

PRODUCTS & MATERIALS

edited by ERIC SEABORG

Thermal Cycler

The OmniGene is a thermal cycler containing a control module with one 96-well block. By adding satellite modules, up to three 96-well blocks can be operated independently from one control module. Advanced software, with the built-in option of personal data card programming, allows sophisticated protocols to be programmed and stored with ease. Hybaid. Circle 89.

Growth Factor and Receptor Reagents

An extensive range of human and mouse growth factors/cytokines and antibodies to growth factors is available. The growth factor sources are natural, recombinant, or synthetic, and all reagents undergo comprehensive performance testing and quality control procedures. Their biological activity is guaranteed. Sigma Immunochemicals. Circle 90.

Monoclonal Antibodies

A new monoclonal antibody (MAb) to human keratinocyte transglutaminase (also known as transglutaminase type I), a cross-linking enzyme in cultured normal human epidermal keratinocytes, can be used for immunohistochemical localization on frozen tissues, formaldehyde-fixed tissues, and cells from human, hamster, monkey, rabbit, and rat sources. Biomedical Technologies Inc. Circle 91.

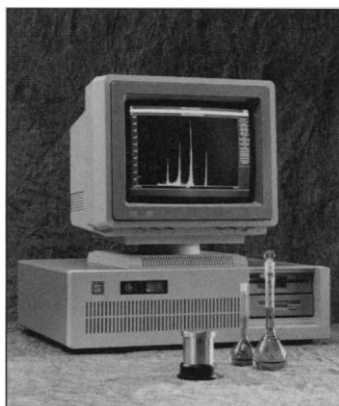
An antimouse interleukin-6 receptor MAb is provided in a 1-ml vial containing 100 µg of 95% pure antibodies in phosphate-buffered saline with 0.1% bovine serum albumin. The MAb can be used to neutralize the bioactivity of mouse interleukin-6 and yet not inhibit the growth of plasmacytomas dependent on the cytokine granulocyte-macrophage colony-stimulating factor. BioSource International. Circle 92.

A line of MAbs to soluble hu-

man CD markers provides 200 tests per vial. Exalpha Corp. Circle 93.

Radioactive Particle Detector

The Liquid Analyzer System 100 is for detection and spectroscopic identification of radioactive par-



ticles in liquids. Based on patent-pending technology, the design allows α -particle emitting radio-nuclides to attach themselves to the face of a silicon detector, yielding spectroscopic identification of the radioactive isotope. The system features an advanced multichannel analyzer workstation operating under a Microsoft Windows 3.0 interface providing high-performance data acquisition and analysis. Applied Electron Corp. Circle 94.

Technical Spell Checkers

Three spelling checking programs are available for IBM compatible computers as supplementary dictionaries for WordPerfect 5.1 (DOS or Windows). BioWords 1.0 contains more than 26,000 terms in agronomy, anatomy, biochemistry, biotechnology, botany, enzymology, genetics, horticultural, immunology, medicine, microbiology, organic chemistry, pharmacology, plant science, soil science, taxonomy, toxicology, virology, and zoology. ChemWords 1.0 contains more than 28,000 terms in agrichemicals, analytical chemistry, biochemistry, chemical engineering, electrochemistry, food chemistry, general chemistry, geochemistry, inorganic chemistry, materials science, medicinal chemistry, mineralogy, nuclear chemistry, organic chemistry, physical chemistry, polymer chemistry, and toxicology. Bio/ChemWords 1.0, with 48,000 terms, combines these two programs. Scientific Software. Circle 95.

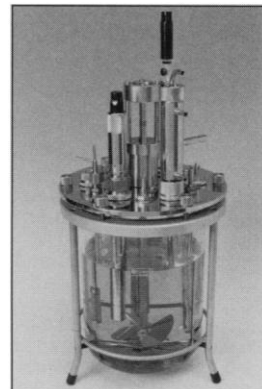
ture, immunology, medicine, microbiology, organic chemistry, pharmacology, plant science, soil science, taxonomy, toxicology, virology, and zoology. ChemWords 1.0 contains more than 28,000 terms in agrichemicals, analytical chemistry, biochemistry, chemical engineering, electrochemistry, food chemistry, general chemistry, geochemistry, inorganic chemistry, materials science, medicinal chemistry, mineralogy, nuclear chemistry, organic chemistry, physical chemistry, polymer chemistry, and toxicology. Bio/ChemWords 1.0, with 48,000 terms, combines these two programs. Scientific Software. Circle 95.

"Reverse" Reverse-Phase Chromatography

A new chemistry for hydrophilic interaction chromatography, or reverse, reverse-phase chromatography, is designed for polar peptides that exhibit little or no retention under conventional reverse-phase conditions. PolyHYDROXYETHYL Aspartamide makes use of high organic concentrations and a sodium perchlorate gradient, causing peptides and other polar molecules to exhibit normal phase elution. It is suitable for histones, membrane proteins, phosphorylated amino acids, and peptides that retain poorly in reverse-phase chromatography. The Nest Group. Circle 96.

Bioreactor Vessel

A new 5-liter round-bottom bioreactor vessel is designed for cell cultures, bacterial studies, and yeast fermentations. The autoclavable vessel is a stirred reactor type with 19 ports in the headplate to allow the use of a wide



variety of stirrer assemblies, sensors, and auxiliaries. Applikon. Circle 97.

Anti-Photobleaching Mounting Medium

VECTASHIELD mounting medium for preserving fluorescence significantly retards photobleaching. Sections or cells labeled with fluorescein, Texas Red, Rhodamine, and AMCA remain brightly fluorescent even after prolonged storage. VECTASHIELD is stable and does not lose potency in long-term storage. It is optically clear and non-fluorescent. Vector Laboratories. Circle 98.

Literature

AxoData and AxoGraph are brochures describing new data acquisition and analysis programs for the Macintosh computer that cover the range of requirements from data digitization to publication. Data Acquisition Platform is a brochure on a fully configured laboratory data acquisition and analysis system, complete with data acquisition interface and software products the user can specify. Axon Instruments. Circle 99.

Electrophoresis and Separations Technology Products is a 28-page listing of power supplies, vertical slabs, gel driers, semi-dry blotters, density gradient forming systems, multistaltic pumps, and companion products. Labconco. Circle 100.

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

SCIENCE

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LINE CLASSIFIED ADVERTISEMENTS

- **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Advertisements must be submitted in writing.
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- **Mail or FAX materials to:**
Science Classified Advertising
 1333 H Street, N.W., Room 814
 Washington, DC 20005
 Telephone: 202-326-6555
 FAX: 202-682-0816
- **Rates:** Ads are \$42 per line; \$420 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads. If you would like *Science* to give estimated cost, indicate on letter.
- **Ads from Outside the U.S.:** Prepayment made in U.S. dollars by checks drawn on U.S. banks is required.
- **Credit Cards:** *Science* accepts MasterCard and VISA. Discount does not apply to credit cards.
- **Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

DISPLAY PERSONNEL ADVERTISEMENTS

For rates and information about fractional display ads (all ads 1/2 page and larger) and all Marketplace listings, contact:

Science Classified Advertising
 Daniel Moran, Traffic Manager
 Telephone: 202-326-6541

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

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

POSITIONS OPEN

ASSISTANT PROFESSOR OF ANATOMY AND NEUROBIOLOGY

The Department of Anatomy and Neurobiology at St. Louis University School of Medicine invites applications for two tenure-track positions at the assistant professor level for the 1992-1993 academic year. All applicants must have a Ph.D. or equivalent degree and postdoctoral research experience. Successful candidates will be expected to establish an independent, competitive research program in the area of neuroscience. Teaching responsibilities will be either in medical histology or medical histology and neuroscience. Deadline for application is 30 June 1992, or until the positions are filled. Applicants should submit curriculum vitae, statement of research interests, selected reprints, and three letters of reference to: **Dr. Dan Tolbert, Department of Anatomy and Neurobiology, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, MO 63104.** *St. Louis University is an Equal Opportunity/Affirmative Action Employer.*

ARTHROPOD SYSTEMATICS. Nine-month tenure-track position at the **ASSISTANT PROFESSOR** level effective 1 October 1992. The successful candidate will be expected to develop an extramurally funded research program, supervise graduate students, and participate in undergraduate and graduate teaching. Send curriculum vitae, statement of professional goals, and names, addresses, telephone and FAX numbers of three references to: **Dr. Norman F. Johnson, Department of Entomology, Ohio State University, 1735 Neil Avenue, Columbus, OH 43210,** by 1 May 1992. *The Ohio State University is an Equal Opportunity Employer. Women, minorities, and Vietnam-era veterans are encouraged to apply.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY. Department of Chemistry, Georgetown University, has a tenure-track position beginning fall 1992 or spring 1993. The department values excellence in undergraduate and graduate teaching and is committed to high quality, active research. Ph.D. and postdoctoral experience required. Send curriculum vitae, selected reprints, statement of research plans, and names and addresses of three references we may contact directly to: **Professor David C. H. Yang, Chemistry Department-Y, Georgetown University, Washington, DC 20057-2222.** *An Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITIONS IN PHARMACOLOGY/TOXICOLOGY MEHARRY MEDICAL COLLEGE

Applications are invited for two full-time faculty positions at the **ASSISTANT PROFESSOR** level. Candidates must possess doctoral degree and postdoctoral experience. Preferred areas of expertise include, but are not limited to, neuroscience/neuropharmacology/neurotoxicology, cardiovascular and biochemical pharmacology. Successful applicants are expected to develop funded research programs and to teach medical, dental and graduate students. Opportunities are present for collaborative research. Please send curriculum vitae, a brief description of research plans, and the names of three professional references to: **Dolores C. Shockley, Ph.D., Chair, Faculty Search Committee, Department of Pharmacology, Meharry Medical College, 1005 D. B. Todd, Jr., Boulevard, Nashville, TN 37208.** *An Equal Opportunity/Affirmative Action Employer.*

Virginia Commonwealth University's Department of Pharmacology and Toxicology announces a non-tenurable **ASSISTANT PROFESSOR** position to conduct CNS pharmacology research. Applicant must have a Ph.D. in pharmacology and at least 2 years of postdoctoral experience in CNS pharmacology. Must possess research funding and peer-reviewed scholarly publications, as well as prior research experience with assessment of spinal pain pathways and pharmacological characterization of neuroanatomical substrates for drug action. Must have background to teach in graduate and professional schools. Send curriculum vitae, letter of research interests and three letters of reference by 17 May 1992 to: **Dr. L. Harris, Search Committee Chairman, Box 613, MCV Station, Richmond, VA 23298-0613.** *Virginia Commonwealth University is a culturally diverse Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.* Position description available upon request.

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR OR POSTDOCTORAL FELLOW

IN DEPARTMENT OF BIOLOGICAL SCIENCES UNIVERSITY AT BUFFALO

We are seeking a postdoctoral associate to join a diverse research program investigating the intercellular channels of gap junctions. Mammalian cell, *Xenopus* oocyte and cell-free systems are being utilized to correlate molecular structure and function in these channels and investigate their role in suppressing tumorigenesis. Experience in either molecular biological techniques (e.g., mutagenesis, cell transfection, etc.), or electrophysiological analysis of ion channels would be advantageous. Excellent salary support, commensurate with experience, is available for 5 years. Senior level applicants will have the opportunity to participate in the departmental teaching program (in the areas of biochemistry, molecular and/or cellular biology). The position will also provide the opportunity to pursue additional, independent grant support. To apply, applicants must submit curriculum vitae, including a statement of research background, and at least three letters of reference to: **Dr. Bruce Nicholson, SUNY at Buffalo, Department of Biological Sciences, 619 Cooke Hall, Buffalo, NY 14260.**

Application deadline is 1 June 1992. *State University of New York is an Equal Opportunity/Affirmative Action Employer.*

BOTANICAL GARDEN CURATOR ASSISTANT PROFESSOR/CURATOR BEAL BOTANICAL GARDEN AND CAMPUS WOODY PLANTS MICHIGAN STATE UNIVERSITY (MSU)

Manage the garden and the plant inventory of the woody plant collections on the developed campus; carry on both a research program and periodically teach a course in botany and/or plant ecology as it relates to enhancing the prestige and development of the garden and campus woody plant collections; and serve as a consultant curator to Hidden Lake Gardens. Qualifications: Ph.D. in botany and/or forest ecology; 1 to 2 years of experience in a botanical garden is desirable; 1 to 2 years of research and/or teaching experience is desirable. Salary: assistant faculty rank commensurate with qualifications and experience. Tenure system. Contact: Send résumé and three letters of recommendation to: **Professor Wayne Loescher, Chair, Search Committee, 288B Plant and Soil Science Building, Michigan State University, East Lansing, MI 48824, Position Control #NS613.** Deadline: 8 May 1992. *MSU is an Affirmative Action/Equal Opportunity Institution.*

RESEARCH ASSISTANT PROFESSOR

The Neonatology Section of the Department of Pediatrics at East Carolina University School of Medicine invites applications for a 2-year term non-tenure-track position to continue development of a research program in hypoxicischemic brain damage in the newborn. Candidates should be actively engaged in some aspects of this field. Ph.D. or M.D. required, postdoctoral experience preferred. There is a possibility of a tenure-track position in the future if candidate is successful in gaining outside funding. Applicants should send curriculum vitae, summary of research experience, and names of three references to: **Arthur E. Kopelman, M.D., Neonatology Section Head, Department of Pediatrics, East Carolina University School of Medicine, Greenville, NC 27858-4354.** *Affirmative Action/Equal Employment Opportunity. Applicants must comply with the Immigration Reform and Control Act.*

FACULTY POSITION(S)

Associate(s), Instructor(s), Assistant Professor(s), Associate Professor(s), Professor(s).

Requirements: M.D. or Ph.D. neuroscientist. Postdoctoral fellowship training desirable. Must have interest and experience in teaching and research related to mental disorders.

Contact: **Robert G. Robinson, M.D., Professor and Head, Department of Psychiatry, University of Iowa College of Medicine, Medical Education Building, 500 Newton Road, Iowa City, IA 52242.**

The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minority members are encouraged to apply.

Unilever Research

Because
in the
science of
skin care
there's
still a
lot more
to be
discovered

The excitement of scientific discovery is growing at Unilever Research. At our newly established skin science center in Edgewater, NJ we're conducting pioneering research that will allow us to study the effects of the sun, aging, pollutants, and changing lifestyles on the skin, and to then develop products that will lessen those effects. If you're ready to be a part of this major initiative, consider the opportunities currently available in the following areas:

BIOEVALUATION

RESEARCH SCIENTIST

Relying on your Ph.D. in Biochemistry (or related field) along with your 2+ years experience in protein structure and function, you'll lead a group in an interactive environment. A working knowledge of protein purification, protein-protein interactions and mechanisms of enzyme action is desirable.

RESEARCH SCIENTIST

To effectively lead a team working to determine the effects and treatment/reversal of photoaging you must possess a relevant Ph.D. along with a minimum of 3+ years experience in the biology of aging as well as extensive knowledge of adult development and aging. A background in physiology and histology is desirable.

RESEARCH SCIENTIST

To join our highly-interactive research team focusing on disorders of the pilosebaceous unit you must possess a Ph.D. and 2+ years experience in cell biology, biochemistry or immunology related to this area.

RESEARCH BIOCHEMIST

Requirements include a B.S./M.S. in Biochemistry (or a related field) along with a background in one of the following: protein chemistry, cell biology or immunology. A working knowledge of chromatography and electrophoresis is a plus.

CLINICAL RESEARCH

PRINCIPAL RESEARCH CHEMIST

You will be responsible for the development and/or application of novel non-invasive *in vivo* instrumental techniques to assess the results of skin's interaction with products. A Ph.D. in Bioengineering, Medical Physics, Biophysics or related field is required along with a familiarity with the structure and function of the skin (an M.S. with 4 years related experience is acceptable). A knowledge of optical, acoustical and mechanical techniques is essential.

SR. RESEARCH SCIENTIST

You will be responsible for developing and implementing new clinical procedures to be conducted on site and with external clinical laboratories. You must possess a Ph.D. in Pharmacology, Toxicology or a related biological science along with 2+ years relevant experience or an M.S. with 6+ years experience. A knowledge of human pharmacology/toxicology, good clinical practice and regulatory procedures is essential.

SR. RESEARCH BIOLOGISTS

Requirements include a Bachelor's degree in Biological or Physical Science with up to 4 years relevant experience. In addition, a strong scientific background and skills in one of the following is also required: clinical science, instrumental analysis, biology, biochemistry or biophysics.

CLINICAL RESEARCH ASSOCIATES

You will execute and monitor novel and standard clinical protocols conducted both on-site and with external clinical facilities. A B.S. in Biological Science and/or an R.N. with 2+ years experience conducting and monitoring clinical studies is required; familiarity with good clinical practice and relevant regulatory procedures is also required.

PRODUCT SCIENCE

RESEARCH SCIENTIST

To develop novel prototypes capable of delivering skin protection benefits, you'll need a Ph.D. in Physical Chemistry or a related field with experience in novel delivery systems.

RESEARCH SCIENTIST

We'll look to you to establish the fundamental mechanisms controlling the link between product microstructure and performance. To qualify, you'll need a Ph.D. in Material Science or a related area with some experience in the emulsions or colloidal systems field.

If you're ready to join us at the forefront of innovative skin research, we're prepared to offer you a very competitive salary and outstanding comprehensive benefits. For consideration, send your resume, indicating position of interest, to: Mr. James R. Conti, Manager, Employee Relations, Unilever Research, U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.



Unilever

Unilever Research, U.S.

POSITIONS OPEN

FACULTY POSITIONS FOR VIROLOGISTS AT NORTHWESTERN UNIVERSITY MEDICAL SCHOOL

(Department of Microbiology-Immunology and Medicine.) Qualified candidates are sought for two full-time tenure-track faculty positions (ASSISTANT PROFESSOR) at Northwestern University Medical School. The Microbiology-Immunology Department seeks candidates with postdoctoral training and demonstrated ability to carry out research on the molecular biology and genetics of a human virus, preferably HIV or other viruses that contribute to disease in AIDS and/or cancer. Responsibilities also include training of Ph.D. candidates and postdoctoral fellows and teaching in courses for professional and graduate students. The Infectious Diseases Division of the Department of Medicine seeks **PHYSICIAN-SCIENTISTS** with research experience and demonstrated ability to carry out basic research on the pathogenesis of HIV. Responsibilities also include some clinical service and teaching. Applications should indicate preference for department and be addressed to the: **Joint Virology Search, c/o Microbiology-Immunology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** To ensure full consideration, applications must be received by 15 July 1992. *Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.*

RESEARCH ASSISTANT PROFESSOR. Duties will include graduate-level teaching in the laboratory and the classroom, and research (primarily using human blood products) in the structure, function, and regulation of human complement genes. Doctoral, M.D. or Ph.D. in molecular immunology, biology to include basic knowledge and skills in complement hemolytic assay and RIA of complement proteins, construction and screening of the complement DNA libraries, DNA sequencing, and computer analysis of DNA data. Forty hours per week; 8:00 a.m. to 5:00 p.m. Salary: \$34,000 per calendar year. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222, RE: Job Order #AL0228732.**

HUMAN GENETICS ASSISTANT PROFESSOR

The new and expanding Division of Human Genetics invites applications for positions at the assistant professor level beginning July 1992. Major opportunities and responsibilities are directed to research in the area of the molecular mechanisms and treatment of human inherited diseases at the genetic and protein levels. Ph.D.'s with strong research background in molecular genetics and/or protein biochemistry are preferred. Send curriculum vitae, bibliography and three letters of reference to: **G. A. Grabowski, M.D., Director of Human Genetics, c/o William K. Schubert, M.D., President and CEO, Children's Hospital Medical Center, Elland and Bethesda Avenues, Cincinnati, OH 45229-2899.** *An Affirmative Action/Equal Opportunity Employer.*

GENETICIST

Applications are invited for a full-time, 1-year faculty appointment at the **ASSISTANT/ASSOCIATE PROFESSOR** level in the Department of Biology, Rider College, beginning fall 1992. Applicants should have broad training in the discipline with emphasis on eukaryotic molecular genetics. Responsibilities include teaching an introductory and advanced genetics course. The successful candidate will have a demonstrated ability in teaching and interest in involving undergraduates in basic research. Candidates with a Ph.D. will receive preference. Apply by sending a letter of interest, curriculum vitae, and names, addresses, and phone numbers of three references to: **Dr. James E. Riggs, Geneticist Search Committee, Department of Biology, Rider College, 2083 Lawrenceville Road, Lawrenceville, NJ 08648-3099.** Review of applications will commence on 5 May 1992 and will continue until position is filled. *Rider College is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

POSITIONS OPEN

ASSISTANT PROFESSOR, TOXICOLOGY

Tenure-track. Ph.D. in toxicology, pharmacology, or related discipline required and 2 years of postdoctoral training preferred. Preference may be given to candidates with teaching experience, publication record and research expertise in renal, immuno, reproductive, developmental, or molecular toxicology. Application review begins on 1 May 1992 and continues until position is filled. Send curriculum vitae, three letters of references, summary of research plan and recent publications to: **Dr. Zahir A. Shaikh, Search Committee Chair, Position #161041, The University of Rhode Island, P.O. Box G, Kingston, RI 02881.** *An Affirmative Action/Equal Opportunity Employer.*

ASSISTANT or ASSOCIATE PROFESSOR (70% research, 30% teaching). Applications are invited for a tenure-track 11-month faculty position. The successful candidate will develop a research program to address conceptual issues in **TERRESTRIAL INSECT SYSTEMATICS**, including evolutionary biology or biogeography. Responsibilities include teaching insect systematics and general entomology on an alternate year basis and curating the University of Hawaii insect museum. Candidates must have a Ph.D. in entomology or a closely related area. Knowledge and application of classical and modern approaches in terrestrial insect systematics as evidenced by scholarly publications is required. Desirable qualifications include teaching experience in insect biology, taxonomy or systematics, a record of successful grant writing, evidence of successful interactions with others, and postdoctoral experience. Salary commensurate with qualifications and experience with minimum of \$40,524 (Assistant) or \$51,264 (Associate). Submit a letter describing qualifications, goals and interests in systematics; curriculum vitae; reprints of five recent publications; official college transcripts; and three letters of recommendation by 15 June 1992 to: **Dr. Vincent P. Jones, Chair, Insect Systematics Search Committee, Department of Entomology, University of Hawaii, 3050 Maile Way, Room 310, Honolulu, HI 96822.** *Equal Opportunity/Affirmative Action Institution. Minority persons, women, veterans, and physically challenged individuals are encouraged to apply.*

FACULTY POSITION IN IMMUNOLOGY UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA)

The Department of Microbiology and Immunology, UCLA School of Medicine, invites applications and nominations for a tenure-track faculty position. We seek an outstanding candidate who applies molecular and cellular approaches to study aspects related to the development, function, or regulation of the immune system. Candidates studying defense mechanisms against microbes are also encouraged to apply. The department is committed to excellence in immunology and UCLA offers an exciting environment with a large and interactive research community. Applicants must have a Ph.D. and/or M.D. degree, postdoctoral experience, and a strong record of research accomplishments. The successful candidate is expected to develop an independent research program and participate in teaching Ph.D. graduate students and medical students. Although candidates at the **ASSISTANT PROFESSOR** level will be preferred, outstanding applicants will also be considered for appointment at the level of **ASSOCIATE OR FULL PROFESSOR**. Interested applicants should send their curriculum vitae, a statement of research interests, selected reprints, and names of at least three references to: **Dr. Rafi Ahmed, Chair, Immunology Faculty Search Committee, Department of Microbiology and Immunology, UCLA School of Medicine, Los Angeles, CA 90024-1747.** Application deadline is 1 September 1992. *UCLA is an Affirmative Action/Equal Opportunity Employer.*

IMMUNOCYTOGENETICIST. Ph.D. or M.D. at **ASSISTANT or ASSOCIATE PROFESSOR** level to work in the 500-bed Temple University Hospital which has active heart, kidney and bone marrow transplantation programs. Expertise in HLA typing required. Expertise in research and research funding are assets. Teaching of residents expected. Apply to: **H. Simpkins, M.D., Ph.D., Professor and Chairperson, Department of Pathology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3401 North Broad Street, Philadelphia, PA 19140.** *Temple University is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY

The Department of Biochemistry at the Philadelphia College of Osteopathic Medicine is recruiting a faculty member at the assistant/associate professor level. Applicants should have a doctoral degree with postdoctoral experience. Responsibilities include teaching medical students and developing independent research. Preference will be given to individuals with expertise in the techniques of molecular biology. The position offers an opportunity to collaborate with both basic and clinical scientists. Interested applicants should send curriculum vitae and three letters of recommendation to: **JoAnne Pieringer, Ph.D., Search Committee Chairperson, Department of Biochemistry, Philadelphia College of Osteopathic Medicine, 4150 City Avenue, Philadelphia, PA 19131.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN THE DEPARTMENT OF MOLECULAR GENETICS, BIOCHEMISTRY AND MICROBIOLOGY

We are presently searching for a faculty member to complement one or more of our areas of interest which include protein structure and engineering, virology, microbial and mammalian genetics, gene regulation and developmental biology, and immunology. Generous space and start-up funds are available and the appointment will be at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The department currently has 25 full-time members with strong research programs and is the lead department in the NHLBI-sponsored Program of Excellence in Molecular Biology. We maintain a strong and active graduate program, plus core facilities in microbiology, cell culture, DNA synthesis and sequencing and production of transgenic mice. All these factors contribute to an excellent research atmosphere. Applicants should submit curriculum vitae, brief description of anticipated research and the names of three qualified references to: **Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, OH 45267-0524.** *Affirmative Action/Equal Opportunity Employer.*

TENURE-TRACK FACULTY POSITIONS (ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR AND PROFESSOR) UNIVERSITY OF MINNESOTA MEDICAL SCHOOL

Applications are invited for positions of assistant professor (tenure track) in the Department of Pharmacology, Medical School. Successful candidates are expected to establish an outstanding independent research program, in addition to teaching, in the area of molecular pharmacology. Requirements include a Ph.D. in biochemistry, cell biology, molecular biology, pharmacology or related field, or an M.D., and 2 years of postdoctoral research experience. Candidates with a strong research background and experience using recombinant DNA technology for studying pharmacological problems and/or molecular biological problems are preferred. Applicants must have demonstrated involvement in quality research published in peer-reviewed journals.

Appointment as associate professor (tenured) or full professor (tenured) may be considered for applicants with professional distinction in published research and who have demonstrated effectiveness in teaching and advising and evidence of consistently attracting extramural funding for research. Appointment at these ranks must meet minimum qualifications established by the University of Minnesota. The above described areas of research and qualifications are also preferred for these candidates.

Applicants should indicate level of position they are applying for and send curriculum vitae, significant reprints, a statement of research plans, and three names for reference purposes to: **Dr. J. W. Miller, Professor and Chairperson of Search Committee, Department of Pharmacology, 3-249 Millard Hall, University of Minnesota, 435 Delaware Street, S.E., Minneapolis, MN 55455.** Deadline for receipt of applications is 15 May 1992.

The University of Minnesota is an Equal Opportunity Educator and Employer.

RESEARCH ASSOCIATE AT THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

The College of American Pathologists, in collaboration with the National Institute of Standards and Technology, offers the position of Research Associate at the National Institute of Standards and Technology (NIST), in Gaithersburg, Maryland. The Research Associate will work in the Inorganic Analytical Research Division at NIST on the development of reference materials for clinical chemistry, on the assignment of accurate concentrations of inorganic constituents in proficiency testing materials, and on the development of methods for inorganic constituents in serum and urine using special analytical instrumentation of high accuracy. A doctorate in chemistry with experience in analytical mass spectrometry and optical methods of analysis is required. Experience in clinical chemistry isotope-dilution methodology, and chromatography is also appropriate. The position offers an unparalleled opportunity in advanced metrology and technology in analytical chemistry towards the improvement of clinical laboratory measurements.

Qualified applicants should submit two copies of their resume before May 15, 1992 to: Ms. Patricia-Lee Gembala, Director of Quality Assurance and Materials Management, College of American Pathologists, 325 Waukegan Road, Northfield, Illinois 60093-2750; and to Dr. William F. Koch, Deputy Chief of the Inorganic Analytical Research Division, A349 Chemistry, National Institute of Standards and Technology, Gaithersburg, MD 20899.



eo e m/f/d/v

Air Force Office of Scientific Research An Exciting Opportunity in Research Management Bioenvironmental Science

The Air Force Office of Scientific Research (AFOSR) is seeking an experienced physiologist/biologist to manage the Air Force research investment in bioenvironmental sciences (approximately \$4 million annually) within the Directorate of Life and Environmental Sciences.

AFOSR's research managers are responsible for the formulation, organization, execution, evaluation, and transition to development of the entire Air Force basic research program performed at universities, industries, and its own in-house laboratories. If successful, you will identify research opportunities, communicate Air Force interests to the scientific community, evaluate proposals, review ongoing projects, and manage fiscal resources; you will represent the program and assist in the transition of research results within the Air Force and DOD.

The technical area of responsibility includes the broad area of bioenvironmental science. Program content addresses both mechanistic and environmental toxicology, as well as the biological effects of physical hazards such as non-ionizing radiation.

A PhD in physiology or a related area of biological science is highly desired. You should have first-hand research experience and broad knowledge of the latest developments in the field as demonstrated by a record of publications in refereed scientific journals. Experience, or at least a strong interest, in research management and shaping broad national research programs to meet Air Force research needs is desired.

The position is competitive civil service (GM 13-14) with a salary within the range of \$46,210 to \$70,987. No prior Government service is required.

To apply you should send Standard Form 171, a resume, and a list of publications to arrive by 1 June 1992 at the address:

Civilian Personnel Office
89th MSSO/MSCA
Ann. No. 92-070
ATTN: Margaret Brown
Andrews AFB, MD 20331-5694

U.S. citizenship required. An equal opportunity employer.

S O M A T I X

GENE THERAPY

Somatix Therapy Corporation is a leader in the emerging field of gene therapy, focusing on the genetic modification of cells to enable the production and delivery of therapeutic proteins within the body. We are currently expanding our research and development staff and are seeking highly qualified individuals to work on our Cancer and Central Nervous System disease programs. The following research positions are available:

CANCER

Program Director

You will be responsible for bringing Somatix's Cancer program to the clinic. Our unique approach involves developing a cancer vaccine by genetically modifying tumor cells to produce lymphokines that stimulate immune rejection of the tumor. As the leader of this program, you will be required to facilitate interdisciplinary collaboration among a team of research scientists and associates within the company as well as at affiliated academic institutions. Requires a Ph.D. or M.D. and 10 years related industrial or academic experience.

Senior Scientist—Tumor Immunology

In our cancer vaccine program you will identify mechanisms of interactions among immune system cells, lymphokines and tumor antigens. You will also investigate the role of dermal and subcutaneous components of the immune system in generating an effective anti-cancer vaccine. Requires a Ph.D. and at least 6 years postgraduate experience.

Scientist—Tumor Cell Biology

You will be responsible for developing new methods to isolate, culture and characterize primary human tumor cells. You will also establish important parameters in the genetic modification of primary tumor cells using retroviral vectors. Requires a Ph.D. and at least 4 years related postgraduate experience.

Scientist—In vivo Tumor Models

You will develop rodent tumor models of cell-based vaccines utilizing genetically modified tumor cells. You will use these models to elucidate the efficacy of anti-cancer vaccines. Requires a Ph.D. and at least 4 years postgraduate experience.

NEUROBIOLOGY

Director

As the leader of the neurobiology department, you will be responsible for building a research program in the use of genetically modified cells for treatment of neurodegenerative diseases. Particular emphasis will be placed upon studies of long-term gene expression and survival of genetically modified cells implanted in the brain. You will supervise research scientists and associates and must be able to facilitate team efforts. Requires a Ph.D. and 10+ years of related industrial or academic experience. Previous experience managing postgraduate scientists essential.

Somatix provides an excellent career opportunity in a rapidly growing company, as well as a competitive compensation and benefits package. Please submit curriculum vitae to: Somatix Therapy Corporation, Attn: Personnel, 850 Marina Village Parkway, Alameda, CA 94501.

Equal Opportunity Employer

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BETH ISRAEL HOSPITAL

HARVARD MEDICAL SCHOOL

POSTDOCTORAL RESEARCH POSITIONS

Pre- and postdoctoral positions available in basic and clinical research for US citizens and permanent residents. Faculty members investigate a wide range of molecular, cellular and physiological mechanisms of lung disease. Fellows will be under the direct supervision of a program faculty member who shares their interests.

Program Faculty

Harold Chapman, MD
Proteases/myeloid differentiation
Jeffrey Drazen, MD
Asthma, airway responses
Patricia Finn, MD
Molecular immunology/gene regulation
Craig Gerard, PhD, MD
Inflammation, cystic fibrosis
Norma Gerard, PhD
Neuropeptide/cytokine receptors
Edward Ingenito, MD, PhD
Immunophysiology of sepsis

Thomas Martin, MD
Mast cells in asthma pathobiology
John Reilly, MD
Regulation of macrophage proteases
Richard Schwartzstein, MD
Respiratory sensations
Jonathan Stamler, MD
Biopharmacology of NO
J. Woodrow Weiss, MD
Hemodynamics of sleep apnea
Scott Weiss, MD
Respiratory epidemiology

Mary Ellen Wohl, MD
Physiology of lung growth

Direct Inquiries to:

Deborah Zelen, Administrator
Respiratory Division
Brigham and Women's Hospital
75 Francis Street
Boston, MA 02115

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Calendar of Upcoming Meetings

SCIENCE will be distributed to scientists attending the following meetings:

Analytica

5 to 8 May 1992, Munich
Issue date: 24 April 1992

American Society for Microbiology

26 to 30 May 1992, New Orleans
Issue date: 8 May 1992

Biotechnology/Pharmaceutical Careers

Special Issue of **SCIENCE**
Issue date: 8 May 1992

HPLC

14 to 19 June 1992, Baltimore
Issue date: 5 June 1992

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Research Scientists

FIBRE STRUCTURE AND FUNCTION GROUP

\$A42K - \$A64K + Superannuation

**CSIRO Division of Wool Technology Geelong,
Victoria, Australia.**

This Division has an international reputation in wool research and for the development of new processes and products to enhance demand for Australian wool. A new fundamental research group is being formed to carry out investigations into the fine structure, chemical composition and reactivity of wool fibres, with a major emphasis on the application of advanced analytical methods for the characterisation of the surface and bulk properties of fibres.

The Division expects to make several appointments over the advertised salary range to cover the range of analytical expertise required and to provide management support to the Group Leader, Dr P Turner, in developing a number of research programs in areas such as:

- mechanisms of uptake of dyes
- adhesion between wool and polymers
- surface reactions of wool fibres

Methods to be used will include analytical TEM and SEM with EDXS and EELS, environmental SEM, Atomic Force Microscopy, FTIR and other spectroscopies, surface analytical techniques (SIMS, XPS), Confocal Optical Microscopy and tensile testing.

The long term objective of the group is to develop a greatly improved understanding of basic wool properties and the consequences of chemical treatments applied to wool. The activities of the group will complement and interact with the work of other major groups in the Division, which include physical and chemical processing, colouration and finishing of wool and wool products.

We are seeking applications from Chemists, Physicists and other Scientists with established expertise in analytical techniques and their application to materials, and who have a well developed interest in working within multi-disciplinary teams. You will have a PhD and post-doctoral research experience demonstrating innovative research achievements. We recognise, however, that you are unlikely to have had experience in fibre research.

The positions are of indefinite tenure and are located at the Geelong Headquarters of the Division. Geelong is Victoria's largest provincial city, located on the coast 80km south-west of Melbourne. It is close to beach resorts and forests and offers excellent recreational opportunities.

Dr Peter Turner, telephone 61 52 47 2611 or fax 61 52 47 2657, can provide further information on the positions, selection criteria and career opportunities. Please send your written application, citing skills, qualifications, work achievements and referees, and quoting Ref. No. FG01 to **The Chief, CSIRO Division of Wool Technology, PO Box 21, Belmont, Victoria 3216, Australia.** by May 15th, 1992.



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27641

DIRECTOR, UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES DIVISION OF BIOMEDICAL SCIENCES UNIVERSITY OF CALIFORNIA, RIVERSIDE

Responsible for leadership of the research and educational activities of the Division of Biomedical Sciences in UCR. Duties include leadership of and active participation in the research activities of the Divisional faculty at UCR and the Ph.D. program in Biomedical Sciences; supervision of an accelerated 7-year educational program leading to the B.S. degree from UCR and the M.D. degree from the UCLA School of Medicine; serving as Chairperson of the Division of Biomedical Sciences (15 ladder-rank faculty positions in basic Medical Sciences disciplines at UCR and seven adjunct positions at the associated Harbor/UCLA Medical Center teaching facility); and maintaining liaison among UCR, UCLA, Harbor/UCLA Medical Center, the UC Office of the President, and other applicable state and national agencies. Requires: (a) Doctorate degree (Ph.D., M.D. or equivalent); (b) A strong and active research program in biomedical sciences; (c) Familiarity with medical school basic sciences instruction; (d) Evidence of success in managing strong academic programs; (e) Qualification for appointment as a Full Professor in the University of California system. Duties begin in 1993.

Please send nominations or letter of application, resume and names of at least three references by June 15, 1992, to: **BMSP Program Director Search Committee, Division of Biomedical Sciences, University of California, Riverside, CA 92521.**

The University of California is an Equal Opportunity/Affirmative Action Employer. Female and minority candidates are encouraged to voluntarily identify themselves.

Science and Technology for International Development

Director

The NATIONAL RESEARCH COUNCIL is seeking a director for its Board on Science and Technology for International Development (BOSTID). Requires knowledge of: modern science and technology applied to international development in a changing world; international development as a technical and economic process; contributions to development of other fields, e.g., the natural sciences, social sciences, engineering, computer and information sciences; major donor agencies. Experience and contacts in science, technology industry, and government; and experience in living and working in developing countries. Other required skills include program management; fund raising to support broad program activities and ability to work cross-culturally with individuals from multiple scientific/engineering/technical and administrative disciplines. Ph.D. or equivalent in a scientific field related to development, e.g., agriculture, health, environment, at least 6 years directly related experience, and demonstrated excellent verbal, written, and networking skills also required. Foreign language skills useful, but not required. Position involves substantial foreign travel. Please send resume in confidence to: NRC/OIA (WC), 2101 Constitution Avenue, N.W., Washington, DC 20418. EOE. Non-Smoking work environment.



Faculty Position

The Division of Laboratory Medicine, Department of Pathology and Laboratory Medicine, University of Wisconsin-Madison Medical School invites applications for a tenure track faculty position at the Assistant or Associate Professor level. Applicants (M.D. or M.D./Ph.D.) should have expertise (BE/BC in AP/CP or CP) and willingness to participate in service work in a specialty area of Laboratory Medicine (Hematopathology, Immunology, Virology, Microbiology or Chemistry) and potential to establish an independent research program. Generous space, start-up, salary and benefits are available as are collaborative opportunities with other investigators throughout the University. Please forward CV, the names of 3 references and relevant reprints by June 1, 1992 to: **Dr. James S. Malter, A4/204-CSC, Department of Pathology, University of Wisconsin Hospital and Clinics, 600 Highland Avenue, Madison, WI 53792-2472.** Wisconsin has an open records law.



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Ortho Diagnostic Systems Inc., a respected Johnson & Johnson company, provides an extensive line of products to type and analyze blood and blood components. We are one of the major suppliers of AIDS and hepatitis blood screening tests worldwide, including ORTHO HCV Antibody ELISA Test System, the first screening test to detect the presence of antibodies against hepatitis C virus in blood. We currently seek the following:

Manufacturing Manager, Immunology Products

You'll guide the team responsible for the manufacture of our immunology product line, participate in the definition and implementation of process and quality improvements and troubleshooting, and assist in the implementation of new processes. To qualify, you'll need a BS/MS in Biology, Immunology or Microbiology and at least 5 years' diagnostic experience. Industrial background with chromatography, HPLC, electrophoresis, filtration, flow cytometry and ELISA is required, along with a broad based knowledge of biotechnology diagnostics in a GMP environment, product documentation and budgeting. Strong supervisory, communication and problem solving skills are essential.

Scientist/Senior Scientist

Two opportunities to participate in the development of automated blood bank instrumentation, as well as new manual technologies for use in blood banking. To qualify, you must possess a BS/MS in Immunochemistry, Biology or a related discipline (PhD is required for the senior level position), and 5-9 years' immunodiagnostic experience that includes flow cytometry. Superior skill in experimental design and data analysis is essential, as is a basic knowledge of immunochemical techniques. Good oral/written communication and computer skills are required; familiarity with immunoassay techniques is a plus.

Conveniently located within an hour's drive of New York City and Philadelphia, we offer a state-of-the-art, smoke-free work environment, competitive salary and the outstanding Johnson & Johnson benefits package, which includes medical and dental plans, tuition reimbursement, and an on-site total health facility, the LIVE FOR LIFE Wellness Center. For consideration, please send your resume and salary history in confidence to: Human Resources Dept. S-417, Ortho Diagnostic Systems Inc., Box B, Raritan, NJ 08869. We are an Affirmative Action/Equal Opportunity Employer M/F/D/V.



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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR IN BIOCHEMISTRY AND MOLECULAR BIOLOGY. Full-time tenure-track faculty position in the areas of biochemistry and molecular biology. Experience beyond the Ph.D./M.S. is required. Successful applicant will be expected to participate in the problem-solving curriculum to first- and second-year medical students and graduate students. It is anticipated that the selected applicant will develop a strong independent research program in the area of his/her expertise. Rank and salary negotiable, depending on qualifications and experience. Starting date: 1 September 1992. Send curriculum vitae and three letters of recommendation to: **Dr. Panayotis G. Iatridis, Northwest Center for Medical Education, Indiana University School of Medicine, 3400 Broadway, Gary, IN 46408.** *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN PHYSIOLOGY UNIVERSITY OF ROCHESTER

Applications are invited for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level within the Department of Physiology. We are seeking individuals who are interested in physiological problems which require the use of modern molecular and cellular approaches. The current strengths of the department are in ionic channels in nerve and muscle cells, molecular studies of intracellular signaling and regulatory systems, and integrative neurophysiology. The successful candidate should complement one of these areas. Faculty are expected to establish an independent research program and to participate in graduate and medical education. Review of applications will begin on 1 July 1992. Applicants should submit curriculum vitae, statement of research interests, and names of three or four references to: **Dr. Paul Horowitz, Chair, Department of Physiology, Box 642, University of Rochester Medical Center, Rochester, NY 14642-8642.** *The University of Rochester is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT/ASSOCIATE PROFESSOR IN ENDOCRINOLOGY. Ph.D. with several years of postdoctoral experience in molecular biology to coordinate and supervise a new interdepartmental research program in diabetes and obesity. The candidate must have outstanding leadership capabilities, become involved in the training of fellows and technicians, conduct collaborative research and initiate his/her independent research. We offer a competitive salary and benefits package.

Please send curriculum vitae, summary of present research interest and two letters of reference to: **Dr. Jose F. Caro, Chairman, Department of Medicine, Jefferson Medical College, 1025 Walnut Street, Philadelphia, PA 19107.**

An Equal Opportunity/Affirmative Action Employer.

The Department of Astronomy at the University of Maryland, College Park, is searching for a distinguished **ASTRONOMER** to serve as **CHAIR** of the new department. The department currently has 15 tenured or tenure-track faculty, 17 research scientists and associates, and 36 graduate students, who maintain vigorous research programs in a wide variety of fields.

The successful candidate will be expected: to provide vigorous leadership in defining the direction of the Department over the coming years; to lead a world class research program in Astronomy; and to be committed to maintaining and enhancing an excellent educational program. The appointment as chair and tenured full professor will be effective as soon as practical, consistent with a thorough search, but we hope no later than January of 1993.

The University of Maryland is committed to enhancing the diversity of its faculty and staff. *We particularly welcome applications from qualified women and members of other groups who are underrepresented in university faculties.*

For full consideration, please reply before 15 May 1992. Applicants should provide complete current curriculum vitae and the names of at least three references. Please address your response to:

**Dr. Derek A. Boyd, Chair
Astronomy Chair Search Committee
Department of Physics
University of Maryland
College Park, MD 20742-4111**

POSITIONS OPEN

ASSOCIATE DEAN FOR BASIC SCIENCE AND RESEARCH

The Texas College of Osteopathic Medicine (TCOM) invites nominations and applications for the position of associate dean for basic sciences and research. TCOM is a state-supported medical school, affiliated with the University of North Texas. Our research grants and contracts were in excess of \$4 million for 1990-1991. We now seek an eminent scientist/teacher who will lead the college to a higher level of national and international prominence in its programs. The associate dean for basic sciences and research is responsible for all research programs in the college and for all teaching and service programs in the Basic Sciences Division. Applications should include curriculum vitae and the names of three references. To receive full consideration, applications should be sent before 1 July 1992 to: **Michael Emmett-Oglesby, Ph.D., Search Committee Chairman, Department of Pharmacology, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2699.** *TCOM is an Equal Opportunity/Affirmative Action Employer and Educator.*

ASSISTANT PROGRAM MANAGER: USDA Forest Service, Northeastern Forest Experiment Station, Radnor, Pennsylvania. Position is with the Global Change Research Program. Salary range \$46,210 to \$60,070. Assists in management of a large, diverse, interdisciplinary research program with a mission to determine the interactive responses among forest ecosystems, atmospheric pollution, and climate changes, and to use this knowledge to manage and protect forest resources. Qualifications include strong background in forest ecology, plant physiology, or hydrology; knowledge of nutrient cycling in forest ecosystems; and experience in research management. For additional information contact **Betty Higgins, telephone: 215-975-4235.** Interested parties should send SF-171, résumé, curriculum vitae and transcripts to the attention of: **Personnel, Forest Service, 5 Radnor Corporate Center, 100 Matsonford Road, Suite 200, Radnor, PA 19087-4585.**

CHAIRPERSON DEPARTMENT OF PATHOLOGY LOYOLA UNIVERSITY MEDICAL SCHOOL 2160 SOUTH FIRST AVENUE MAYWOOD, IL 60153

Applications are invited for the position of **PROFESSOR** and **CHAIRPERSON** of the Department of Pathology at Loyola University Medical School, Maywood, Illinois. Candidates must have a distinguished record of scholarship and professional achievement, proven leadership and administrative ability. Send applications and curriculum vitae to the Chairman of the Search Committee:

**Robert J. Freeark, M.D.
Chairman, Department of Surgery
Loyola University Medical Center
2160 South First Avenue
Maywood, IL 60153**

An Affirmative Action/Equal Opportunity Employer.

ASSOCIATE DEAN FOR RESEARCH AND BIOTECHNOLOGY TRANSFER: Temple University School of Medicine seeking established scientist with M.D., Ph.D. or M.D./Ph.D. degree and reputation in basic research. Credentials to qualify for appointment as **ASSOCIATE OR FULL PROFESSOR.** Qualifications include successful competition for external peer-reviewed grants; detailed understanding of federal, philanthropic and commercial research funding at local and national levels; knowledge/experience in biotechnology transfer; demonstrated leadership in research. Experience in administering academic unit preferred.

Individual will direct Office of Sponsored Projects; develop/maintain record of research activities throughout school; develop tracking system for grants in process of being submitted; stimulate and coordinate research activities among school's academic units; maintain ongoing knowledge of research opportunities. May continue own research program and have appropriate teaching responsibilities. Interested individuals should send curriculum vitae and bibliographies to: **Allen R. Myers, M.D., Dean and Associate Vice President, HSC, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3400 North Broad Street, Philadelphia, PA 19140.**

Temple University is committed to Affirmative Action/Equal Employment Opportunity and strongly encourages applications from women and minorities.

POSITIONS OPEN

COORDINATOR FOR EDUCATION, THE ORGANIZATION FOR TROPICAL STUDIES (OTS), a non-profit international consortium of universities and research institutions, seeks a full-time staff member to administer the organization's program of intensive field courses. The position is based at the U.S. office of OTS at Duke University and will coordinate with staff in OTS' Central American office to implement courses and workshops taught in Costa Rica for U.S. and Latin American students, professionals, and policy-makers. Academic background in biology, natural resources, agroecology or related fields is required; Ph.D. preferred; OTS course experience highly desirable. Bilingual communication skills are essential. Experience in administration and fund raising is desirable. Applicants should send letter of interest, curriculum vitae and names of four references to: **Donald E. Stone, Executive Director, OTS, P.O. Box DM, Duke Station, Durham, NC 27706 (telephone: 919-684-5774).** Deadline: 15 May 1992. *Equal Opportunity/Affirmative Action Employer.*

WILDLIFE RESEARCH ADMINISTRATION

The U.S. Fish and Wildlife Service in Jamestown, North Dakota, seeks a **SENIOR WILDLIFE RESEARCH MANAGER** to administer its Northern Prairie Wildlife Research Center located in Jamestown with field stations at Dixon, California; Delano, California; and LaCrosse, Wisconsin. The center is responsible for conducting research on waterfowl west of the Mississippi River, excluding Alaska and the Gulf Coast. The Center Director is responsible for integrating management of a broad, multidisciplinary program on migratory birds, upland ecology and waterfowl modeling activities. Applicants must have 1 year of specialized experience equivalent to the next lower grade level in the federal service. Salary range is \$64,233 to \$83,502 (GS-15). Individuals currently employed by the federal government should submit an SF-171 to the: **U.S. Fish and Wildlife Service, Department of the Interior, Washington Headquarters Personnel Office, MS 100 ARLSQ, 1849 C Street, N.W., Washington, DC 20240.** Nongovernment applicants should submit an Application for Federal Employment (SF-171) to the: **Office of Personnel Management, Twin Cities Service Center, Federal Building, Room 501, Ft. Snelling, MN 55111.** For further information, call: **Pearl Inge at 703-358-1743.** Applications must be received by COB 1 May 1992. *The U.S. Fish and Wildlife Service is an Affirmative Action/Equal Opportunity Employer.*

AQUATIC VERTEBRATE BIOLOGIST

The Department of Biology at the University of Northern Iowa invites applications from individuals with the Ph.D. degree for a tenure-track assistant professor position in aquatic vertebrate biology effective August 1992. This position will strengthen our effort to develop an Environmental Science program in the College of Natural Sciences. Teaching responsibilities may include a course(s) in one's specialty and participation in the general education program. Applicants with research in ecology or environmental biology of aquatic vertebrates are preferred. The research program should invite participation by graduate (M.A.) and undergraduate (B.A. and B.S.) students. Postdoctoral teaching and/or research experience is preferred. The department expects excellence in both teaching and research. Applicants should submit curriculum vitae, statement of teaching interests/philosophy, research interests and goals, relevant reprints, and three letters of recommendation. For full consideration application materials should be received by 1 May 1992. This position is contingent on state appropriations. Send application and supporting materials to:

**Dr. Jill M. Trainer
Chair, Search Committee
Department of Biology
University of Northern Iowa
Cedar Falls, IA 50614-0421
(FAX No.: 319-273-2893)**

The University of Northern Iowa is an Equal Opportunity Educator and Employer with a Comprehensive Plan for Affirmative Action. Women, minority persons, Vietnam era veterans and disabled persons are encouraged to apply.

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**UMDNJ
NEW JERSEY MEDICAL SCHOOL
PROFESSOR & CHAIRPERSON
DEPARTMENT OF PATHOLOGY AND
LABORATORY MEDICINE**

The New Jersey Medical School of UMDNJ, NJ's university of the health sciences, invites nominations and applications for the position of Professor and Chairperson for its Department of Pathology and Laboratory Medicine. The successful candidate will have a nationally recognized record of achievement in research and a strong interest in the development of effective teaching and clinical laboratory programs. Candidates must be Board-certified or equivalent, have experience in Anatomic and Clinical Pathology and must be qualified for an appointment as Professor of Pathology and Laboratory Medicine at the New Jersey Medical School. For further information or to apply please send your CV to: **Dr. John H. Siegel, MD, Chairman, Pathology & Laboratory Medicine Search Committee, ATTENTION: Linda C. Reich, Office of the Dean, UMDNJ-New Jersey Medical School, MSB-C 662, University Heights, 185 South Orange Avenue, Newark, NJ 07103-2714.** UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.



National Institute on Aging

**MEDICAL STAFF FELLOWSHIP IN
NEUROPHARMACOLOGY, USING
POSITRON EMISSION TOMOGRAPHY**

Medical Staff Fellowship beginning July 1992 or 1993, for studying drug modulation of human brain function, metabolism and blood flow in relation to aging and disease (e.g. Alzheimer's disease, geriatric depression, Down Syndrome and other retardation), at rest and during cognitive stimulation, using POSITRON EMISSION TOMOGRAPHY (PET). Experience in CLINICAL PHARMACOLOGY AND PHARMACOKINETICS would be very useful. Responsibilities include writing and conducting clinical protocols, and limited clinical care on 8-bed clinical research unit. Position, which is tenure track, is an excellent opportunity for neurologists, psychiatrists, clinical pharmacologists or other clinicians interested in vivo brain imaging and neuropharmacology, who plan a research career. M.D. degree and medical license (ECFMG if foreign physician) required. Fellows work in Laboratory of Neurosciences (S.I. Rapoport, M.D., Chief), National Institute on Aging, Bethesda, MD. Starting salary commensurate with training and experience. For further information, contact:

**M.B. Schapiro, M.D., Chief
Brain Aging and Dementia Section
Laboratory of Neurosciences
National Institute on Aging
National Institutes of Health
Building 10, Room 6C-414
9000 Rockville Pike
Bethesda, MD 20892, USA
Tel: 301-496-4754**



NIH is an Equal Opportunity Employer



**UNIVERSITY OF MANCHESTER
SCHOOL OF
BIOLOGICAL
SCIENCES**

**Chair in Plant
Molecular Sciences**

Department of Cell & Structural Biology

The purpose of this new appointment is to provide leadership in Plant Molecular Sciences within the School of Biological Sciences. Applications are sought from candidates with a strong research programme in the biochemistry, molecular biology, cell biology, developmental biology or genetics of plants. The person appointed will establish a vigorous research programme and provide direction for undergraduate and future graduate courses in plant sciences, which are organised on a modular basis.

Applications, giving full details of qualifications and experience, and the names of three persons from whom references may be sought should be sent to the Registrar, The University, Manchester, M13 9PL, from whom further particulars may be obtained (tel: 061 275 2028, fax: 061 273 5306). Informal enquiries may be made to Professor Mark W.J. Ferguson, Head of the Department of Cell and Structural Biology (tel: 061 275 6775, fax: 061 275 3915). Closing date: Monday, 18 May 1992. Please quote Ref. No. 64/92.

The University is an Equal Opportunity Employer.

**SIMON FRASER UNIVERSITY
DEPARTMENT OF BIOLOGICAL SCIENCES**

ENVIRONMENTAL TOXICOLOGY

Applications are sought for a tenure track position in Environmental Toxicology in the Department of Biological Sciences at Simon Fraser University.

The successful candidate for this Assistant Professor appointment is expected to develop a strong research programme in some aspect of toxicology. As well as participating in the biology teaching programme, the appointee will be expected to assist in the teaching and development of the undergraduate and graduate environmental toxicology programmes.

Applicants should submit a curriculum vitae, reprints and a statement of current and future research interests, and should arrange to have three letters of reference sent directly to:

**Dr. B. A. McKeown, Chair
Department of Biological Sciences
Simon Fraser University
Burnaby, B.C.
V5A 1S6**

The deadline date for applications is 1 June, 1992.

Simon Fraser University is committed to the principle of equity in employment and offers equal employment opportunities to qualified applicants. This advertisement is directed to applicants who at the time of application are eligible for employment in Canada.

POSITIONS OPEN

FACULTY POSITIONS IN BIOLOGICAL SCIENCES, UNIVERSITY OF DELAWARE. Applications are invited for two tenure-track appointments at the ASSISTANT PROFESSOR level to be filled as early as 1 September 1992. The positions are to be filled by broadly trained organismic biologists with primary research interests in (1) evolutionary biology and (2) membrane signal transduction. We seek talented individuals who are addressing significant issues in their chosen disciplines using molecular techniques. Instructional responsibilities for (1) will be participation in our introductory biology series and for (2) will be teaching molecular biology; both individuals will be expected to make creative contributions to our upper division/graduate curricula in their respective disciplines. The successful candidates will be expected to establish and maintain independent fundable research programs and to interact with current faculty with related interests.

Applicants must hold the Ph.D. or equivalent and have two or more years of postdoctoral experience. They should submit, by 1 May 1992, their curriculum vitae, a statement of present and future research interests and three letters of evaluation to: **Milton H. Stetson, Ph.D., Professor and Director, School of Life and Health Sciences, UNIVERSITY OF DELAWARE, Newark, DE 19716. Telephone: 302-831-6977, FAX: 302-831-2281.** The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from qualified minority group members and women.

DEVELOPMENTAL BIOLOGIST. The Department of Embryology of the Carnegie Institution of Washington seeks a **STAFF (FACULTY) MEMBER** who will carry out independent research in some aspect of developmental biology. Our department is part of a nonprofit research institution and is situated on the Johns Hopkins University Homewood campus. Applicants should send curriculum vitae, a statement of research interest, and have three letters of recommendation sent to: **Director, Department of Embryology, Carnegie Institution of Washington, 115 University Parkway, Baltimore, MD 21210.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS. Available immediately and later in summer of 1992 to study the molecular virology of *Leishmania* viruses. Relevant experience in molecular biology and cell culture is desired. Positions include appointments as postdoctoral fellows in microbiology and molecular genetics, Harvard Medical School. Send curriculum vitae and names of three references to: **Dr. Jean Patterson, Division of Infectious Diseases, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115. FAX: 617-735-8387.**

POSTDOCTORAL POSITION IN PLANT MOLECULAR CYTOLOGY. Available immediately for the development of novel procedures of molecular and cellular biology in combination with flow cytometry for the identification of developmentally regulated genes. Ph.D. with experience in plant cell or molecular biology or related fields required. Experience in PCR-based techniques and flow cytometry also desirable. Send curriculum vitae and the names of three references to: **Dr. David W. Galbraith, University of Arizona, Department of Plant Sciences, 303A Forbes Building, Tucson, AZ 85721. FAX: 602-621-7186.** Equal Opportunity/Affirmative Action Employer. Women and minorities encouraged to apply.

POSTDOCTORAL POSITION IN HIV TRANSMISSION AND PATHOGENESIS. Available immediately for M.D.'s, Ph.D.'s, and D.V.M.'s with strong background in molecular virology, immunology, or genetics to study mechanisms of (1) viral determinants of pathogenesis, (2) sexual transmission, (3) fetal and neonatal pathogenesis in the SIV/rhesus macaque model. Experience in recombinant DNA technology, mucosal/cellular immunology or baculovirus protein expression desirable. Salary: \$31,000 per year depending on experience. Send curriculum vitae, summary of past work, and names and addresses of three references to: **Dr. Maria Marthas, California Regional Primate Research Center, University of California, Davis, CA 95616-8542.** Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION available on or about 1 July 1992 to study the expression and function of nuclear retinoic acid receptors during the in vitro differentiation of tracheal epithelial cells. Also to purify and characterize retinoic acid receptors from expression systems. Experience in protein purification and molecular biology techniques (HPLC, affinity chromatography, Northern and Southern blotting) desired. Please send replies including curriculum vitae and names of three references to: **Richard M. Niles, Ph.D., Professor and Chairman, Department of Biochemistry, Marshall University School of Medicine, Huntington, WV 25755-9320.** Marshall University encourages applications from women and minorities and is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN HUMAN GENETICS

Postdoctoral positions are available for investigation of the basic molecular mechanisms of human genetic diseases including site-directed mutagenesis and heterologous expression to determine structure/function relationships of lysosomal proteins, and development of animal models of human diseases. Exciting opportunities are open for recent Ph.D.'s with experience in DNA and/or protein biochemistry in a new and expanding major division. Send curriculum vitae, bibliography and three letters of reference to: **G. A. Grabowski, M.D., Director of Human Genetics, c/o William K. Schubert, M.D., President & CEO, Children's Hospital Medical Center, Eland and Bethesda Avenues, Cincinnati, OH 45229-2899.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available to study: (1) potentiation of specific T-cell responses to human tumors using gene-altered tumor cells, (2) signaling pathways and receptors involved in IFN- γ gene expression in T-cells responding to tumor cells, and (3) molecular mechanisms of cytokine effects on T-cell responses. Experience in molecular biology and signal transduction is preferred. Interested candidates should send curriculum vitae and references to: **Dr. James Finke, Research Institute Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.**

UNIVERSITY OF FLORIDA BRAIN INSTITUTE SPINAL CORD REGENERATION RESEARCH PROGRAM

POSTDOCTORAL POSITIONS are immediately available as part of an NIH- and state of Florida-funded multidisciplinary program focused on spinal cord injury and repair being conducted in the Departments of Neuroscience and Neurological Surgery. Emphasis is on therapeutic interventions and their potential impact on various behavioral/neurophysiological correlates of motor, sensory, and autonomic change precipitated by spinal cord trauma. Principal areas of interest include: spasticity, sensory dysfunction, segmental circuits subserving sexual reflexes, magnetic resonance imaging/spectroscopy, and neural tissue transplantation biology. To complement and expand these projects, individuals are being sought having expertise in any of the following basic areas: transplantation immunology, contemporary neuroanatomical techniques (i.e., immunocytochemistry, tract-tracing), molecular biology (especially pertaining to growth factor chemistry or gene cloning and related techniques), neuropharmacology, electrophysiology, NMR spectroscopy, tissue culture, or behavioral analysis. Other areas deemed to be relevant to these basic interests also will receive careful consideration by the selection committee. Applicants must have a Ph.D. or M.D. degree and preference will be given to individuals with a background in neural regeneration/plasticity research. Closing date is 1 June 1992 or until available positions have been filled. Send curriculum vitae and the names, addresses, and telephone numbers of three references to: **Paul J. Reier, Ph.D., University of Florida College of Medicine, Department of Neurological Surgery, P. O. Box 100265, Gainesville, FL 32610-0265.** An Equal Opportunity Employer.

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.

THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Invites applications for the post of INFORMATION MATERIALS OFFICER (Research/Writing) in its Headquarters in Rome, Italy

RESPONSIBILITIES:

To undertake a wide range of writing assignments on the work of the Organization for public information materials, magazines, international yearbooks and other publications. To work with designers, graphic artists and a Macintosh-based computer system to conceive and prepare publications, posters, exhibits and audiovisual presentations.

REQUIREMENTS:

University degree in agricultural sciences, economics, journalism or in a subject related to the work of the Organization. Five years' professional experience in writing and preparing illustrated publications using both conventional and computer systems. Ability to collect technical information and communicate it to non-specialist colleagues and to the general public. Excellent knowledge of English and limited knowledge of Arabic, French or Spanish.

BENEFITS:

The post carries a net salary per year (inclusive of a variable element for post adjustment) from US\$ 51 103 to 65 531 (without dependents) and from US\$ 54 691 to 70 631 (with dependents). Other benefits of the International Civil Service.

Please send detailed curriculum vitae no later than 19 May 1992 quoting VA 191-GII to: **Personnel Officer, GIDX, FAO, Via delle Terme di Caracalla, 00153 Rome, Italy. Tel: 6101881 FAO —Telefax: 57973152.**

UNIVERSITY OF MINNESOTA DIRECTOR, OFFICE OF PATENTS AND LICENSING OFFICE OF RESEARCH AND TECHNOLOGY TRANSFER ADMINISTRATION

Responsibilities: supervise and direct four licensing professionals and four support staff; manage all patent and licensing activities and work with an external advisory council to evaluate new technologies; develop intellectual property policies; meet with faculty and administrators to counsel, advise and resolve disputes; represent the University in national and state organizations.

Minimum qualifications: bachelor's degree in science or engineering and knowledge of science, patent law and contractual agreements. Desired qualifications: experience managing a technology transfer operation; demonstrated success marketing intellectual property to industry and negotiating agreements; an understanding and appreciation of the research enterprise in an educational institution; and experience in technology/licensing in private industry.

Applications must be postmarked by May 31, 1992. Send resume and letter of application discussing experience and relevant accomplishments to:

**Director of Patents and Licensing
Search Committee
University of Minnesota
Office of Research and
Technology Transfer
Suite 201, 1100 Washington Avenue S.
Minneapolis, MN 55415-1226.**

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

DIRECTOR American Type Culture Collection (ATCC)

Applications and nominations are invited for the position of Director of The ATCC. This position will become available April 1, 1993.

Candidates must have—

- Doctorate in microbiology or a related field
- Well recognized accomplishment in research
- Executive scientific administrative experience
- Experience in fiscal and personnel management
- History of success in securing research and development funds from both private and public sources

Applications should include detailed curriculum vitae, complete information on past and current research support, plus names and addresses of three referees. Send letters of nomination and applications to:

**Dr. Nicholas W. Gillham, Chairman,
Search Committee American Type
Culture Collection, 12301 Parklawn
Drive, Rockville, Md. 20852. This ap-
plication deadline is 1 August 1992.**

An Equal Opportunity Employer/MF

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

IN VIVO BONE RESEARCH SCIENTIST

We seek an In Vivo Bone Scientist to join a growing, multi-disciplinary Bone Research Group. Experience with classical and novel applications of bone histomorphometry is essential. Experience with molecular or cellular biology in the bone area is desirable. The selected individual will provide direction and insight into the integration of molecular, cellular, in vitro, and in vivo bone research. Our goal is to establish a first-class research team that is strongly committed to basic research leading to drug discovery in the area of bone therapeutics.

Background must include a Ph.D. in a health-related or basic science discipline, post-doctoral training in bone research, and a minimum of three years of independent research.

*Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume and salary history to: **Human Resources Department, Job # 9116B205-SC, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.*

Glaxo Inc.

The New York Academy of Sciences Conference on

Saliva as a Diagnostic Fluid
October 22 to 25, 1992
Edgewater Resort
Panama City, Florida

Conference Co-Chairs:

Daniel Malamud
University of Pennsylvania
School of Dental Medicine

Lawrence Tabak
University of Rochester

Theme:

The purpose of this conference is to bring together researchers from diverse disciplines - biochemistry, clinical pharmacology, clinical chemistry, endocrinology, immunology, and oral biology - to examine the progress and future of salivary diagnostics. The deadline for submission of poster abstracts is **June 26, 1992.**

For further information: Contact the Conference Department, The New York Academy of Sciences, 2 East 63rd Street, New York, NY 10021.

Tel:212/838-0230, Fax:212/888-2894

ASSOCIATE DEAN DIVISION OF BASIC MEDICAL SCIENCES FACULTY OF MEDICINE MEMORIAL UNIVERSITY OF NEWFOUNDLAND

The Associate Dean of Basic Medical Sciences is responsible for the activities of the Division of Basic Medical Sciences and for the activities of the individuals of the Division in the manner of a Division Head. The Associate Dean represents the Basic Medical Sciences faculty in their dealings with the Dean and to an appreciable extent in the dealings of the Division with other portions of the University. The Associate Dean should be an active researcher and at the same time actively promote the interests of the Division by addressing needs for funds, space and faculty, and generally facilitate the work of the Division members.

The Division includes 46 full time Faculty in the full range of disciplines basic to medicine, and is organized on a nondepartmental basis. The Division has particular strengths in immunology, molecular biology and neurosciences. Applicants are not limited to these areas. The Division is housed with the Faculty in the Health Sciences Centre on the University campus and the Medical School carries full accreditation from LCME/CACMS.

The successful applicant will have an established reputation in research, demonstrated administrative capability and a commitment to support teaching at the undergraduate and graduate levels. The position is available July 1, 1992. Both internal and external candidates are encouraged to apply.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Applications with a detailed curriculum vitae and the names of three references should be sent by May 31, 1992.

**Dr. Roy West, Chair
Search Committee for Associate Dean
Basic Medical Sciences
Faculty of Medicine
Health Sciences Centre
Memorial University of Newfoundland
St. John's, Newfoundland, Canada A1B 3V6
Telephone: (709) 737-6652
FAX: (709) 737-7382**



PROFESSORSHIP OF CLINICAL BIOCHEMISTRY

The electors intend to proceed to an election to the Professorship of Clinical Biochemistry, which falls vacant on 1 October 1993 upon the retirement of Professor Sir Philip Randle.

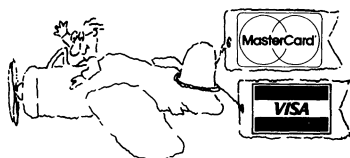
The successful candidate will either be medically qualified or at least have demonstrated a strong medical interest in his or her previous career.

If the professor is medically qualified and is granted an honorary consultant contract by the district health authority, the stipend will be £46,390 per annum. If these conditions are not satisfied, the stipend of the professorship will be £34,191 per annum.

A non-stipendiary professorial fellowship at Hertford College is attached to the professorship.

Applications (ten copies, or one from overseas candidates), naming three referees, should be received not later than 1 June 1992 by the Registrar, University Offices, Wellington Square, Oxford OX1 2JD, England, from whom further particulars may be obtained.

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POSITIONS OPEN

The Department of Neurosciences, University of California, San Diego, is seeking a qualified Ph.D. or M.D. for a **POSTDOCTORAL POSITION** to work in pharmacology of stroke. Studies concern animal models and clinical trial experience is available for appropriate candidates. The position requires background in pharmacology and ability to perform animal surgery. Knowledge of behavioral testing and histology is desirable. The position is available immediately. Salary is based on the University of California schedule. Send curriculum vitae and names of three references to: **Justin Zivin, M.D., Ph.D., University of California, San Diego, Department of Neurosciences 0624, La Jolla, CA 92093-0624.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN DROSOPHILA MOLECULAR NEUROBIOLOGY. Applications are invited for a postdoctoral position to study *Drosophila* phototransduction. Projects will entail using molecular genetic techniques to characterize genes essential for phototransduction. A Ph.D. in molecular biology, genetics, biochemistry or neurobiology required. Please forward your curriculum vitae and three letters of recommendation to: **Dr. Craig Montell, Department of Biological Chemistry, The Johns Hopkins School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205.**

POSTDOCTORAL POSITION available to study repair of radiation-induced DNA damage in human cells. Specific research areas include purification and characterization of human DNA repair enzymes, mechanistic studies of DNA repair inhibitors, and modulation of cellular DNA repair by retroviral expression of DNA repair enzymes. Experience in molecular biology, biochemistry, or radiation biology is required. Interested individuals should send curriculum vitae and names of three references to: **Dr. Timothy J. Jorgensen, Department of Radiation Medicine, Georgetown University Medical Center, 3800 Reservoir Road, N.W., Washington, D.C. 20007-2197.** *Georgetown University is an Equal Opportunity/Affirmative Action Employer.*

TWO POSTDOCTORAL POSITIONS immediately available for investigating the molecular basis of in vitro transformation of human cells by physical and chemical carcinogens. Research involves genomic, cDNA cloning of genes, characterization of gene structure and studies in protein expression associated with transformed human cells. Experience with molecular biology techniques of DNA cloning, PCR amplification, DNA hybridization and sequencing required. Interested individuals should send curriculum vitae and names of three references to: **Dr. Peter J. Thraves, Department of Radiation Medicine, Georgetown University Medical Center, 3800 Reservoir Road, N.W., Washington, D.C. 20007-2197.** *Georgetown University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS, GENE MAPPING. USDA, Agricultural Research Service (ARS), Meat Animal Research Center, Clay Center, Nebraska, has postdoctoral-research associate positions available immediately in a group developing a map of the cattle and swine genomes. Candidates with a background in genetics/molecular biology and experience in molecular biology or cytogenetic techniques are encouraged to apply. Excellent facilities and established reference families provide a unique opportunity in this high priority ARS program. Minimum starting salary: \$32,423. Send curriculum vitae and names of three references to: **Dr. Craig W. Beattie, Roman L. Hruska U.S. Meat Animal Research Center, P.O. Box 166, Clay Center, NE 68933.** Telephone: 402-762-4359; FAX: 402-762-4148. *USDA-ARS is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study the regulated expression and functional and developmental significance of a previously unknown nonfibrillar collagen. The gene for this protein, recently discovered in this laboratory, is expressed at high levels only in certain immune tissues. Molecular biology experience required. Additional cellular, biochemical, immunological or in situ hybridization skills are desirable. Send curriculum vitae and names of three references to: **Dr. Daniel S. Greenspan, Department of Pathology, University of Wisconsin Medical School, 1300 University Avenue, Madison, WI 53706.**

POSITIONS OPEN

POSTDOCTORAL POSITION. To participate in studies of the molecular basis of cell division and chromosome segregation in *E. coli*. The research involves the combined use of molecular genetics and biochemistry to study the mechanisms responsible for cell division, including the proper placement of the division site, the functions of cell division genes and gene products, and the coordination of the division process with the partition of daughter chromosomes into progeny cells. Send curriculum vitae, brief description of prior research experience, and the names of several references to: **Dr. L. Rothfield, University of Connecticut Health Center, Farmington, CT 06030-3205.** *An Affirmative Action/Equal Opportunity Employer, M/W/H.*

POSTDOCTORAL POSITION in molecular endocrinology available immediately to study involvement of the *c-myc* protooncogene in breast cancer growth regulation by progestins. Experience in basic molecular biology techniques and cell culture is desired for this grant-funded position. Send curriculum vitae and names, addresses and telephone numbers of three references to: **Dr. Michael R. Moore, Department of Biochemistry, Marshall University School of Medicine, 1542 Spring Valley Drive, Huntington, WV 25755-9320.** *Marshall University encourages applications from women and minorities and is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study molecular mechanisms regulating expression of neurotrophic factors in the CNS. Experience in recombinant DNA and cell culture techniques is desirable. Send curriculum vitae and names of three references to: **Dr. Paul Isackson, Mayo Clinic Jacksonville, 4500 San Pablo Road, Jacksonville, FL 32224.** *Equal Opportunity Employer. Drug-free and smoke-free workplace.*

POSTDOCTORAL POSITIONS

Postdoctoral positions available immediately to investigate (1) DNA-binding proteins mediating induction of lymphokine genes in activated T-cells; and (2) the structural basis for T-cell receptor recognition of antigen/MHC. We are seeking motivated candidates with recent Ph.D. degrees and strong backgrounds in gene expression and/or protein purification. Please send curriculum vitae, bibliography, statement of research interests, and names of three references to: **Dr. Anjana Rao, Room 313 Mayer Building, Division of Tumour Virology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIP

Applications are invited from recent Ph.D., M.D. or D.V.M. candidates for a postdoctoral fellowship in radiopharmaceutical research applied primarily to cancer diagnosis and therapy. Applicants with strong interest in biochemistry, organometallic chemistry, synthetic organic chemistry and receptor science would be preferable. Competitive salary is offered. *This training grant requires that candidates be citizens or non-citizen nationals of the United States or have been lawfully admitted for permanent residence.* Send résumé and references to: **Dr. M. L. Thakur, Nuclear Medicine, 804 Main Building, Thomas Jefferson University, Philadelphia, PA 19107-5244.** *Thomas Jefferson University is an Affirmative Action/Equal Opportunity Employer.*

ICI/PURDUE UNIVERSITY—POSTDOCTORAL FELLOWSHIP. A 3-year postdoctoral fellowship is available beginning spring/summer 1992 to work on the mechanism of action of chemical carcinogenesis. The successful candidate will be proficient in molecular biology and have an interest in the receptor-mediated regulation of gene expression. The project builds upon the success of the two participating research groups in furthering our understanding of receptor-mediated chemical carcinogenesis [*Nature* 347, 645-650 (1990); *Science* 254, 415-418 (1991)]. The aim will be to identify and characterize genes regulated by peroxisome proliferators and TCDD with particular emphasis on those that may have relevance to cell growth and carcinogenesis. Send curriculum vitae, name and address of three references to: **William F. Greenlee, Ph.D., Head, Department of Pharmacology and Toxicology, 1334 R. E. Heine Pharmacy Building, Purdue University, West Lafayette, IN 47907-1334.** *Purdue University is an Equal Opportunity/Affirmative Action Employer.*

BRANCH CHIEF

The Thrombosis and Hemostasis Branch of the Division of Blood Diseases and Resources, National Heart, Lung, and Blood Institute, National Institutes of Health (NIH), PHS, seeks a Branch Chief in Bethesda, Maryland.

The Branch Chief will be responsible for supervision of all branch scientific and administrative activities relevant to its mission of research in thrombosis and hemostasis. This includes providing leadership and coordination of all research activities, basic, applied, and clinical, in the areas of hemostasis and of thromboembolic, hemorrhagic, and platelet disorders; development of scientific and conference and workshop initiatives; development of "state of science" reviews on topics of importance to the Branch's programs; and serving as the Institute's liaison to other components of the National Heart, Lung, and Blood Institute, other Institutes, as well as public, private, and international organizations whose activities are related to the mission of the Institute.

Specific requirements are: 1) an M.D. or Ph.D. degree or equivalent education and experience, plus experience in basic and/or clinical research. The position is Health Scientist Administrator (Biological Sciences), GM-601-15, or Medical Officer, GM-602-15, with a salary range of \$64,233 to \$87,784. In addition, candidates may be eligible for Physician's Comparability Allowance up to \$20,000. Candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service. U.S. Citizenship required.

For further information or to submit curriculum vitae, contact:

John C. Hoak, M.D., Director
Division of Blood Diseases and Resources
National Heart, Lung, and Blood Institute
Federal Building, Room 516
7550 Wisconsin Avenue
Bethesda, MD 20892
(301) 496-4868



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THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON

CV Bank for Minority Individuals and Women

The University of Texas Medical Branch at Galveston has established a Curriculum Vitae Bank to promote the recruitment and appointment of minority individuals and women for faculty, research, administrative or professional positions.

UTMB was established in 1891 and is located on the Gulf coast. Named the 13th best place to live in the United States by *Money* magazine, Galveston is home to some 60,000 year-round residents. The University employs approximately 8,800 faculty and staff and has an enrollment of approximately 2,500 students in undergraduate, graduate and professional programs.

The academic components include the School of Medicine, the School of Nursing, the Graduate School of Biomedical Sciences, the School of Allied Health Sciences, the Marine Biomedical Institute, the Institute for the Medical Humanities, several research centers and a variety of academic, business and student support service units. In addition, UTMB owns and operates 7 hospitals and operates 107 outpatient clinics.

Any person interested in registering with the **UTMB CV Bank** should send a vitae or resume and a letter of interest to: **Mr. Dale B. Robinson, Director of Affirmative Action, UTMB, 301 University Blvd., Galveston, Texas 77555-0106.** Materials provided to UTMB will be used only for the purpose of assisting in the filling of UTMB positions.

The University of Texas Medical Branch at Galveston is an equal opportunity/affirmative action university. M/F/H/V. The University employs only persons eligible to work in the United States.

UTMB

SCANNING PROBE MICROSCOPY AT SRI

SRI International, one of the world's leading research, development and consulting organizations, is initiating a program in Scanning Probe Microscopies; Scanning Tunneling Microscopy-STM, Atomic Force Microscopy-AFM, and others.

These technologies will be applied to develop new directions in: Materials Science, Life Sciences, Atomic and Molecular Engineering, new techniques for lithography and storage, and other technical areas.

Applicants should have a PhD in any of the disciplines stated above, with considerable (5+ years) experimental research with these probe technologies. Successful candidate will initiate his/her research program(s) and be vitally interested in collaborating with others in technical areas outside their own field of expertise.

For immediate consideration, send or FAX resume with salary history to: SRI International, M/S BHA261, 333 Ravenswood Ave., Menlo Park, CA 94025. FAX: (415) 859-3880. An equal opportunity employer.



MEDICINAL CHEMIST Scientific Investigator

Amylin Pharmaceuticals, Inc. is a dynamic development stage pharmaceutical company working on products for diabetes and related metabolic disorders. We are currently seeking to expand our Chemistry team and have an opportunity available for an outstanding Ph.D. in synthetic organic chemistry. The successful candidate will have a record of scientific and drug discovery accomplishments demonstrated by scientific publications and patents and 5+ years' pharmaceutical industrial experience. A background in the design and synthesis of peptide mimetics is desirable.

Amylin is located in San Diego and offers a competitive salary and benefits package and an exciting work environment. If you are a highly motivated individual who functions well in a multifunctional environment and is seeking the stimulation that a growing company can provide, this may be the career move for you. Send resume and salary requirements to: **A. McGovern/L.G., Amylin Pharmaceuticals, Inc., 9373 Towne Centre Drive, San Diego, CA 92121.** Amylin is an Equal Opportunity Employer.



Postdoctoral Positions in Molecular Genetics

The Biomedical Sciences Division of Lawrence Livermore National Laboratory is seeking two Postdoctoral Research Scientists to participate in studies of the molecular nature of somatic and inherited genetic alterations within the context of studies of the radiation induced mutation rate in the Chernobyl population.

Position One will be the identification and analysis rare genetic variants and germinal mutations. The genomic targets will include both functional genes and simple tandem repeat loci with emphasis on understanding the molecular mechanisms of mutation induction. The effort will also address questions of genetic mosaicism. A Ph.D. or equivalent and research experience with molecular techniques are required. Contact: Dr. Harvey Mohrenwaiser, (510) 423-0534. FAX (510) 422-2282.

Position Two focuses on molecular characterization of somatic mutations induced in vivo. Analysis of mutations in the HPRT gene of lymphocytes of human and mice will reveal mechanisms of both spontaneous and radiation induced somatic mutation. A Ph.D. or equivalent and research experience in molecular biology are essential. Contact: Dr. Irene Jones, (510) 423-3626. FAX (510) 422-2282.

LLNL, affiliated with the University of California, offers research in a team environment, outstanding research facilities, plus an excellent compensation and benefits package. Letters of application should reference the position of interest and include a resume with names and phone numbers of three references, and be forwarded to: Phil Harding, Biomedical Sciences Division, Dept. A92214BS, P.O. 5510, L-725, Livermore, CA 94551. Equal Opportunity Employer.

University of California

 Lawrence Livermore
National Laboratory

COLORADO

Biopharmaceutical Leader

Technology Analyst

Somatogen, a rapidly growing biopharmaceutical company and a world leader in the development of a blood substitute, currently has an exciting opportunity available for a Technology Analyst. The successful candidate will have a desire to be part of a team involved in leading edge technology.

This position reports to the Vice President of Technology and Intellectual Property. Responsibilities include performing both scientific and business analyses of potential new technologies of interest both in and outside the field of blood substitutes. Market potential, status and strength of competitive technologies are areas of focus. This individual might currently be a Business Development Analyst in a biopharmaceutical company and will have the opportunity at Somatogen to help shape the intellectual property and technology division as the company grows, product lines expand, and research moves into new areas.

A Ph.D. in a biological or chemical field, or an MBA with a strong scientific background is required. A competitive salary and benefits package with equity complements this offer.

Somatogen's first product, a recombinant, genetically engineered human hemoglobin for use as a blood substitute, is in clinical trials. Somatogen's staff of 125 employees were drawn to the company by its high quality science, the enormous medical potential for recombinant hemoglobin, and Boulder's stimulating university environment, appealing lifestyle and opportunities for recreation in a mountain setting.

Interested candidates may submit a resume and cover letter to:

Nancy Borne, Manager of Professional Development

SOMATOGEN

5797 Central Avenue, Boulder, Colorado 80301
An Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL FELLOW

A position is available to study the structure/function relationships of Ca^{2+} /calmodulin-dependent myosin light chain kinases. Experimental approaches include site-directed mutagenesis and construction of chimeric kinases to characterize functional domains. Additional opportunities exist for collaborative research in a multidisciplinary training program involving characterization of the biological roles of myosin light chain kinases in cells to analyses of the three-dimensional structures of these enzymes. Previous experience with recombinant DNA methodology is desirable. Please address inquiries to: James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. Telephone: 214-688-6849, FAX: 214-688-2974. An Affirmative Action/Equal Opportunity Employer.

OSSERMAN FELLOWSHIP

Twelve-month fellowship available for outstanding candidate with M.D., Ph.D., D.V.M. or equivalent degree, conducting research pertinent to myasthenia gravis (MG), in the laboratory of a qualified senior investigator; investigations concerned with mechanisms of neuromuscular transmission; immunology, molecular or cell biology of the neuromuscular synapse; the etiology/pathogenesis, diagnosis or treatment of MG. Stipend competitive.

Fellow proposal (limit ten pages) should include: brief statement of specific aims; succinct description of methods and experimental design; description of laboratory resources and environment; pertinent references; curriculum vitae (applicant).

Application should include additionally: preceptor's curriculum vitae, and letters of recommendation from (a) preceptor accepting candidate; and (b) a past or current academic adviser.

Applications (five copies) must be received on or before 1 November 1992 by: Research and Grants Committee, The Myasthenia Gravis Foundation, 53 West Jackson Boulevard, Suite 660, Chicago, IL 60604, telephone: 800-541-5454.

POSTDOCTORAL FELLOWS in ecology and limnology at Rutgers University, Institute of Marine and Coastal Sciences. Two positions are available for research in the New Jersey Pinelands. Individuals whose experience complements faculty research on nutrient cycling, wetland ecology, wetland biogeochemistry, acid rain, and water quality effects on aquatic communities will receive preference. Please send résumé, research statement, and three references to: Dr. Frederick Grassle, Director, Institute of Marine and Coastal Sciences, Rutgers University, Post Office Box 231, New Brunswick, NJ 08903-0231 by 15 May 1992. Rutgers University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATES FELLOWS

Applications are invited for immediate openings at the level of research associate fellow to join an active research team conducting basic heart and lung research. Candidates should have a Ph.D. and/or an M.D. degree with experience in immunology, biochemistry or cardiac surgery. Experience in transplantation immunology, liquid and gas chromatography, immunoassays, electrophysiology and electron microscopy is particularly welcome. A good publication and grant seeking track record is preferred. Interested candidates should forward curriculum vitae and name, address and telephone number of at least three references to: Lynn B. McGrath, M.D., Acting Director, c/o Deborah Research Institute, Trenton-Pine Mill Road, Browns Mills, NJ 08015-1799.

POSTDOCTORAL RESEARCH FELLOW. To undertake research in mucosal immunology, particularly in relation to immunity to dental caries and other oral infections. The work will involve immunization of animals, examination of immune responses in serum and secretions and at the cellular level, including analysis of lymphocyte subsets, their culture in vivo, and cytokine production. Ph.D. or M.D. in immunology or microbiology or a medical degree. Forty hours per week, 8:00 a.m. to 5:00 p.m. Salary: \$19,700 per year. Contact: Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222, RE: Job Order #AL0228733.

POSITIONS OPEN

UNIVERSITY OF ALBERTA BIOCHEMISTRY POSTDOCTORAL FELLOW

Candidates should have a recent Ph.D. with experience in either protein chemistry and structure or molecular cloning techniques. Research is focused on the structure-function relationships of contractile proteins of muscle and nonmuscle tissues and the expression of novel variants of these in *E. coli* by oligonucleotide-directed mutagenesis. Positions are available for up to 3 years at a salary ranging from \$23,230 to \$26,320 depending on experience and qualifications. Please send curriculum vitae, list of publications and names, plus addresses of three references to: **Dr. L. B. Smilie, MRC Group in Protein Structure and Function, Department of Biochemistry, University of Alberta, Edmonton, Alberta T5G 2H7, Canada.** The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities and women.

POSTDOCTORAL RESEARCH ASSOCIATES

Opportunities for two postdoctoral research positions in the Department of Microbiology and Immunology. Available project areas include: genetics of antibiotic resistance and pathogenesis, or genetics of anaerobic rumen bacteria (with Dr. C. Jeffrey Smith); and molecular biology of oncogene and lymphokine expression in normal and malignant cells (with Dr. James A. McCubrey). Additional project areas may include genetics of steroid biotransformations by anaerobes, genetics of *Bordetella pertussis* pathogenesis, and molecular studies of experimental autoimmune encephalitis. Nationally competitive salaries with fringes. Applicants should have the Ph.D. degree with training and experience in relevant areas of microbiology, molecular genetics and immunology. Send cover letter, complete curriculum vitae, relevant publication reprints and the names, addresses and phone numbers of three reference individuals to: **Postdoctoral Screening Committee, Department of Microbiology & Immunology, East Carolina University School of Medicine, Greenville, NC 27858-4354.**

East Carolina University is an Affirmative Action/Equal Opportunity Employer. Federal law requires proper documentation of identity and employability at time of employment. It is requested this documentation be included with your application.

TWO POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS are available to study opioids. (1) Prior experience in neuropharmacology to examine mechanisms of opioid tolerance in animals, (2) prior experience in molecular biology to examine the regulation of opioid peptide gene expression. NIH-supported training—U.S. citizen or permanent resident. Contact: **Dr. Charles E. Inturrisi, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH OPPORTUNITIES IN INDIA. Research fellowships in India will be awarded through U.S. Agency for International Development program to U.S. citizens in 1993. Priority areas of research include: atmospheric/environmental sciences, biology, biotechnology, chemistry, computer software, electronics, forestry, geology, marine science, materials science, microelectronics, oceanography, physics, solid-state electronics, water resources, and other appropriate fields. For application and proposal guidelines, contact: **Jeanine M. Daniels, Academy for Educational Development, 1255 23rd Street, NW, Washington, DC 20037.**

RESEARCH ASSOCIATE POSTDOCTORAL POSITION

Available to study the effect of oncogenes and tumor suppressor genes on cellular response to radiation-induced injury. Expertise in molecular genetics, recombinant DNA technology and/or protein chemistry strongly preferred. Send curriculum vitae and names of three references to: **George Iliakis, Ph.D., Department of Radiation Oncology and Nuclear Medicine, Thompson Building, Room B13, Thomas Jefferson University, Philadelphia, PA 19107.**



EARTH OBSERVING SYSTEM (EOS) SENIOR PROJECT SCIENTIST

The NASA/Goddard Space Flight Center, located in Greenbelt, MD is seeking candidates for the position of EOS Senior Project Scientist. The incumbent will provide the primary and day-to-day interface between the Earth Science community and the EOS Project in defining and representing scientific requirements and providing related scientific insight and guidance to the EOS Project. The incumbent will work with the EOS Program Scientist and other Earth Science Program personnel at NASA Headquarters to ensure that scientific and related programmatic requirements are appropriately implemented by the EOS project. Along with the Program Scientist, the incumbent will co-chair the EOS Investigators Working Group (IWG) and related panels and subpanels. The incumbent will guide and lead the efforts of EOS Project Scientists associated with the various EOS payloads and the EOS Data and Information Systems (EOSDIS).

An applicant should be an internationally recognized research scientist in an Earth science discipline or interdisciplinary Earth science, with substantial experience in developing and implementing research programs. There should be documented skill or knowledge in numerical modeling and data analysis using remotely sensed data from spaceborne, earth oriented observing systems and related data processing, archiving, and distribution systems. The salary associated with the position (\$64,233-\$104,000) will depend upon the selected applicant's background, qualifications, and experience.

In applying, the following is required: a resume including a list of scientific and technical publications and an Application for Federal Employment (SF-171). This material should be sent by May 8, 1992, to: **NASA/Goddard Space Flight Center, Code 115G, Greenbelt, MD 20771.** Inquiries should be directed to **Ms. Dianne Hagerty at (301) 286-8319.** Equal Opportunity Employer. U.S. Citizenship is required.

THE UNIVERSITY OF AUCKLAND New Zealand

ACADEMIC VACANCIES IN THE SCHOOL OF BIOLOGICAL SCIENCES

The School of Biological Sciences, established in 1991, incorporates the Departments of Biochemistry, Botany, Cellular & Molecular Biology, and Zoology. The School currently is carrying out an extensive revision of its teaching programme and a review of its organisational structure. The School has a combined staff of 140, of whom 40 are academic staff. Within the School, the plant molecular group currently consists of 19 researchers (staff, Postdoctoral Fellows and graduate students).

Facilities available to staff include a 400 MHz NMR facility, an automated DNA sequencer, oligonucleotide synthesiser, a gas phase protein sequencer, EM, HPLC and FPLC equipment, and a comprehensive Vax-based computer system providing access to major databases. The School has good light microscope facilities with fluorescence and DIC optics. Glasshouse, tissue culture and controlled environment facilities are also available.

LECTURESHIP/SENIOR LECTURESHIP IN PLANT MOLECULAR GENETICS (Vacancy UAC.126)

Applicants must have a PhD or equivalent, a strong research record resulting in publication at the international level and a record of attracting research grant support. The person appointed will contribute to the School of Biological Sciences undergraduate and graduate teaching programme and will be expected to attract and supervise postgraduate research students.

LECTURESHIP IN NEW ZEALAND & EXPERIMENTAL BIOLOGY (Vacancy UAC.130)

The successful applicant must have a PhD or equivalent qualification in the natural sciences, several years of postdoctoral experience, and a record of research and scholarship at the international level. Expertise and experience in university teaching will be required. The appointee should have skills and experience in liaising with Maori and Pacific Island communities and with Maori and Pacific Island students in particular. Preference will be given to an applicant able to establish a strong collaborative research programme with those currently underway in the School in an appropriate area of the Biological Sciences.

The appointee, in addition to engaging in teaching and research, will coordinate a programme aimed at increasing the participation and success rates of Maori and Pacific Island students in the School of Biological Sciences.

ASSOCIATE-PROFESSORSHIP IN STRUCTURAL BIOLOGY (Vacancy UAC.131)

Applicants must have a PhD or equivalent qualification, a strong research record resulting in publication at the international level and a record of attracting research grant support. Preference will be given to a candidate with research interests in membrane biology able to direct a programme in teaching and research which integrates structural biology with biochemistry and cell physiology.

Commencing salary per annum will be established within the ranges: NZ\$37,440–NZ\$49,088 (Lecturer); NZ\$52,000–NZ\$60,944 (Senior Lecturer); NZ\$69,680–NZ\$75,920 (Associate Professor).

Conditions of Appointment and Method of Application are available from the **Appointments Officer, Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF**; or from the **Assistant Registrar (Academic Appointments), University of Auckland, Private Bag, Auckland, New Zealand**, to whom applications should be forwarded by 31, May 1992.

Please quote relevant Vacancy Number in all correspondence

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THE

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Career Growth

Biogen is a thirteen year old leading biotechnology company engaged principally in developing genetically engineered human pharmaceuticals. As a result of its early research, Biogen now derives revenues from five products being sold by its licensees or affiliates in various countries. Biogen currently directs its research and development into areas where the company has particular strength - inflammation, cardiovascular disease, AIDS and selected cancers.

Process Scientist Analytical Biochemistry

We currently seek a highly motivated Scientist with HPLC expertise to lead our expanding analytical Process Development efforts. Methods include amino acid analysis, peptide mapping, and carbohydrate analysis. Ideally you will have a strong background in creative troubleshooting, assay development, and computer literacy as well as excellent written and oral communication skills.

Qualified candidates will possess a PhD in Chemistry/Biochemistry, 3-5 years' industrial experience, and at least 2 years' supervisory experience. This position requires expertise in protein chemistry.

Our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available.

For immediate consideration, call Joe Tringali at (617)252-9802, or mail/fax your resume to his attention at Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142. Fax: (617) 252-9617. Biogen is an Equal Opportunity Employer, M/F/D/V.

BIOGEN

Senior Associate Scientist/Scientist

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company seeks an experienced and self-motivated individual to join the Cancer Research Team to participate in the in vivo evaluation of potential new anti-cancer agents against murine tumors and human tumor xenografts. The successful candidate will work within a multidisciplinary team of scientists dedicated to the discovery and development of novel cancer therapies in well equipped state-of-the-art laboratories.

Minimum qualifications include a BS degree in chemistry or biochemistry (MS for Scientist level), with 3 or more years' experience in the area of in vivo chemotherapy and radiobiology. Additional expertise in the following areas is desirable: tissue culture, biochemical assays, computers, in vivo models of metastasis/angiogenesis, transgenic models in cancer research, small animal survival surgery skills, and in vitro or in vivo aspects of mitogenic signal transduction pathways as a target for cancer therapy.

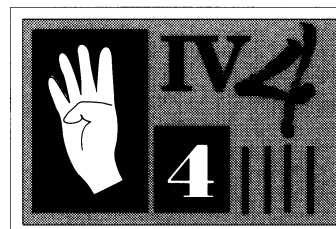
Interested persons should send their resume and references in confidence to Box JDM 92166, PARKE-DAVIS, Human Resources, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"

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uct pipeline spanning the areas of biotherapeutics, diagnostic products and services as well as pharmaceuticals and fine chemicals.

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Genzyme's enzymology group has exciting programs focusing on the therapeutic application of cysteine proteases and glycosyl transferases, and on the enzymatic synthesis of chiral pharmaceutical intermediates. Currently, we have two positions available for candidates with experience in protein purification, mechanism-based characterization of enzymes and standard molecular biological techniques.

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This candidate will drive the chiral resolution and synthesis efforts. Requires a Ph.D. and 1-3 years' experience. (Code SLS)

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Genzyme offers an excellent compensation and benefits package for full time employees including 3 weeks paid vacation, a 401(k) plan with a company match, extensive insurance benefits and an Employee Stock Purchase Plan. Please forward your resume and/or letter of introduction, indicating the appropriate code, to: Human Resources, Dept. S417, Genzyme Corporation, One Kendall Square, Cambridge, MA 02139. An equal opportunity employer.

Advancing Health Care Products and Services Worldwide

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TSI Corporation

Headquartered in Worcester, MA, TSI Corporation offers an excellent salary and benefits package with an opportunity to make a major impact on the future growth of the company as a key member of management. Relocation assistance is available. For consideration, please send your resume and compensation history to: V.P., Human Resources, TSI Corporation, Innovation Drive, Worcester, MA 01605.

TSI Corporation is an Equal Opportunity Employer. Principals only. No phone calls please.

TSI is a growing, diversified life sciences company with a record of performance. In research and development, our science team has made significant progress on advanced disease models for use in screening drugs for AIDS, Alzheimer's disease, and cancer, and in testing chemicals for cancer risk.

TSI is working to achieve a leadership role by entering markets where it can use technology to provide high-quality, superior products and services to its customers. Thanks to a combination of acquisitions in preclinical testing services and biological products as well as significant internal growth, we have achieved record revenue performance and profitability. We have emerged as a financially strong, diversified biotechnology company positioned to serve both the present and future needs of the biomedical community.

MOLECULAR BIOLOGISTS Transgenic Animal Research

We have immediate openings in our Transgenic Animal Research Program. Working with a team of cell biologists, pathologists, biochemists and reproductive scientists, successful candidates will conduct research in selected therapeutic areas related to the discovery and development of important animal disease models.

Scientists

Ph.D. degree in Molecular Biology, and a minimum of 4 years' independent postdoctoral research experience in recombinant DNA technology applied to one or more of the following areas: Virology, Oncology, Immunology, and/or Neurophysiology. Candidates should have demonstrated experience in studies involving the regulation of mammalian gene expression, differentiation, gene transfer technology, and/or embryonal stem cell transformation. Prior industrial experience and a strong background in cell biology are highly desirable.

Assistant/Associate Scientists

BA/BS or MA/MS and a minimum of 2 years' relevant work experience in Molecular Biology. Proficiency in a variety of techniques (including PCR, gel electrophoresis, DNA synthesis and sequencing, and mammalian cell culture) is essential.



MEMORIAL UNIVERSITY OF NEWFOUNDLAND HEAD, DEPARTMENT OF BIOCHEMISTRY

Memorial University of Newfoundland invites applications and nominations for the position of Head, Department of Biochemistry, Faculty of Science. The appointment, to be effective September 1, 1992, or the earliest possible date thereafter, is initially for a term of three years and is renewable.

The Department offers undergraduate programs in Biochemistry, Food Science, Nutrition and Dietetics. Graduate programs are offered in Biochemistry and Food Science. Biochemistry is a dynamic Department with strong research programs which have gained international recognition. There are approximately 27 faculty members, 200 undergraduate and 29 graduate students in the Department.

Memorial University is the largest university in Eastern Canada, with approximately 17,500 full and part-time students, supported by a faculty of over 900, and non-academic staff of some 2,000 individuals. The main campus is located in St. John's, the provincial capital, with a population of over 150,000. It enjoys a moderate climate and offers numerous outdoor activities throughout the year.

Applicants should have an active research program and administrative experience, be forward looking and possess a high profile and stature in the discipline as well as a commitment to teaching and research.

Applications and nominations will be treated in confidence. The resume, along with the names of three referees, should be submitted by June 30, 1992, to:

Search Committee
c/o J.M. Foltz, Associate Dean of Science
Memorial University of Newfoundland
Chemistry-Physics Building
St. John's, Nfld., Canada
A1B 3X7
FAX: (709) 737-3316
E-mail: jane@kean.ucc.mun.ca

In accordance with Canadian immigration requirements, first preference will be given to Canadian citizens and permanent residents. Memorial University is committed to the principles of employment equity and welcomes applications from all qualified candidates.

POSITIONS OPEN

POSTGRADUATE RESEARCH POSITION at EPA's Risk Reduction Engineering Laboratory in Cincinnati, Ohio. Position involves research to develop analytical methods for determination of a wide variety of organic constituents in soil matrices. B.S. or M.S. in chemistry within last 3 years preferred. For information: **Postgraduate Research Programs Risk Reduction Engineering Laboratory, Science Engineering Division, ORAU, P.O. Box 117, Oak Ridge, TN 37831-0117, telephone: 615-576-3456.**

POSTDOCTORAL RESEARCH POSITIONS available immediately in funded programs on the mechanisms of human disease. One or more **BIOCHEMIST/IMMUNOLOGISTS** to study cytokine biology; and one or more **MOLECULAR BIOLOGISTS** to study DNA transposition. We are a newly established, well-funded, independent, not-for-profit biomedical research institute. Our 30,000 square feet of modern, state-of-the-art facilities are located on the North Shore University Hospital campus on Long Island, close to New York City and Cold Spring Harbor labs. We offer an excellent salary and benefits program, commensurate with experience. For confidential consideration, please forward your curriculum vitae, with three references, to: **Department-PDS, The Picower Institute For Medical Research, 350 Community Drive, Manhasset, NY 11030. We are an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS are immediately available to work on molecular and cell biological aspects of eicosanoid biosynthetic enzymes and endocrine regulation of human placenta. Candidates with the background and experience in eicosanoid biosynthetic enzyme assays, identification of products, static and dynamic tissue/cell culture methods and other relevant cell and molecular biology and biochemistry techniques are encouraged to apply by sending curriculum vitae and arranging to send three letters of recommendation to: **Dr. C. V. Rao, 438 MDR Building, Department of Obstetrics/Gynecology, University of Louisville Medical Center, Louisville, KY 40292, FAX: 502-588-0881.**

POSTDOCTORAL RESEARCH ASSOCIATE

POSTDOCTORAL position available in retroviral research to examine antisense inhibition of HIV replication and studies of RNA enhancers with investigators, Drs. M. M. Lederman and H.-J. Kung in the Departments of Medicine and Molecular Biology. Submit your curriculum vitae to: **Dr. Michael M. Lederman, Division of Infectious Diseases, Case Western Reserve University School of Medicine, 10090 Euclid Avenue, Room W106, Cleveland, OH 44106-4984. Facsimile number: 216-368-2034. Case Western Research University is an Equal Opportunity Employer.**

RESEARCH ASSOCIATE POSITION available immediately for studying microbial degradation of polynuclear aromatic hydrocarbons. Ph.D. in microbiology, microbial biochemistry, or related field required. Experience in metabolite isolation by HPLC and structural identification preferable. The position provides an opportunity for developing a program of candidate's interest. Please send résumé and names of three references to: **Dr. H. Sikka, Director, Division of Environmental Toxicology and Chemistry, Center for Environmental Research, State University of New York College at Buffalo, 1300 Elmwood Avenue, Buffalo, NY 14222. Telephone: 716-878-5422. FAX: 716-878-5400.**

RESEARCH ASSOCIATE. Perform starch modification and copolymerization experiments, NMR analysis of starch, plastic molding processing (including injection, compression and extrusion), analysis of physical properties of new plastic products. Forty hours per week, \$27,500 per year. Ph.D. in starch chemistry or related fields. *Must have proof of legal authority to work in the United States.* Apply or send résumé to: **Job Service of Iowa, P.O. Box 410 (120 Kellogg Avenue), Ames, IA 50010. Refer to Job Order IA 1100086. This advertisement is paid for by the employer.**

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. **Classified Advertising** telephone: 202-326-6555. FAX: 202-682-0816.

POSTDOCTORAL OPPORTUNITIES

Viral Vaccine Research & Development

Lederle-Praxis Biologicals, recognized as an international leader in the research, development and manufacture of vaccines for the prevention of viral and bacterial disease, is a growing business unit of American Cyanamid Co. Currently, we are seeking several energetic and talented individuals to work as integral members of our multi-faceted Viral Vaccine Research and Development team.

Current projects provide opportunities to study mechanisms of attenuation in live vaccine candidates, to construct and characterize recombinant and chimeric viruses, and to evaluate expression systems to produce viral proteins for vaccine development.

Candidates must be graduates of a PhD program in areas such as Microbiology or Molecular and Cellular Biology. Preference will be given to individuals with hands-on experience with techniques in virology, molecular biology and cell culture.

We offer an excellent salary and benefits package, including a 401K savings plan, and a convenient Rockland County location 25 miles north of New York City. If you're ready to make a contribution to a challenging program, send your resume to: Dept. CQ-JT, Personnel Section, Lederle Laboratories, Pearl River, NY 10965. We are an equal opportunity employer.

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POSITIONS OPEN

RESEARCH ASSOCIATE for treatment, teaching and research hospital in northwestern Ohio. Use vibratome to obtain thin transverse thoracolumbar spinal cord slices of neonatal rats. Intracellular recordings are made from neurons in slice by means of glass microelectrodes. Electrical stimulation is accomplished by bipolar electrode. Signals are amplified via an Axoclamp 2A and displayed on a Gould digital oscilloscope and on a Gould pen recorder. Use patch-clamp techniques to make recording from neurons in lateral horn of the thoracolumbar spinal cord slices. Pharmacological agents are dissolved in Krebs solution and applied to the slice in known concentrations to study the effects on spinal cord preparations. Master's degree in medicine or pharmacology and 1 year of experience in the job described required. Forty hours per week, 8 a.m. to 5 p.m., Monday through Friday; salary: \$23,500 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: J. Davies, JO #1153935, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

RESEARCH ASSOCIATE POSITIONS

Two research associate positions are available for qualified candidates with experience in biochemical and/or biophysical methods. Excellent opportunities to apply state-of-the-art biophysical approaches to important problems in the membrane field.

(1) **STRUCTURAL BIOLOGIST** with experience in protein crystallography or structural electron microscopy (including cryoelectron microscopy) with an interest in applying these methods to problems of membrane receptor-ligand interactions (LDL receptor, insulin receptor, protein kinase C, membrane-toxin interactions, etc.).

(2) **SCIENTIST** with an interest/experience in biochemical/biophysical studies of membrane lipids, lipid-lipid and lipid-protein interactions, etc.

Send curriculum vitae and two letters of recommendation to: Dr. G. Graham Shipley, Department of Biophysics, Boston University School of Medicine, 80 East Concord Street, R111, Boston, MA 02118-2394. Boston University is an Equal Opportunity/Affirmative Action Employer.

BIOLOGIST

The Natural Products Branch, Developmental Therapeutics Program, Division of Cancer Treatment, Frederick, Maryland, invites applicants for the position of biologist. Duties will center on the development and application of methods for the production of plant and marine organism biomass to permit the isolation and purification of large quantities of active agents to meeting program needs for preclinical and clinical development of these agents. The position will involve extensive liaison activities with domestic and foreign research organizations and government agencies. Candidates should have a Ph.D., or equivalent experience, or substantial professional postbachelor degree experience in a biological science, and expertise in methods of mass propagation and cell culture, as well as some knowledge of molecular biology and biochemical processes. Salary commensurate with experience starting at \$46,210 (GS-401-13/14). Qualified and interested candidates should send curriculum vitae and names and addresses of three references to: Mrs. M. Johnson, Personnel Management Branch, NCI, Building 427, Room 14, NCI-Frederick Cancer Research and Development Center, P.O. Box B, Frederick, MD 21702-1201; telephone: 301-846-5023. NIH is an Equal Opportunity Employer.

BIOMEDICAL RESEARCH TECHNICIANS

We are an internationally renowned biomedical research institute based in New York City seeking seasoned technicians interested in becoming involved in breakthrough research in the field of molecular cell biology. To qualify, applicants must have a B.S. or M.S. in a life science and a background in molecular biology and immunology techniques, plus a minimum of 1 year of work experience in a U.S. laboratory. Excellent verbal/written communication skills are essential. These positions offer highly competitive salaries and benefits, along with our state-of-the-art research environment. For immediate and confidential consideration, send your résumé to: Box L-10, 29 West 35th Street, 7th Floor, New York, NY 10001. We are an Equal Opportunity Employer.

Applied Biotechnology

Pfizer, a U.S. based multinational pharmaceutical company, is seeking qualified scientists to expand a recently established Applied Biotechnology research group at its Central Research facility in Groton, Connecticut. We are looking for individuals with strong credentials in the areas of pharmacology and molecular biology or pharmacology and immunology.

You will develop novel assay technology and apply this technology to the discovery of new therapeutic agents. Additionally, you will be expected to establish and maintain collaborations with specific project teams in a number of therapeutic areas throughout our discovery research operations. Your qualifications should include a PhD degree and at least two years postdoctoral training. Experience in natural product screening is desirable, while prior pharmaceutical industry experience will be advantageous.

Pfizer offers a stimulating scientific research environment, a competitive compensation and benefits package along with relocation assistance to this southeastern Connecticut shoreline community. Please send a resume, a description of your research experience, and names of three references to: Mr. Kym J. Goddu, Personnel Associate, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.



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Join Sterling Winthrop and be part of a team dedicated to the enhancement of scientific discovery. Sterling Winthrop Pharmaceuticals Research Division is the worldwide pharmaceutical research and development organization of Sterling Winthrop Inc.

We currently seek a Research Leader to direct mass spectrometry facilities at two U.S. sites. Along with providing overall leadership to the Mass Spectrometry group, responsibilities include providing timely, high quality mass spectrometry results to chemists and analysts and collaborating with project teams on discovery projects requiring unique applications of leading edge mass spectrometry.

Requirements include a Ph.D. and at least 6 years of related experience along with a strong scientific background with publications demonstrating collaboration across multiple fields.

At Sterling Winthrop, you'll enjoy a highly competitive salary and benefits package. For confidential consideration, forward your resume and salary requirements to:



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Cortech is a Denver-based pharmaceutical research and development company working in the areas of inflammation and immunology. Cortech offers a stimulating environment where a multidisciplinary approach is used to develop new therapies for human disease.

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IMMUNOLOGIST

Immunologist with 1 to 2 years of postdoctoral experience to join a multidisciplinary group studying the role of T cells in allergy and antibody-mediated autoimmune diseases.

PHARMACOLOGIST

Ph.D. pharmacologist with minimum of 2 years of postdoctoral experience, preferably in the areas of asthma/airways hyperreactivity, neurogenic inflammation, pain or CNS trauma. Ability to set up and organize research, including trouble shooting equipment, resolving experimental design problems and supervising one or two research assistants required. Working knowledge of routine in vitro and in vivo experiments and analytical expertise essential.

Excellent compensation and benefits package offered. Cortech is an Equal Opportunity Employer. Please send curriculum vitae to: Personnel, Cortech, Inc., 6840 North Broadway, Denver, CO 80221.

MOLECULAR BIOLOGIST SENIOR RESEARCH ASSOCIATE

Position available immediately to study B cell lymphokine and B cell lymphokine receptor expression in the Lymphokine Research Laboratory. Specific requirements include a strong background in molecular biology including cDNA cloning and sequencing, vector construction, point mutations and PCR.

POSTDOCTORAL POSITION IN MOLECULAR AND CELLULAR BIOLOGY

A postdoctoral position is immediately available to study B cell lymphokine secretion and B cell lymphokine receptor expression. Applicants should have experience in cell and molecular biology techniques. Please send curriculum vitae, a brief description of research experience and the names and addresses of three references to: David Benjamin, M.D., Lymphokine Research Laboratory, 1232 James Cancer Hospital and Research Institute, Ohio State University Hospitals, 300 West 10th Avenue, Columbus, OH 43210-1228.

MOLECULAR PARASITOLOGIST

Applications are invited for a research scientist with experience in the study of parasitic organisms at the molecular level. The project will focus on the development of novel anti-sense oligonucleotides as therapeutic agents for specific parasitic illnesses. Experience with the growth of parasitic agents in vitro and in murine models is essential. Additional experience with plasmid preparations, Northern, Southern and Western blotting is highly desirable. Applicants should possess a doctoral degree for this position which will be either at the level of a postdoctoral fellow or of a non-tenured assistant professor. Salary will be commensurate with experience and benefits will be provided. Please send résumé to: Human Resources Department, attention: Molecular Parasitologist, 1401 Rockville Pike, Suite 600, Rockville, MD 20852.

SENIOR RESEARCH SCIENTIST

Scientist needed to undertake a vaccine development program which has as its initial objective the development of vaccines for Respiratory Syncytial Virus and Hepatitis C; to utilize recombinant DNA approaches for expression of the viral glycoproteins and utilize affinity chromatography for purification of these molecules; with the resulting preparations being evaluated for efficacy in experimental animals and human volunteers. Ph.D. in Enzymology with 2 years of research in vaccine development including molecular cloning and characterization of respiratory syncytial virus; construction of vaccinia recombinants expressing virus surface antigens; and establishment and supervision of molecular biology laboratory facilities. Forty hours per week, 8:00 a.m. to 5:00 p.m. Salary, \$40,000 per year. Contact: Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222, RE: Job Order #AL0684190.

POSITIONS OPEN

CLINICAL RESEARCHER: Develop/monitor clinical protocols. Analyze data and write research reports. Requirements: Ph.D./molecular biology/3 years of experience. Ability to interpret and evaluate laboratory and clinical data and conduct statistical analysis and interpret results. Specialized knowledge in hematology and clotting studies. Salary: \$4000 per month. Job site interview: Los Angeles, California. Send this ad and résumé to: Job #DB22820, P.O. Box 9560, Sacramento, CA 95823-0560 no later than 4 May 1992.

RESEARCH ANALYTICAL CHEMIST. To acquire, process and interpret one- and two-dimensional nuclear magnetic resonance (NMR) spectra for establishing the chemical and stereochemical identities of drug candidates and other organic molecules, as well as for identifying quantitative impurities. Develop and implement high resolution nuclear magnetic resonance techniques for elucidation of molecular structures, dynamics and functions; utilize multiple quantum spectroscopy, NOESY, TOCSY, COSY, MQF-COSY, ROESY, HMQC, HMBC and other nuclear magnetic resonance techniques including different water suppression methods, saturation transfer experiments, and insensitive nucleus enhancement by polarization transfer. To participate in a project team for developing capabilities and methodologies to apply nuclear magnetic resonance spectroscopy and magnetic resonance imaging (MRI) in detecting diseases of soft tissue, heart, brain and kidney by using spin dynamics, slice selection and multi-dimensional Fourier transformation, and selecting the region of interest using both surface coils and birdcage coils. Responsible for development and maintenance of computer software including programs developed for laboratory automation and data processing, which requires the use of both VMS and Unix operating systems. Ph.D. in chemistry and 2 years of experience as research analytical chemist or 2 years of experience as postdoctoral researcher required. Previous employment experience must have included characterizing the structural and functional aspects of genetic variants and point mutants of myoglobins with modern phase-sensitive 2D ¹H NMR methodologies, such as NOESY, MQF-COSY, Relayed-COSY, P. COSY, TOCSY, and Multiple Quantum Spectroscopy. Previous experience must also have included utilizing 3D HMQC-COSY, HMQC-NOESY, and COSY-NOESY development and applications on biomolecules, Silicon Graphics IRIS computers to do myoglobin modeling, structural analyses and ring-current calculations, and NMR techniques including different water suppression pulse sequences, saturation transfer experiments, NOE and spin decoupling experiments. Forty hours per week, 8:15 a.m. to 4:55 p.m.; \$4000 per month. *Must have proof of legal authority to work permanently in the United States.* Send résumés to: Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605. Attention: P. Kula, Reference #V-IL-4894. No calls. *An employer-paid ad.* Two copies of résumé required.

New York Blood Center, Hudson Valley Blood Services Division, Valhalla, New York. **TRANSFUSION MEDICINE PHYSICIAN** needed for busy regional blood center with tertiary care hospital affiliation. Responsibilities include medical oversight of Hospital Transfusion Service, therapeutic apheresis and blood center laboratories with research opportunities. Board certification in blood banking a requirement and must qualify for a faculty appointment at New York Medical College. Send curriculum vitae to: David Ciavarella, M.D., Hudson Valley Blood Services, Grasslands Reservation, Valhalla, NY 10595, or FAX to: 914-592-1577.

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A 1-week intensive course sponsored by the Massachusetts Institute of Technology (MIT), 15 to 19 June 1992, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director. Basic Principles of Cardiovascular Physiology, Cardiovascular Medicine, Diagnostic and Therapeutic Technologies. Contact: Director of the MIT Summer Session, 617-253-2101.

ANNOUNCEMENTS

ALFRED P. SLOAN FOUNDATION SABBATICAL AWARDS IN MOLECULAR STUDIES OF EVOLUTION

Molecular or evolutionary biologists at U.S. and Canadian institutions are invited to apply for sabbatical awards for academic year 1993 to 1994, for development of interdisciplinary knowledge needed for molecular studies of evolution. Awards include matching funds for sabbatical salary and expendables allowance. Deadline: 26 June 1992. Contact: Dr. Michael S. Teitelbaum, 630 Fifth Avenue, Suite 2550, New York, NY 10111. Telephone: 212-649-1649.

INTERNATIONAL SYMPOSIUM ON "BIODIVERSITY IN MANAGED LANDSCAPES: THEORY AND PRACTICE" to be held at the Capitol Plaza Holiday Inn, Sacramento, California, U.S.A., 13 to 17 July 1992. Sponsored by a host of U.S. federal agencies and international conservation organizations. The program's objectives are to provide the scientific basis for understanding biodiversity, document case examples of theory and concepts applied at differing scales, and examine policies that effect its conservation. A distinguished group of invited speakers will address: genetic diversity; species diversity; community diversity; landscape diversity; setting objectives and priorities, inventory, monitoring, and assessment; management strategies; and policy and social considerations. For further information write or call: Dr. Robert C. Szaro, USDA Forest Service, Forest Environment Research, P.O. Box 96090, Washington, DC 20090-6090, telephone: 202-205-1524 or FAX: 202-205-1551.

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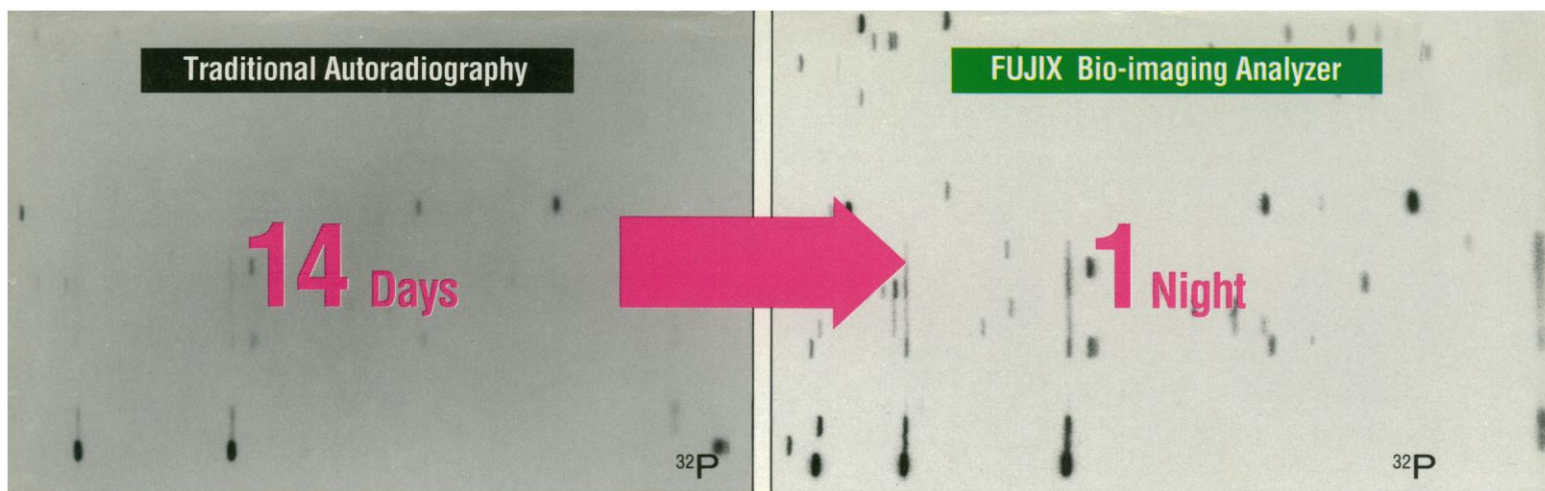
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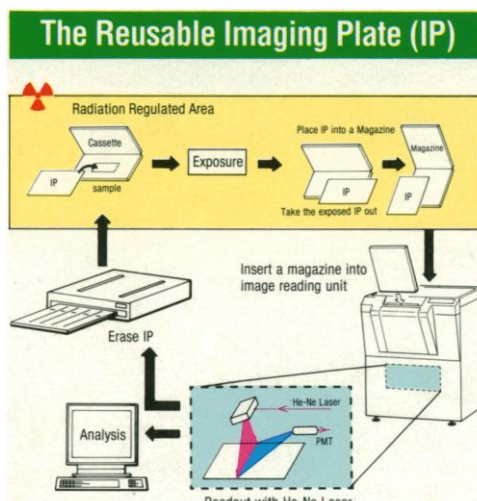
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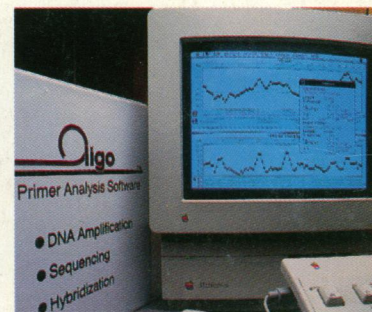
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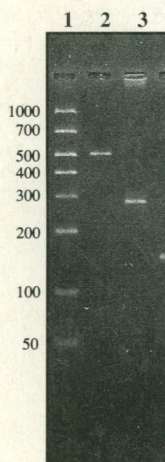
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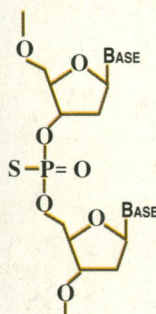
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