FAX: 215-898-3911.

The Rowland Institute for Science invites applications for a POSTDOCTORAL POSITION to study protein folding and design. The focus of the research is to understand the interplay of forces at intermediate stages of protein folding; using model peptide systems. Current work centers on α_3 , a 38-residue peptide of de novo design which adopts a helical hairpin conformation in solution (*Prot. Sci.*, 4: 286-295, 1995; *PNAS*, 91: 3675-3679, 1994). Experience with peptide synthesis, peptide purification, two-dimensional nuclear magnetic resonance and circular dichroism would be helpful. Interested parties should send a curriculum vitae and names of three references to: Dr. John J. Osterhout, The Rowland Institute for Science, 100 Edwin H. Land Boulevard, Cambridge, MA 02142. An Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF MICHIGAN

Two POSTDOCTORAL POSITIONS are available immediately in an exciting research environment to investigate signal transduction and mechanisms of DNA excision repair in the context of autoimmunity. Experience in signal transduction and recombinant DNA technology is required for one position. Cellular and molecular immunology experience is required for the second position.

Send curriculum vitae and names of three references to: Dr. Joseph Holoshitz, Director, University of Michigan Specialized Center of Research in Rheumatoid Arthritis, 200 Zina Pitcher Place, Kresge I R4550, Ann Arbor, MI 48109-0531.

POSTDOCTORAL RESEARCH ASSOCIATE-SHIP available for a Ph.D. or equivalent with experience in molecular immunology (flow cytometry, quantitative PCR, cytokines, etc.) to study human NK cells (NIH-funded). Send curriculum vitae, reprints and three reference letters to: Dr. R. Krishnaraj, University of Illinois at Chicago, Department of Medicine (M/C 787), 840 South Wood Street, Chicago, IL 60612. FAX: 312-413-2693. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION in Cellular and Molecular Neurobiology—The Department of Neurobiology has postdoctoral positions available to study various aspects of molecular, cellular and developmental neurobiology. Some major areas of interest are cell-cell and cell-substratum adhesion molecules, neurite outgrowth and nerve regeneration. Specific studies include: analysis of overexpression, mutation or deletion of adhesion molecules in animals, analysis of genes such as Hox and Pax, that control the expression of adhesion molecules and their subsequent roles in the formation of morphogenetic pathways during neural development; identification of signal transduction pathways and the gene programs activated by adhesion molecule binding. Applicants should have a strong background in cellular and/or molecular biology. Send curriculum vitae and three letters of reference to: Dr. Gerald M. Edelman, Chairman, Department of Neurobiology, The Scripps Research Institute, 10666 North Torrey Pines Road, SBR14, La Jolla, CA 92037. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL TRAINING Immunobiology of Normal and Neoplastic Lymphocytes

This NIH-sponsored program offers training in a wide variety of cancer related areas of immunology including immune recognition, regulation, and tolerance; lymphocyte development; cell signaling and adhesion; and cancer immunotherapy. A brochure describing the research interests of the 24 primary trainers in the program is available on request.

Positions are open immediately for Ph.D. graduates and for those who expect to graduate in the next year. Applicants must be U.S. citizens or permanent residents. Interested candidates should send curriculum vitae and names of three references to: Dr. Yvonne Paterson, Program Director, Department of Microbiology, 1033 Blockley Hall, University of Pennsylvania Medical Center, Philadelphia, PA 19104-6076. FAX: 215-898-9557; Email: paterson@A1.msfc.upenn.edu. Women and minorities are urged to apply. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available to study the mechanism of apoptosis with special emphasis on the role of proteases and protease inhibitors (*J. Exp. Med.*, 180: 2113, 1994). Applicant should have a background in cell biology and biochemistry, with some experience in molecular biology a plus. Areas of research include signal transduction pathways, lipid second messengers, growth factor receptors, purification and cDNA cloning of novel proteins mediating apoptosis, and development of therapeutics aimed at modulation of apoptosis. Send curriculum vitae and names of three references to: Dr. Susan C. Wright, Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043.

A POSTDOCTORAL POSITION is available immediately to study the regulation of the myelin protein genes in mouse. Experience in molecular biology required. The successful candidate will have the opportunity to apply state-of-the-art biotechnology and work with a highly interactive group of neuroscientists. Send curriculum vitae and three references to: Dr. Raul A. Saavedra, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, PA 19129. An Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available immediately to study receptor interaction and Ca^{2+} function during Platelet-Derived Growth Factor (PDGF) signal transduction. Relevant expertise in biochemistry/biophysics, time-resolved fluorescence spectroscopy, Ca^{2+} imaging, and caged-compound techniques preferred. Send curriculum vitae and name of references to: Dr. Xue F. Wang, Department of Cell Biology and Anatomy, University of North Carolina, Chapel Hill, NC 27599-7090. Email: wangfeng@med.unc.edu.

RESEARCH FELLOWSHIP POSITIONS—The Cardiovascular Institute of The Mount Sinai Medical Center has postdoctoral positions available in the molecular biology of lipoprotein metabolism and atherosclerosis. Training in cell and/or molecular biology essential. Please send curriculum vitae and names of three references to: Dr. Edward Fisher, Cardiovascular Institute, The Mount Sinai Medical Center of New York, Box 1030, One Gustave Levy Place, New York, NY 10029. An Equal Opportunity Employer.

Tenure-Track And Postdoctoral Opportunities.

The following research training opportunities are currently available at the National Institutes of Health.

Tenure-Track Position Assistant Professor Equivalent

Oral Epidemiology Deborah M. Winn, PhD

A position is available for undertaking research using epidemiologic methods applied to human populations to study determinants of oral and craniofacial diseases or the utilization of dental treatment, oral and systemic consequences of materials and procedures used in dental practice, oral manifestations of systemic diseases, or oral and systemic health interrelationships. Applicants with a strong record of scientific achievement should submit a *curriculum vitae*, a summary of research goals, copies of selected publications, and three (3) letters of reference by October 15, 1995. Division of Epidemiology and Oral Disease Prevention (OE-95), NIDR, Building 45, Room 4AS-13E, 45 CENTER DR MSC 6401, BETHESDA MD 20892-6401.

Postdoctoral Positions

Cognitive Neuroscience and Brain Imaging Alex Martin, PhD

Visual object processing, semantic memory, and language are being investigated in the normal human brain using positron emission tomography and magnetic resonance imaging. Patients with Alzheimer's disease or related disorders are also available for study. Applicants must have a PhD in psychology, cognitive science, or related field, and have less than five years of postdoctoral experience. Experience with functional brain imaging is desired. Laboratory of Psychology and Psychopathology (OE-95), NIMH, Building 10, Room 4C110, 10 CENTER DR MSC 1366, BETHESDA MD 20892-1366.

Developmental Gene Expression and Chromatin Structure Ann Dean, PhD

Embryonic globin gene expression is being studied, especially as it relates to chromatin structure. Approaches include *in vitro* and *in vivo* analysis of functional promoter and enhancer elements, *in vitro* transcription of DNA templates assembled into nucleosomes, and structural studies using minichromosomes. Candidates must have training in molecular or cell biology and an interest in the role of chromatin structure in the molecular basis of development. Applicants must have less than five years of postdoctoral experience. Laboratory of Cellular and Developmental Biology (OE-95), NIDDK, Building 6, Room B1-08, 6 CENTER DR MSC 2715, BETHESDA MD 20892-2715.

Neuroanatomy Mortimer Mishkin, PhD

The functional neuroanatomy of the central auditory system is being studied in the rhesus monkey. The research focus is on information flow in auditory perception, learning and memory using a variety of neuroanatomical, neurophysiological and behavioral techniques. A strong background in neuroanatomy is particularly desirable. Applicants must have less than five years of postdoctoral experience. Laboratory of Neuropsychology (OE-95), NIMH, Building 49, Room 1B80,

49 CONVENT DR MSC 4415, BETHESDA MD 20892-4415.

Signal Transduction and Pattern Formation Alan Kimmel, PhD

The role of the cAMP receptors and downstream pathways in control of *Dictyostelium* development and regulated gene expression is being studied. Approaches include knock-out transformation, two-hybrid screens, transcription factor analysis, and positional cloning. Experience in molecular biology, protein chemistry, or receptor biochemistry is essential. Applicants must have less than five years of postdoctoral experience. Laboratory of Cellular and Developmental Biology (OE-95), NIDDK, Building 6, Room B1-22, 6 CENTER DR MSC 2715, BETHESDA MD 20892-2715.

Toxicokinetic Modeling Christopher J. Portier, PhD

Toxicokinetic models are being studied as a means of relating the response of laboratory animals and humans to exposure to environmental toxins. Research relating to the utility of these models for the design and analysis of laboratory and epidemiology studies and for risk estimation is planned. Applicants should have a strong background in computer modeling, some experience in modeling biological systems and less than five years of postdoctoral experience. Laboratory of Quantitative and Computational Biology (OE-95), NIEHS, P.O. Box 12233, MD A#-06, Research Triangle Park, NC 27709.

Additional Opportunities

The NIHEDNET Bulletin Board **POSTDOC** (fellowship positions) and **TENURE** (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7,Even,1) or the Internet using Telnet (wylbur.cu.nih.gov) or the World Wide Web (URL: telnet://wylbur.cu.nih.gov). When connected to NIH, key in ,vt100 for terminal emulation, F5E for initials, and AJL1 for account number. To view tenure track positions, quit the **POSTDOC** conference and join the **TENURE** conference.

An electronic version of the *Postdoctoral Research Fellowship Opportunities* catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: <http://www.nih.gov>). When connected with Gopher, select **Grants and Research Information** and then **NIH Office of Education**. When connected with WWW, select **Grants and Contracts** and then **NIH Office of Education**. If you have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



National Institutes Of Health

Office Of Education

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POSITIONS OPEN

POSTDOCTORAL POSITIONS

Thomas Jefferson University has three **POSTDOCTORAL POSITIONS** available immediately for studies related to cardiac muscle excitation-contraction coupling and neuronal signal transduction mechanisms. 1) To investigate the effects of alcohol and anesthetics on glutamate receptor Ca^{2+} signaling in developing brain. Experience in neuronal signal transduction mechanisms, preparation and maintenance of primary neuronal cultures and preferably fluorescence imaging is required. Respond to **Dr. Thomas A. Rooney** at the address below. 2) To study the interactions of cocaine and alcohol with the pathways of excitation-contraction coupling in isolated cardiomyocytes. 3) To participate in a collaborative study with **Dr. Joshua R. Berlin** investigating basic mechanisms of Ca^{2+} release in heart muscle cells. Candidates for position 2 should have research experience in studies of cardiac cell function, electrophysiology and/or confocal microscopy, and for position 3, additional experience in quantitative image analysis is desired. Respond to: **Prof. Andrew P. Thomas** at the address below. A doctoral degree is required for all three positions. Applications, including curriculum vitae, summary of research experience and names and addresses of three references, should be sent to the **Department of Pathology, Anatomy and Cell Biology, Thomas Jefferson University, Room 271JAH, Philadelphia, PA 19107**. *Thomas Jefferson University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION Alzheimer's Disease Research

Scios Nova is a biopharmaceutical company engaged in the discovery, development, and commercialization of novel human therapeutics. Our R&D efforts focus on the treatment of acute illnesses, primarily in the areas of cardio-renal disease and inflammation.

POSTDOCTORAL POSITION is available to study the molecular and cellular biology of genes involved in the pathology of Alzheimer's Disease. This research would add to an on-going research program in this area.

The candidate should have significant experience in molecular and mammalian cell biology. Background in neurobiology is desirable but not essential.

Please send curriculum vitae, including contact information for three references, to:

Dr. Barbara Cordell
Scios Nova Inc.
2450 Bayshore Parkway
Mountain View, CA 94043
Equal Opportunity Employer

POSTDOCTORAL POSITION Molecular/Biochemical Pharmacology Texas Children's Cancer Center

POSTDOCTORAL POSITION is available immediately in the pharmacology section of Texas Children's Cancer Center. This is a laboratory-based clinical research program that focuses on the pharmacokinetics/pharmacodynamics of antineoplastic agents, CNS pharmacology, and hepatic drug metabolism. Investigation of topoisomerase inhibitors, taxane derivatives, and antimetabolites are specific areas of interest. Applicants must have a Ph.D., Pharm.D., or M.D./Ph.D. with laboratory experience in biochemical and molecular techniques. Send a curriculum vitae and names of three references to: **Dr. Susan Blaney/Jacqueline Plotkin, Texas Children's Hospital, mail station 3-3320, Houston, TX 77030-2399**. *Baylor College of Medicine is an Affirmative Action/Equal Access/Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIPS. Departments of Molecular and Cellular Biology and Organismic and Evolutionary Biology, Harvard University. A limited number of postdoctoral research positions become available from time to time. Some appointments are funded through research grants awarded to faculty members and are ordinarily for one year, sometimes renewable, other appointments are possible through postdoctoral fellowships. For a list of faculty members who may have postdoctoral positions available, write to the respective department office (do not send applications): **Molecular and Cellular Biology, 7 Divinity Avenue, Cambridge, MA 02138; Organismic and Evolutionary Biology, 26 Oxford Street, Cambridge, MA 02138**. *Harvard University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE SENSORY NEUROBIOLOGY

A two-to-three year **POSTDOCTORAL POSITION** is available to study sensory transduction mechanisms in free nerve endings. Current research projects involve electrophysiological, molecular biological, pharmacological, and bioengineering approaches to look at the cellular and molecular mechanisms of cold, mechanical, chemical and pain transduction. A Ph.D. in neurophysiology, neurobiology, biophysics, bioengineering, or a related field is required. Salary range is \$26,000 to \$32,000 depending on experience. Applicants should send a curriculum vitae and the names of three individuals who may be contacted for references to: **Darrell L. Tanelian, Ph.D., M.D., Director, Pain Research Program, Department of Anesthesiology and Pain Management, University of Texas, Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9068**. *University of Texas Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW Department of Obstetrics and Gynecology Louisiana State University Medical Center Shreveport, Louisiana

A position is presently available to study the causes and mechanisms of aneuploidy in mammalian germ cells and zygotes. Candidates should have a background and interest in the chemistry of oocyte meiotic maturation and cytogenetics. Please submit a curriculum vitae and statement of research interest to: **Dr. John B. Mailhes, Department of Obstetrics & Gynecology, L.S.U. Medical Center, P.O. Box 33932, Shreveport, LA 71130**. **Telephone: 318-675-5382**.

Qualifications: Ph.D. in related field. Experience in molecular biology cytogenetics, and the biochemistry of oocyte maturation is desirable.

Louisiana State University Medical Center-Shreveport is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL TRAINEE

POSTDOCTORAL TRAINEE position available immediately to investigate the role of opioids and related neuropeptides in analgesia and/or temperature regulation as part of ongoing NIH-funded research. Applicants should have a strong background in one of these areas. Position is part of an interdisciplinary training program entitled "Drugs of Abuse and Neuropeptides" from the National Institute on Drug Abuse. Trainees will become familiar with a broad range of techniques: pharmacological, biochemical, immunological, molecular, and behavioral. Must be U.S. citizen or hold green card. Send curriculum vitae and the names of three references to: **Dr. Martin W. Adler, Department of Pharmacology, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140**. *Temple University is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.*

Two **JUNIOR RESEARCHER** (postdoctoral) positions (nos. 086171T, 088757T). Retrovirology Research Laboratory, Pacific Biomedical Research Center, University of Hawaii at Manoa, full-time, non-tenurable, federal funds, to begin November 1, 1995, pending availability of funds. Duties: Apply cellular and molecular techniques in research on HIV/AIDS pathogenesis; participate in the multidisciplinary retrovirology activity of the University's Research Centers in Minority Institutions Program. Minimum qualifications: Ph.D. with experience in molecular biology, cellular immunology, tissue culture and a serious interest in HIV research. Minimum monthly salary: \$2776. Send curriculum vitae and names of three references to: **Richard Yanagihara, M.D., Retrovirology Research Laboratory, Leahi Hospital, 3675 Kilaua Avenue, Honolulu, HI 96816**. **Telephone: 808-732-7702; FAX: 808-735-3682**. Closing date: October 1, 1995.

ELECTRONICS DESIGN

Small, growing manufacturer of a diverse product line of scientific and industrial calibration and measurement instrumentation, seeks a talented **DESIGN ENGINEER**. Strong circuit design and programming skills required. Chicago area location. Please submit résumé, salary requirements and all other relevant data to: **Science Box No. 59, 1333 H Street, Room 814, NW, Washington, DC 20005**.

POSITIONS OPEN

PROJECT SCIENTIST and **POSTDOCTORAL FELLOW**. Positions available beginning October 1, 1995, for Ph.D.'s with training and experience in molecular biology. Endogenous growth factor/receptor expression and function in corneal and breast cells, including the role of apoptosis in wound healing. Published experience with recombinant DNA techniques, nucleic acid sequencing, Northern blotting, Western blotting, and PCR required. Send curriculum vitae, cover letter of interests, and three references to: **Steven E. Wilson, M.D., Eye Institute and Department of Cell Biology/A31, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195**. *Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.*

LIVING SKIN BANK Research Associate UH-S-6016-95-07-8

The Living Skin Bank has an ongoing research program on epithelial differentiation and skin biology. A **RESEARCH ASSOCIATE** position is now available for a Ph.D. in a biologic science to participate in these studies. Required is two years of experience in two of the following areas: cell biology, molecular biology, and/or biochemistry. Preferred is specific experience in studying the role of peptides and other small molecules on cell metabolism, gene expression, signal transduction and/or population dynamics.

Please submit résumé to: **University Hospital, Human Resources, UH-S-6016 HSC, Level 3, Room 106, Stony Brook, NY 11794-8300**. *An Affirmative Action/Equal Employment Opportunity Employer.* If you need a disability related accommodation, please call the University Hospital Human Resources department at 516-444-2525.

POSTDOCTORAL RESEARCH ASSOCIATE

Will conduct fundamental research and study on the biochemical and molecular basis of baculovirus envelope protein structure, function, synthesis, trafficking and assembly into viral-induced nuclear envelopes. Successful applicant will study and apply most aspects of recombinant nucleic acid and baculovirus expression vector techniques. For studies of protein structure pursuant to function, emphasis will also be on recombinant and expression vector technologies. Position may start immediately or within the next six to nine months. Starting at \$25,000, negotiable commensurate with experience. Please send résumé and three references to: **Dr. Max Summers, Center for Advanced Invertebrate Molecular Sciences, Texas A&M University, Department of Entomology, College Station, TX 77843-2475**. *Texas A&M University is an Affirmative Action/Equal Opportunity Employer.*

STRUCTURAL AND COMPUTATIONAL SCIENTISTS

A **RESEARCH SCIENTIST** position at all levels is available for a structural biologist with proven record in determining macromolecular structures in solution by state-of-the-art NMR techniques. Excellent research support is available. **POSTDOCTORAL POSITIONS** are also available in all areas of NMR, MRI, X-ray crystallography and Computational Chemistry. We currently have the following facilities: an AMX600, an AMX400WB with solid state and microimaging capabilities, a BIOSPEC 47/40 animal MRI system, two X-ray diffractometers with image plate and area detectors and excellent computational facilities. Send a complete curriculum vitae, a research proposal (optional for postdoctoral applicants) and three letters of references to: **Dr. Tai-huang Huang, Division of Structural Biology, Institute of Biomedical Sciences, Academia Sinica, Nankang, Taipei 11529, Taiwan, R.O.C. FAX: 886-2-785-3569; Email: BMTHH@ccvax.sinica.edu.tw**.

LIVE IN JAPAN

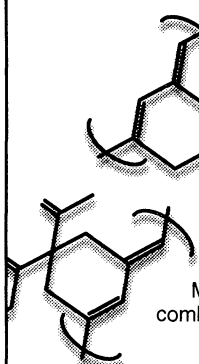
International Education Services (IES) invites applications for a one-year assignment in Japan teaching English to Japanese staff from major corporations, pharmaceutical companies, and government agencies. Professional work experience required. Please FAX or airmail current résumé to: **IES, Rose Hikawa Building, 22-14, Higashi 2-chome, Shibuya-ku, Tokyo 150 Japan**. **Telephone: 81-3-3498-7101; FAX: 81-3-3498-7113**.

Research Without Boundaries

That's what you'll find at Unilever Research. As one of the world's largest consumer products companies, we offer hundreds of brands and thousands of products that are sold in more than 100 countries. And the driving force behind them all is scientific research.

Since we introduced our first product in 1902, Unilever scientists have developed a constant flow of highly innovative products and technologies. Our international commitment to scientific breakthroughs in skin research has resulted in our world-class Skin Care Research Center in Edgewater, NJ.

Here, we've brought together scientific experts from many disciplines including Cell and Molecular Biology, Physiology, Colloid and Surface Science, Biophysics, and Emulsion and Composite Materials Science. By combining this cross-



disciplinary knowledge, we're building upon our understanding of skin biology to create superior skin technologies that will continue to improve people's lives.

To expand our scientific frontiers even further, we have a current need for more individuals who thrive on scientific research, its challenges and its rewards. The following dynamic positions are now available:

MORPHOLOGIST/BIOCHEMIST

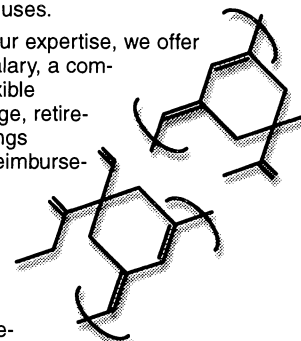
Participate in a state-of-the-art research program focused on evaluating morphologic and biochemical changes in the skin. Position requires a BS/BA in a biologically-related field as well as an understanding of cell biology and histology, and PC familiarity. Experience in tissue sectioning, image analysis, immunohistochemistry and computer programming is desirable.

RESEARCH BIOLOGIST

Assist in the design, execution and interpretation of clinical trials. To qualify, you must have a BS/BA, preferably in the biological/chemistry sciences. Experience in a clinical research setting, a background designing/writing proto-

cols/reports and some knowledge of statistics are pluses.

In return for your expertise, we offer an excellent salary, a comprehensive flexible benefits package, retirement and savings plans, tuition reimbursement, and a progressive work environment that's conducive to challenge and career advancement. For consideration, send your resume indicating position of interest, to: Ms. Jane Goodwin, Human Resources, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.



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Research U.S.**

Molecular Neurobiology/ Neurodegenerative Disease

A **FACULTY POSITION** is available at the junior or senior level in molecular neurobiology, with particular interest in neurodegenerative and neuromuscular disease, signal transduction mechanisms, including synaptic function, and the role of the neuronal cytoskeleton in pathogenesis. Other areas which fortify and complement existing research strengths in cell and neurobiology will be considered; the use of molecular, genetic and transgenic approaches are also desirable. Appointments carry institute-backed salary guarantees and liberal start-up packages for personnel, equipment and operating costs.

Submit a detailed *curriculum vitae*, a one-page summary of research interests and future research plans, and three letters of recommendation to:

Dr. Richard Vallee, Scientific Director
c/o Human Resources - Search I
The Worcester Foundation for
Biomedical Research
222 Maple Avenue
Shrewsbury, MA 01545



Review of applications
will begin
October 15, 1995.
An Affirmative
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Research Scientist

Plant Gene Expression

DuPont Central Research is seeking a highly motivated scientist to join a research program aimed at understanding and manipulating factors affecting transgene expression in plants. The successful candidate will join the Plant Gene Expression Group, which includes scientists from Central Research and from Agricultural Biotechnology at the DuPont Experimental Station in Wilmington, Delaware.

Areas of research experience may include transcription factor/promoter interactions, chromatin structure, or other topics relevant to gene expression. Previous work in these areas need not have focused on plant systems. Minimum requirements for the position include a Ph.D. and postdoctoral research experience.

Interested candidates should forward their resumes and a list of references to: DuPont Human Resources, PSS-0111, Wilmington, DE 19898 or you may fax to (800) 631-2206, Attn: PSS-0111. Applications received by September 15th will be assured consideration. An Equal Opportunity Employer.



*Central Research
and Development*

MBC '95

The Molecular Biology Conference San Diego, California Sept. 17-20, 1995

Abstract Deadline: Sept. 7, 1995

Exhibits & Workshops

Gene Regulation, Structural Biology, Molecular Immunology, Gene Therapy: S. Forsberg, La Jolla; S. Chang, San Diego; W. Chazin, La Jolla; A. Kaushik, Guelph; D. Casimiro, La Jolla

Yeast Expression and Two-Hybrid System: E. Golemis, Philadelphia; P. Colas, B. Cohen Cambridge; Li Zhu, Palo Alto; A. Ghosh, Lincoln; S. Gangloff, New York; M. Pilgrim, Stanford, E. Komives, La Jolla

Symposium on the Molecular Biology of Ebola and Outbreking Viruses: W. Taylor, Athens; A. Sanchez, Atlanta; K. Anderson, Ft. Detrick

Plant Extinction/A New DNA Bank: H. Koopowitz, Irvine; I. Rubenstein, R. Dana, San Diego

Sequencing, DNA and Germplasm Preservation, Advances in Technology: M. Morimyo, Tokyo; A. Chemeris, Russian Academy of Sciences; M.A. Northrup, Livermore; J. Miller, Carlsbad; O. Ryder, San Diego; F. Molina, Rockville; E. Roos, Ft. Collins; C. Simon, Pullman

DNA Collections, Databases, World-Wide-Web: S. Beckstrom-Sternberg, Beltsville; B. Sherman, D. Davy, Berkeley; M. Polacco, Columbia; E. Reardon, R. Jain, La Jolla

Agricultural Biotech: M. Helm, La Jolla; T. Dunahay, Denver; J. Sherman and J. Frank, San Marcos; J. Chambers, Washington, D.C.; R. Lilley and M. Shariati, Wollongong

Computer Facilities: e-mail, Usenet news, telnet, gopher, wais, WWW Organizers: H. Koopowitz, U C Irvine, W. Taylor, U of GA; A. Sanchez, Center for Disease Control, Atlanta; D. Ornstein, PROMED; H. Shands, J. Miksche, S. Heller, E. Roos, C. Simon USDA/ARS

The meeting is being sponsored by PGG/Ambiocom, San Diego, CA.

Contact: 619-945-2321

rcdana@greengene.com

<http://www.bocklabs.wisc.edu/ebola/ebola-conf-sep-95.html>

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SUNY HEALTH SCIENCE CENTER AT SYRACUSE

FACULTY POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

We invite applications for two tenure-track positions. While we expect to make appointments at the ASSISTANT PROFESSOR level, candidates at higher levels also will be considered. Outstanding candidates in all areas of biochemistry and molecular biology are encouraged to apply. However, one of the positions is dedicated to protein structure/function. Applicants must have a Ph.D., M.D. or equivalent degree, postdoctoral experience, demonstrated research productivity and a commitment to excellence in teaching medical and graduate students. Send letter of application (with curriculum vitae and summary of research plans) and have three letters of reference forwarded to: **Dr. Harvey S. Penefsky, Chair, Search Committee, Department of Biochemistry and Molecular Biology, State University of New York Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210.** Review of applications will begin November 1, 1995, and continue until the positions are filled.

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SUNY

Postdoctoral Positions in Biochemistry University of Missouri-Columbia

Dr. Derek Cash

Neurotransmitter receptors

Dr. Susan Deutscher

Antibody engineering, nucleic acid-protein interaction

Dr. David Emerich

Symbiotic nitrogen fixation

Dr. Milton Feather

Protein glycation and Maillard reaction

Dr. William Folk

Control of gene expression in plants and animals

Dr. Tom Guilfoyle

Auxin-regulated genes; RNA polymerase

Dr. Gretchen Hagen

Auxin-regulated genes

Dr. Mark Hannink

Transcription factors and oncogenesis

Dr. Dennis Lubahn

Estrogen receptor-minus mouse characterization

Dr. Mark Martin

Transcription factors and gene regulation

Dr. Thomas Mawhinney

Cystic fibrosis and glycoprotein genetics

Dr. Roy Morris

Cytokinin biosynthesis and control

Dr. Charlotte Phillips

Inherited connective tissue disorders and the regulation of extracellular matrix

Dr. Joseph Polacco

Genetics of plant nitrogen assimilation

Dr. Thomas Quinn

Design & synthesis of radiolabeled antibodies and peptides

Dr. Douglas Randall

Plant protein kinases

Dr. John Rogers

Function of a vacuolar sorting receptor in plant cells

Dr. Cleopas Samudzi

Macromolecular crystallography on protein-protein and protein-DNA complexes

Dr. Frank Schmidt

RNA structure and function

Dr. Krishna Sharma

Protein modification and cataractogenesis

Dr. Roger Sunde

Selenoprotein regulation and molecular biology

Dr. Suresh Tyagi

Regulation of proteinases and antiproteinases

Dr. Gary Weisman

Structure and function of recombinant P₂ purinoceptors

Applicants should send CV and names of two references to:

Postdoctoral Application, Department of Biochemistry, 117 Schweitzer Hall,
University of Missouri, Columbia, MO 65211

Specify research interest

The University of Missouri is an Equal Opportunity/Affirmative Action Employer

DIRECTOR OF NEUROSCIENCE RESEARCH

The Aitken Neuroscience Institute invites applications from Ph.D. or M.D. scientists. Individuals may qualify for an academic position at Cornell University Medical College. The Aitken Neuroscience Institute is a non-profit organization which combines a neuroscience research laboratory, the Brain Trauma Foundation and clinical neurosurgeons and neurologists from Cornell-New York Hospital Medical Center in one location on the upper east side of Manhattan. Through basic science, clinical research, patient care and public education, the institute's mission is to improve the outcome of patients with neurological injury. The Aitken Laboratory has developed expertise in studying the cerebral microcirculatory response to traumatic brain injury as well as the role of inflammatory mediators in delayed cell death using astrocyte culture models. Current research efforts are directed toward understanding the mechanism of secondary damage following ischemic and traumatic cerebral injury.

The successful candidate will continue and expand on the current scientific investigation and supervise postdoctoral fellows, residents, medical students and technicians. The candidate must have a strong record of scientific achievement, funding and effective communication skills. Please send curriculum vitae and three letters of recommendation to **Mr. Peter Quinn, Executive Director of the Aitken Neuroscience Institute, 523 East 72nd St., 8th Floor, New York, NY 10021, FAX (212) 772-0357.**

Ph.D. SCIENTISTS



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BIOCHEMISTRY

An opportunity is currently available with the Allergy and Respiratory Biology group in our Central Research Division for a biochemist to join a multidisciplinary team focused on discovery of novel therapeutics for the treatment of allergic and respiratory diseases. Our current interests encompass the pharmacologic manipulation of cytokine receptor binding and signal transduction. This position requires a Ph.D. and 3 years of postdoctoral training in biochemistry, molecular science or a related field. We are seeking candidates with a demonstrated record of creative research in the biochemical pharmacology of cytokine signaling. Drug discovery experience is desirable.

NEUROSCIENCE

We seek an individual skilled in neurochemical and neuropharmacological techniques, with expertise in the following: receptor binding, second messenger systems, enzymatic assays, neurotransmitter release, molecular biological techniques, and *in vivo* biochemical approaches. Our team is engaged in the discovery of novel psychotherapeutic agents; areas of interest include depression, anxiety, psychosis, substance abuse, and cognitive disorders. This position requires a Ph.D. in Neuroscience, Pharmacology, or related discipline and at least two years of postdoc experience. Strong written and communication skills are a must.

In addition to a stimulating environment, we offer a competitive compensation and flexible benefits package, including relocation assistance to our southeastern shoreline community. Please submit CV or resume suitable for electronic scanning (i.e., eliminate italics, bullets, bolds, underlines, and staples) to: **Manager of Employment, AD#1029, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. EOE M/F/D/V.**

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THE UNIVERSITY OF CALIFORNIA, SAN DIEGO, DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

invites applications for a tenure track position in Biochemistry at the Assistant Professor level. Candidates must have a Ph.D. and a demonstrated ability for creative research and teaching at the undergraduate and graduate levels. The committee is particularly interested in receiving applications from chemists, biochemists, structural biologists, and molecular biologists with research interests in signal transduction processes, cell-cell interactions, cell proliferation and growth control, receptors, cell adhesion and other immunologically relevant molecules, or structure and function of other important biomolecules. The appointee would have the opportunity to interact with the UCSD Cancer Center which has programs in molecular virology, immunology, glycobiology, growth control, and cancer genetics. Salary commensurate with qualifications and based on University of California pay scale. Position subject to availability of funds. Candidates should send a curriculum vitae, a list of publications, reprints of up to five representative papers, a summary of research plans and names and addresses of three references to: Chair, Biochemistry Search Committee - S2-997, University of California, San Diego, Department of Chemistry and Biochemistry - 0332, La Jolla, CA 92093-0332. Prompt response is recommended but all applications received by 01Dec95 or until open position is filled will be assured full consideration. *The University of California is an equal opportunity/affirmative action employer.*

Research Scientists

The R. W. Johnson Pharmaceutical Research Institute (RWJPRI) performs R&D activities for the Johnson & Johnson pharmaceutical companies: Cilag, Ortho-McNeil Pharmaceutical, Ortho Biotech and Ortho Dermatological. The La Jolla, CA, division of RWJPRI is engaged in a novel protein drug target identification program using state-of-the-art molecular biology technology. The Protein Expression/Assay Development Groups express novel protein drug targets and develop functional and high-throughput assays. We are seeking highly qualified researchers for the following positions:

SCIENTIST

The successful candidate will develop assays to characterize the function of novel protein drug targets and convert functional assays into high-throughput screens. Qualified candidates will have a Ph.D. in cell biology, biochemistry or molecular biology and 0-5 years postdoctoral training. Experience in several of the following assays is required: cell proliferation and differentiation assays, receptor binding and second-message assays, gene/protein expression assays (RNase protection assay, reporter gene assay, and metabolic labeling assay, etc.), enzymatic assays, immunoassays. Flexibility to work on diverse projects is required.

SENIOR ASSOCIATE SCIENTIST

The successful candidate will be involved in characterization of novel protein drug targets as well as in high-throughput assay development and validation. Qualified candidates will have an MS in biological science with 5+ years experience in drug discovery related research. Strong skills in protein/enzyme characterization, enzymatic assays, tissue culture and transfection, cell-based assays, receptor-based assays, and use of automated equipment are highly desired.

These positions are provided an excellent research environment, career growth potential, and a competitive compensation and benefit package. Please submit your curriculum vitae to: Human Resources Manager, R. W. Johnson PRI, 3535 General Atomics Court, Suite 100, San Diego, CA 92121. An Equal Opportunity Employer, M/F/D/V.



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LECTURESHIP IN PROTEIN ENGINEERING

**School of Biology and Biochemistry
Centre for Peptide and Protein Engineering**

Applications are invited for this post tenable from 1 October 1995 or such other date as may be agreed, but no later than 1 January 1996, to develop a strong research programme in the study of protein function to enhance the research activities of the School.

Applicants must have an Honours Degree or equivalent together with a PhD or equivalent in Biochemistry, Molecular Biology or Allied subject, experience demonstrated by at least four publications in peer reviewed international journals of applying recombinant DNA methods to the study of Protein Function, ability to foster the increased application of Molecular Biological techniques to the on-going studies of the Centre and to develop new research themes. Some teaching at tertiary level and proven ability to obtain external funding for research are desirable.

Preference will be given to applicants with experience in: Peptide and Protease Chemistry, Molecular Enzymology: tumour-derived growth factors: Angiogenic Peptides: Parasite Neuropeptides and their Receptors: Proteolytic Processing and aggregative properties of Amyloid-derived Peptides: Immunoassay Development.

Informal enquiries to Dr. Brian Walker, Division of Biochemistry, School of Biology and Biochemistry (ext 2047/2117).

Salary scale: Lecturer Grade A: £15,154 - £19,848, or Grade B: £20,677- £26,430 with eligibility for USS. Assistance with relocation as appropriate.

Further particulars are available from the Personnel Officer, The Queen's University of Belfast BT7 1NN (01232) 245133 ext 3044/3246 or FAX (01232) 324944/310629. Closing date: 8 September 1995.

The University is a charity, established in 1845 to advance education. Committed to an Equal Opportunities policy and selection on merit, it welcomes applications from all sections of the community. Under its affirmative action programme it particularly welcomes applications from women for academic posts.

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Readership in Botany

Applications are invited for a Readership in the Department of Botany (Ref. RF-95/96-4), tenable from January 1996. Appointment will be made initially on a three-year fixed-term basis.

Applicants should have a PhD with a strong record of research activity and publications as well as some administrative experience and qualities of leadership. The appointee should be able to teach all the three areas of Botany, Food Science and Plant Biotechnology.

Those who have submitted applications in response to the recent advertisement of Reader in the Department (Ref. RF-94/95-20) with a closing date of 11 November 1994 need not re-apply.

Annual salary (under-review) [non-superannuable but attracting 15% (taxable) terminal gratuity] is on a 9-point scale, with starting salary depending on qualifications and experience: HK\$669,360 - HK\$889,260 (approx US\$86,930 - US\$115,488; US\$ equivalents as at 26 July 1995).

At current rates, salaries tax will not exceed 15% of gross income. Housing at a charge of a percentage of salary, currently 7 1/2%, children's education allowances, leave, and medical benefits are provided.

Further particulars and application forms may be obtained from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (fax: [852] 2559 2058; E-mail: APPTUNIT@HKUVM1.HKU.HK). Particulars are also available on the University's listserv accessed by E-mail as "LISTSERV@HKUVM1.HKU.HK" (specify "get apptment filelist" for list of vacant posts).

Closes **15 September 1995**.

Cell Biology

A FACULTY POSITION supported by the Markey Charitable Trust is available at the junior or senior level in cell biology. Areas of particular interest include **cell growth control, the cell cycle, signal transduction mechanisms, and cancer**, but other areas which fortify and complement existing research strengths in cell and neurobiology will also be considered. Direct relevance to problems of medical interest, and the use of molecular, genetic and transgenic approaches are desirable. Appointments carry institute-backed salary guarantees and liberal start-up packages for personnel, equipment and operating costs.

Submit a detailed *curriculum vitae*, a one-page summary of research interests and future research plans, and three letters of recommendation to:

Dr. Richard Vallee, Scientific Director
c/o Human Resources - Search 2
**The Worcester Foundation for
Biomedical Research**
222 Maple Avenue
Shrewsbury, MA 01545



Review of applications will begin **October 15, 1995**. An Affirmative Action/Equal Opportunity Employer.



Wayne State University

DEVELOPMENTAL BIOLOGY/EVOLUTION

The Department of Biological Sciences invites applications for tenure-track positions at the full, associate and assistant professor level. We are seeking faculty members with their primary research interest in molecular genetic analysis of development and evolution. We are particularly interested in individuals using molecular genetic analysis of development to address evolutionary questions, although other areas will be considered. The department is undergoing a significant expansion and plans to make evolutionary development an area of emphasis. We will be recruiting in complementary areas in the immediate future.

Substantial space and start-up funds will be made available to the successful candidates. The department occupies a new seven-story research building with animal rooms, greenhouses, microscopy facilities, Drosophila support facilities, and a molecular biology core facility.

Applicants must have demonstrated excellence in research and the potential for the highest quality teaching. Candidates will be expected to establish and maintain an extramurally funded research program and participate in both undergraduate and graduate teaching programs.

Women and minority candidates are encouraged to apply. Review of candidates will begin immediately and continue until all positions are filled.

Send curriculum vitae, a description of current and long-range research plans, three representative papers and the names of four references to:

Jack Lilien
Chair, Department of Biological Sciences
Wayne State University
Detroit, MI 48202

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GLOBAL CAREER OPPORTUNITIES



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ARC Research Associate Marine Botany

DEPARTMENT OF BOTANY

Applications are invited from PhD or equivalent graduates with experience in ecophysiology of marine plants, to undertake research in the development of nutrient bioindicators using a variety of marine plants. The source, transport and fate of nutrients in coastal marine ecosystems will be assessed by relating a suite of selected attributes of marine plants (eg. productivity, distribution, stable isotopic signatures, nutrient and amino acid content) to nutrient availability, form and source. A strong background in phytoplankton, macroalgae or seagrass research is essential.

The position will be available to start as soon as possible. The appointment will be for two (2) years, within a salary range of \$A37,345 – \$A40,088 per annum. Superannuation benefits are available.

Further information, including duty statement and selection criteria may be obtained from Dr Dennison, (facsimile +61-7-3365-1699, telephone +61-7-3365-2073, email W.Dennison@botany.uq.edu.au). Applications, quoting **Reference No. 39995**, addressing the selection criteria and duties statement, including a curriculum vitae, should be forwarded to Dr W.C. Dennison, Department of Botany, The University of Queensland, Brisbane Qld 4072 Australia. Copies of references and names, addresses and telephone numbers of three referees should also be included.

Closing date for applications is 31 August 1995.

GLOBAL CAREER OPPORTUNITIES



DEPARTMENT OF ZOOLOGY

The Department of Zoology is one of the largest Departments in the Faculty of Science with 25 academic staff and over 100 post-graduate students. It has close ties with the Departments of Marine Biology and Botany and Tropical Agriculture, together forming the School of Biological Sciences. The Department is a major participant in two Collaborative Research Centres - the CRC for Aquaculture and the CRC for Tropical Rainforest Ecology and Management. Applications are invited for the following positions:-

LECTURER/ SENIOR LECTURER - AQUACULTURE

Reference No: JI95135

Aquaculture is a major program within the Department and is offered as a three year BSc and a four year BApplSci degree. Postgraduate degrees, (Honours, Diploma, MSc and PhD) are also offered. Teaching and research focuses on tropical aquaculture, especially on nutrition, microencapsulation, endocrine regulation of growth, fishes, tropical bivalves and redclaw crayfish. There is strong potential for the development of research on penaeid prawn culture. Several freshwater and seawater recirculating systems are available on campus, and there are sea water facilities at the University's Orphous Island Research Station.

The appointee will be required to teach in their area of expertise at third and fourth year levels, may be required to teach introductory aquaculture at second year level and contribute to other undergraduate teaching in Zoology. Postgraduate supervision is also required.

Applicants must have a PhD in Zoology or other relevant discipline and have a strong research record. Applicants with interest in the development and application of advanced technologies for aquaculture are encouraged to apply. Applications should include a teaching portfolio. For appointment as Senior Lecturer substantial appropriate experience will be required.

For further information contact Professor John Lucas, telephone 61 77 814540, fax 61 77 815511.

LECTURER - ZOOLOGY

Reference No: JI95136

The appointee will be required to teach general zoology at 1st or 2nd year levels and in their areas of expertise at 2nd and 3rd year levels, and will be required to undertake postgraduate supervision (Honours, Diploma, MSc and PhD) as appropriate.

Applicants must have a PhD in Zoology or other relevant discipline and have a strong research record, with interests that would enhance or complement the main research focus of the Department in whole animal biology, especially population and community ecology, entomology, wildlife biology, animal behaviour or aquatic ecology. Complementary skills in and the ability to teach biometrics or genetics would be an advantage. The provision of a teaching portfolio would be an advantage.

For further information contact Associate Professor Richard Pearson, telephone 61 77 814540, 61 77 815511 or via email at Richard.Pearson@jcu.edu.au

Tenure: The positions are available from January 1996 for a probationary period of up to three years with provision for conversion to tenure.

Salary: Senior Lecturer (Academic Level C) - A\$51692 - A\$59605 a year. Lecturer (Academic Level B) - A\$42198 - A\$50111 a year. Commencing salary will be according to qualifications and experience.

Applications stating qualifications, experience and telephone contact number and the names, addresses and fax numbers (if any) of three referees should be forwarded to the Recruitment Officer, Human Resources Division, James Cook University of North Queensland, Townsville Q 4811, Australia. Phone 61 77 81 4880, fax 61 77 81 5644. Applications close on 29 September 1995.

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ANNOUNCEMENTS

REQUEST FOR PROPOSALS

In Vitro Genotoxicology and Epidemiology Studies Assessing Effects of Radiofrequency Radiation

Wireless Technology Research, L.L.C. (WTR) has issued an omnibus RFP soliciting proposals from investigators to do tests on radiofrequency radiation using bacterial and *in vitro* mammalian mutation assays and a chromosome aberration assay in human lymphocytes. The omnibus RFP also requests proposals for a series of specific epidemiology studies including cohort and case-control studies. The RFP includes extensive background on the WTR program and the rationale for scientific decision making. Applicants are required to show experience and to consider specific elements detailed in the full RFP document. The deadline for proposals is November 1, 1995. For full RFP, write to: WTR, Attn: Omnibus, 1711 N Street, N.W., Suite 200, Washington, DC 20036. FAX: 202-833-2801.

SYMPOSIUM

SYMPOSIUM: Therapeutic Antibody Technology 95 October 30 to November 1, 1995; Cathedral Hill Hotel, San Francisco, California. Speakers: C. Barbas, G. Barsomian, C. Borrebaeck, D. Burton, P. Carter, D. Charish, K. Chester, A. Griffiths, A. Grillo-Lopez, K. Hellstrom, A. Hiatt, H. Hoogenboom, P. Hudson, A. Jakobvits, K. Johnson, W. Marasco, G. Mark, J. Marks, S. Morrison, I. Pastan, A. Plückthun, L. Ostberg, J. Reno, M. Rosenberg, T. Scanlon, W. Stemmer, L. Weiner, I. Wilson. Abstracts due October 16, 1995. Organizers: J. Larrick, J. Marks. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 415-694-4996; FAX: 415-694-7717; Email: PAIMM@AOL.COM.

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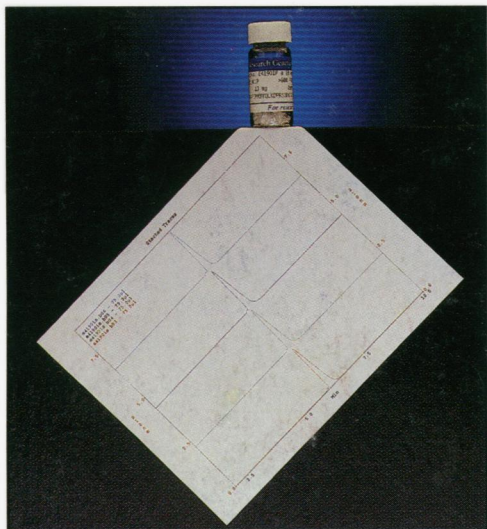
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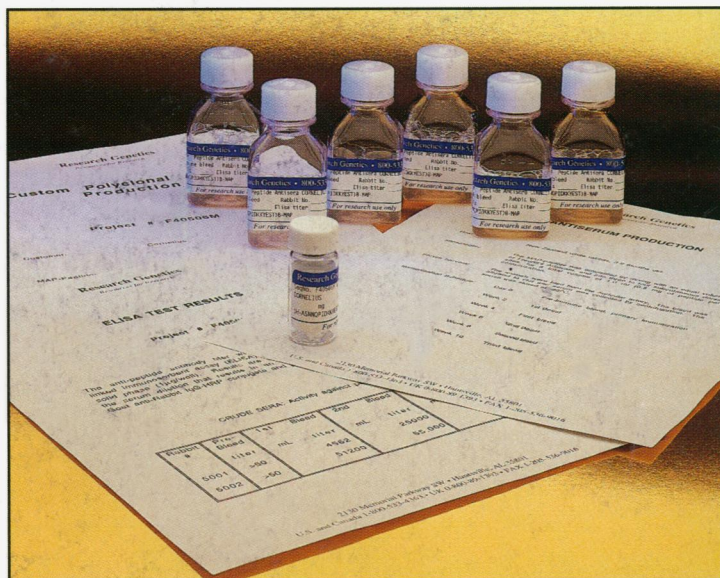
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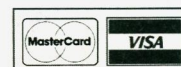


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