

gram, and a brief indication of their role would have been welcome.

In mineralogy, especially since Werner, minerals had been classified according to their external characteristics. Berzelius's extension of stoichiometry and analysis, to bring mineralogy into chemical science, is well handled. So too is his relative failure to subordinate organic chemistry to chemical procedure, in part because of the difficulty of reaching the specific level—that is, of obtaining pure organic substances. The result was that Berzelius, at least into the 1820's, regarded organic chemistry as essentially natural history, not science. Nonetheless, his work provided the foundation of the reinterpretation of the radical theory that was to underpin organic chemistry in its subsequent development—a theme left for subsequent studies. This book, scrupulous and thorough in its research, ends with the full articulation of Berzelius's system around 1820.

TREVOR H. LEVERE

Institute for History and Philosophy of Science and Technology, University of Toronto, Toronto M5S 1A1, Canada

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(Continued on page 1344)

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 Phosphorus-32
 Phosphorus-33
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POSITIONS OPEN

ANATOMIST. Position open at assistant professor level. Applicants should hold a Ph.D., D.O., or M.D. degree. Experience teaching gross anatomy is necessary. Knowledge of neuroanatomy is desirable. Applicants should send curriculum vitae, a summary of research experience and goals, and names of three references to: **Dr. P. L. Szabo, Chairman, Department of Anatomy, New York College of Osteopathic Medicine, P.O. Box 170, Old Westbury, Long Island, New York 11568. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR. The Department of Veterinary and Animal Sciences, University of Massachusetts, is seeking applicants for a tenure-track position in veterinary pathology. Responsibilities include teaching undergraduate animal diseases course; developing and conducting research program with large animals, preferably dairy; and directing large animal diagnostic laboratory with limited case load. Qualifications include D.V.M. plus additional training, preferably Ph.D. or Board-certification. Must be interested in teaching and research with research interests in bovine diseases desirable. Applicants should submit letter of application and curriculum vitae and request three letters of reference be sent to: **Dr. James B. Marcum, 313 Paige Laboratory, University of Massachusetts, Amherst, Mass. 01003; telephone: 413-545-2312.** Application deadline: 2 July 1982, or until position is filled, *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOCHEMISTRY

A tenure-track faculty position is available in the Biochemistry Department, School of Medicine and Dentistry. Candidates must have postdoctoral experience and an established record of research productivity; teaching experience is desirable. Duties will involve participation in teaching basic and advanced courses to medical and graduate students and conducting independent research. Department areas of research include gene regulation, membrane biochemistry, structure and function, hormone receptors and actions, and regulatory biochemistry. Salary and academic rank are dependent on background and prior experience. Please submit curriculum vitae, a synopsis of proposed research, and names of three references. All material should be sent to:

**Dr. Russell Hilf
Chairman, Search Committee
University of Rochester
School of Medicine, and Dentistry
Department of Biochemistry, Box 607
601 Elmwood Avenue
Rochester, New York 14642**

The University is an Affirmative Action/Equal Opportunity Employer.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND DEPARTMENT OF EARTH SCIENCES ASSISTANT/ASSOCIATE PROFESSOR

The Department of Earth Sciences, Memorial University of Newfoundland, presently with 26 faculty, is expanding into areas related to East Coast offshore petroleum exploration and development. One and, possibly, two tenure-track positions are available at the assistant/associate professor level and applications are invited from specialists in **organic geochemistry and clay mineralogy.** A Ph.D. in earth sciences or related field is required, together with proven research and teaching capability; salary will be commensurate with qualifications and experience and will commence in the range of \$25,550 to \$39,000.

Applications or enquiries should be sent to:

**Dr. C. R. Barnes, Head
Department of Earth Sciences
Memorial University of Newfoundland
St. John's, Newfoundland, Canada A1B 3X5
Telephone: 709-737-8143**

ASSISTANT PROFESSOR, Extension Beef Cattle Nutrition, AND MANAGEMENT SPECIALIST. Appointment is full-time in extension. Candidates must have a Ph.D. in ruminant nutrition and a thorough understanding of beef cattle management. Ability to communicate effectively with clientele and colleagues in team educational efforts is essential. Apply with résumé and transcripts and have a minimum of three referees forward letters of recommendation to: **Dr. S. A. Ewing, Head, Department of Animal Science, 101 Kildee Hall, Iowa State University, Ames, Iowa 50011. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

ASSISTANT PROFESSOR—BIOLOGY

The Biology Programs of the University of Texas at Dallas invite applications for two tenure-track positions at the assistant professor level beginning 1 September 1982. Applicants should be actively engaged in research in **eukaryotic and cellular molecular biology**, have at least 2 years of postdoctoral experience, and show evidence of independent, productive work sufficient to obtain federal grant support. The University has an upper level undergraduate biology program and a graduate biology (M.S., Ph.D.) program with research emphasis on molecular and cellular biology. The successful candidates will be expected to participate in teaching cell biology and/or biochemistry, supervise graduate students, develop a vigorous and independent research program, and interact with the current faculty. Send curriculum vitae (indication of sex and ethnicity for Affirmative Action statistical purposes is requested but not required), a short description of research plans, and names of three or more references to:

**Academic Search Number 246
The University of Texas at Dallas
P.O. Box 688
Richardson, Texas 75080**

Applications should be received by 15 August 1982.

The University of Texas at Dallas is an Affirmative Action/Equal Opportunity Employer.

A 2-year appointment, beginning fall 1982 or January 1983, in **geochemistry/chemistry** area at the **ASSISTANT PROFESSOR OR INSTRUCTOR** level. There is much flexibility in the courses which might be taught and special consideration will be given to candidates whose research interests can take advantage of facilities and research activities present at Bowdoin College. Candidates with backgrounds in fields ranging from chemical oceanography to sedimentary geology are encouraged to apply. Ph.D. preferred. Curriculum vitae and names of three references to: **Professor S. S. Butcher, Chemistry Department, Bowdoin College, Brunswick, Maine 04011.** Closing date: 31 July 1982. *Equal Opportunity/Affirmative Action Employer.*

DIRECTOR OF ENVIRONMENTAL HEALTH AND SAFETY UNIVERSITY OF WASHINGTON

Responsible for a program covering radiation safety, biohazard control, industrial hygiene, occupational safety and health, fire safety, sanitation, and diving safety on a campus that enrolls 35,000 students and includes a health science center with two hospitals. Candidates should possess a master's degree in environmental health, public health administration, or related field, or an equivalent combination of education and experience, plus a minimum of 6 years of experience (including 3 years of management experience) in the field of environmental health, safety, or industrial hygiene. Applicants should send a résumé, three references, and a salary history to: **John Coulter, Assistant Vice President, Health Sciences Center, SC-61, University of Washington, Seattle, Wash. 98195. An Equal Opportunity/Affirmative Action Employer.**

DIRECTOR OF ACADEMIC COMPUTING COMPUTER LABORATORY

**MICHIGAN STATE UNIVERSITY (MSU)
(Extending application deadline to 15 July 1982)**

Responsible for planning and directing the operational and administrative activities of the MSU Computer Laboratory, MSU's center for academic computing, and guiding the continuing design and implementation of a campus-wide data communication network.

The director reports to the office of the provost.

Minimum qualifications: earned doctorate from an accredited academic institution. Extensive administrative experience in a computing environment providing computing services to a diverse group of instructional and research users. Established professional reputation in a computer discipline or in computer applications in another discipline.

Salary negotiable depending on qualifications and experience.

Send letter of application, résumé, and references by 15 July 1982 to:

**Dr. Jack B. Kinsinger
Associate Provost
Office of the Provost
Michigan State University
East Lansing, Michigan 48824**

An Affirmative Action/Equal Opportunity Institution

POSITIONS OPEN

CARDIOVASCULAR PHYSIOLOGIST/ PHARMACOLOGIST

A position is available at Southwest Foundation for Research and Education for a scientist with a Ph.D. in physiology or pharmacology. The individual will be expected to conduct an independent research program and to coordinate research activities in our cardiovascular research laboratory in collaboration with Dr. Vernon S. Bishop of the Department of Pharmacology at the University of Texas Health Science Center at San Antonio. An interest in nonhuman primate research and knowledge in cardiovascular instrumentation is necessary. Southwest Foundation has modern animal surgery facilities, biochemical laboratories, a well-equipped cardiovascular laboratory for studying conscious primates, and a veterinary staff. Salary is competitive and commensurate with experience and training. The appointment can be at either the associate or assistant scientist rank. Please send curriculum vitae, a description of present and future research interests, and names of three references to: **Personnel Director, Southwest Foundation for Research and Education, P.O. Box 28147, San Antonio, Texas 78284. We are an Equal Opportunity/Affirmative Action Employer.**

CARDIOVASCULAR PHYSIOLOGIST for a position of research associate (Ph.D., M.D., or biomedical engineer) to work on development of an experiment for the first dedicated Space Shuttle/Space Lab (in 1985). Possibility of teaching a few lectures per year in the medical course. Salary: \$26,000 to \$28,000 per year. Write: **Dr. V. Popovic, Department of Physiology, Emory University School of Medicine, Atlanta, Ga. 30322. An Equal Opportunity/Affirmative Action Employer.**

CELL/MOLECULAR BIOLOGIST position in the Department of Cellular and Molecular Biology at the Southwest Foundation for Research and Education which is affiliated with the University of Texas Health Science Center at San Antonio. The individual sought is expected to collaborate in established programs examining hormonal regulation of target tissue function during aging and in neoplasia and to develop an independent complementary research program. Applicants with a Ph.D. degree with predoctoral and at least 2 years of postdoctoral experience in studies examining gene expression by techniques of in vitro translation or transcription analysis are particularly desired. The Department of Cellular and Molecular Biology is directed by Dr. Sydney A. Shain, maintains a large colony of inbred rats for studies in aging, and has established programs of in vivo and in vitro studies related to prostatic cancer. The research environment provides an excellent opportunity for an aggressive, creative scientist. Send résumé, a statement of research interests, and names of three references to: **Personnel Manager, Southwest Foundation for Research and Education, P.O. Box 28147, San Antonio, Texas 78284.**

We are an Equal Opportunity/Affirmative Action Employer.

THE UNIVERSITY OF TASMANIA CHAIR OF BIOCHEMISTRY

Applications are invited for appointment to the chair of biochemistry, which will become vacant on the retirement of the foundation professor, Professor E. S. Holdsworth, on 28 February 1983.

Candidates with suitable qualifications and experience in any field of biochemistry are invited to apply.

The present professorial salary is A\$43,904 per annum. In addition, a medically qualified appointee will be entitled to receive an appropriate clinical loading.

Candidates who wish to apply should in the first instance write to: **The Registrar, University of Tasmania, Box 252C, G.P.O. Hobart, Tasmania, 7001, Australia,** to obtain further information, including a detailed statement of the conditions of appointment and an application form. Applications close on 30 July 1982.

CHIEF, LABORATORY SERVICE. A Board-certified pathologist with special interest in clinical pathology for an 800-bed medical, surgical, and psychiatric VA Medical Center located near Roanoke in southwestern Virginia in the Blue Ridge Mountain area. Affiliated with the University of Virginia Medical School. *An Equal Opportunity Employer.* Interested applicants send curriculum vitae to: **Philip Fogg, M.D., Chief of Staff, VA Medical Center, Salem, Virginia 24153.**

POSITIONS OPEN

KANSAS STATE UNIVERSITY

The Department of Physics will have a 1-year temporary position available beginning 23 August 1982 at the rank of **assistant or associate professor**. Candidates are sought who have an interest in one of the following areas: applied physics, atomic physics, biophysics, climatology, condensed matter physics, light scattering, nuclear physics, or physics education.

Applications must be submitted prior to 15 July 1982 to: **John Eck, Department of Physics, Kansas State University, Cardwell Hall, Manhattan, Kansas 66506**, and should include a résumé and a brief statement of research interests. Candidates should arrange to have three letters of reference sent to the same address by the above date.

Kansas State University is an Equal Opportunity Employer.

ASSISTANT RESEARCH BIOCHEMIST. The University of California, Davis, Department of Pediatrics, is seeking a full-time assistant research biochemist. The applicant must hold a Ph.D. in biochemistry, have postdoctoral and grant writing experience, and have experience in toxicology, enzymology, and renal preparations (isolated perfused kidney, brush border preparations, isolated tubules, and so forth). Submit curriculum vitae, statement of present and proposed research interests, and names and addresses of five references to: **Michael Miller, M.D., Department of Pediatrics, 4301 X Street, Sacramento, Calif. 95817.** The University of California is an Equal Opportunity/Affirmative Action Employer. Position closes 31 July 1982.

ENZYMOLOGIST familiar with enzyme activity assays for methylglyoxal synthase and enzymes involved in methylglyoxal catabolism, HPLC peptide mapping, high sensitivity peptide and amino acid analysis, computer experience (software and hardware), electrophoresis, electrofocusing and chromatofocusing experience, ability to supervise technicians and graduate students. Must have a Ph.D. in chemistry/biochemistry and have 2 years of laboratory training along with 2 years of experience in the laboratory. Must have knowledge of computer-assisted retrieval of scientific literature, experience in subcellular fractionation and enzyme isolation, along with experience in chromatofocusing and methods of resolving isozymes and minor forms of enzymes. This is a full-time position for \$1250 per month. Apply at: **Texas Employment Commission, Denton, Texas**, or send résumé to: **Texas Employment Commission, TEC Building, Austin, Texas, 78778; Job Order Number 2612590.** This ad paid by an Equal Opportunity Employer.

Two Positions EVOLUTIONARY MOLECULAR BIOLOGIST ELECTRON MICROSCOPIST

Two assistant professorships are available August 1982. Both are 1-year appointments possibly leading to tenure-track status. Teaching duties for the **EVOLUTIONARY MOLECULAR BIOLOGY** position will include a portion of introductory biology for majors, a senior or graduate-level course emphasizing recombinant DNA technology, and development of a laboratory course in molecular biology techniques. Preference will be given, but not limited, to persons interested in molecular biology of plant systems. Applicant should have knowledge of modern biochemical/molecular genetic approaches to evolutionary biology of eukaryotic systems. Teaching duties for the **ELECTRON MICROSCOPY** position include graduate-level courses in preparation of specimens for and use of an AEI EM6B and a senior or graduate-level course in candidate's specialty area. Ability to assist and interact well with faculty and graduate students in a variety of disciplines is essential. Preference may be given, but not limited, to persons interested in parasitology. Both candidates should have postdoctoral experience and must demonstrate excellence in teaching. Participation in the supervision of graduate students, development of an active research program, and attraction of extramural funding are expected of both candidates. Send curriculum vitae, copies of recent or most important research papers, a brief statement of research goals, and names and addresses of four references to:

**Dr. Donald W. Duszynski, Chairman
Department of Biology
University of New Mexico
Albuquerque, N.M. 87131**

The University of New Mexico is an Equal Opportunity/Affirmative Action Employer.

18 JUNE 1982

POSITIONS OPEN

COMPUTER SCIENTIST FOR CARDIOVASCULAR IMAGING. Faculty position involving innovative research in image and digital signal processing, computer graphics, and application software development. Experience in cardiac research, biomedical engineering/physics desirable but not essential. Inquiries with curriculum vitae to: **Harvey J. Berger, M.D., Director of Cardiovascular Imaging, Department of Diagnostic Radiology, Yale University School of Medicine, 333 Cedar Street, New Haven, Conn. 06510.** The University is an Equal Opportunity/Affirmative Action Employer and applications from women and members of minority groups are welcomed.

DEVELOPMENTAL BIOLOGIST

Applications are invited for a tenure-track position at the assistant professor level. Applicants must have demonstrated excellence in research and teaching and the potential to develop an independent research program which would complement on-going programs in molecular, cellular, and developmental biology. Postdoctoral experience required. We seek candidates with research interests in one of the following areas: mechanisms of cell-cell interactions and recognition and cell migration, development of the nervous system, or gene regulation in development. Research experience with monoclonal antibodies, cell hybridization, or gene insertion desirable. Teaching responsibilities will include supervision of Ph.D. candidates, participation in an undergraduate course in the cellular basis of development, and an advanced course in the applicant's specialty. Send curriculum vitae, statement of academic training and research interests, and three letters of reference to: **Developmental Biology Search Committee, Biology Department, Wesleyan University, Middletown, Conn. 06457.**

Wesleyan University is an Equal Opportunity/Affirmative Action Employer and encourages applications from members of minority groups and women.

DIABETES RESEARCH POSITION. Sansum Medical Research Foundation. Available 15 October 1982 as head of diabetes research in charitably funded foundation. Requires M.D. degree and several years of research experience, and ability to create and pursue own program. Salary commensurate with qualifications. Foundation is closely affiliated with 60-physician multispecialty clinic and adjacent to 400-bed hospital. University affiliation possible. Send curriculum vitae and names of three references to:

**C. A. Domz, M.D.
Sansum Medical Research Foundation
P.O. Box LL
Santa Barbara, California 93105**

ECOLOGIST. Tenure-track position beginning August 1982 teaching nonmajors environmentally oriented and interdisciplinary courses. Plant ecologist given preference. Ph.D. required. Send résumé, transcripts, and three letters of reference to: **Bruce MacLaren, Natural Science Department, Eastern Kentucky University, Richmond, Kentucky 40475**, by 13 July 1982. *Eastern Kentucky University is an Equal Opportunity/Affirmative Action Employer.*

ENVIRONMENTAL SCIENCES/NATURAL MANAGEMENT. The South-East Consortium for International Development (SECID), a nonprofit corporation providing research, training, and extension in developing nations, invites applications for the position of East Africa Project Representative for the Environmental Training and Management in Africa Project. The successful applicant will be posted in Nairobi, Kenya, and will be expected to work with African institutions and U.S. AID environmental officers in planning and implementing training programs in environmental sciences, environmental planning, and resource management in eastern and southern African nations. Candidates must have a Ph.D. degree in environmental sciences/natural resource management or related subjects; preference will be given to candidates with significant international experience, particularly in East Africa. The position is available from 1 August 1982. Send résumé, including description of international experience, a complete list of publications, and the names and addresses of three references, to:

**Dr. Earle N. Buckley
SECID
400 Eastowne Drive
Suite 207
Chapel Hill, N.C. 27514**

Application deadline: 15 July 1982. *SECID is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS IN PHYSIOLOGY

Applications are invited for two tenure-track positions. One position is available at the rank of assistant professor and one at the rank of associate professor. Applicants must have a strong interest in teaching medical and graduate students and must have a strong ongoing research program in cardiovascular physiology. Send letter and curriculum vitae to: **Dr. Carl E. Jones, Chairman, Department of Physiology, Texas College of Osteopathic Medicine (TCOM), Camp Bowie at Montgomery, Fort Worth, Texas 76107.** TCOM is a state-supported medical school under the direction of the North Texas State University Board of Regents. An Affirmative Action/Equal Opportunity Employer.

HEAD, FISHERIES AND WILDLIFE WITH UTAH STATE UNIVERSITY

Chief administrative officer of large department with active program of teaching, research, and extension. Must have Ph.D. in wildlife, fisheries, or a closely related field; substantial academic experience; and proven record of excellence in teaching, research, or administration. Nonacademic experience also desirable; strong quantitative skills preferred. Send résumé, reprints, and names of five references by 1 September 1982 to:

**Dr. John A. Kadlec
Department of Fisheries and Wildlife
Utah State University
UMC-52
Logan, Utah 84322**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION

Available 1 July 1982: Individual with Ph.D. training in biochemistry or genetics preferred. Research area includes molecular biology of host T cell recognition in antitumor immunity. Stipend: \$17,000 for first year—National Cancer Institute of Canada (scale). Please send résumé to: **Dr. Bruce E. Elliott, Cancer Research Laboratories, Botterell Hall, Department of Pathology, Queen's University, Kingston, Ontario, Canada K7L 3N6.** Telephone: 613-547-6259.

ASSISTANT/ ASSOCIATE PROFESSOR Microbiology and Immunology

The Department of Microbiology and Immunology at the Albert Einstein College of Medicine has a position for an assistant or associate professor, with interests primarily in the area of molecular and tumor virology. The candidate must have a Ph.D. or M.D. degree with a minimum of 2 years of postdoctoral training. The position requires an individual who will establish a vigorous program of independent research as well as participate in graduate teaching.

Interested applicants should forward a letter of application, curriculum vitae, and names of three references to: **Search Committee, Department of Microbiology and Immunology,**

**ALBERT EINSTEIN
COLLEGE OF MEDICINE
1300 Morris Park Avenue
Bronx, New York 10461**

An Equal Opportunity Employer

POSITIONS OPEN

National pharmaceutical manufacturer is seeking Ph.D. with strong background in IMMUNODIAGNOSTICS as well as possessing management experience. Excellent opportunity for advancement. Please send detailed résumé, including salary requirements, to: **Personnel Administrator, Hollister-Stier, P.O. Box 3145, Spokane, Wash. 99220.** An Equal Opportunity Employer, M/F/H.

IMMUNOLOGIST/MICROBIOLOGIST

A vacancy exists as research assistant professor in the Department of Microbiology to undertake research in immunology and/or microbiology, particularly in relation to oral and other secretory environments, and to teach graduate and dental students. Salary not less than \$24,200 per annum. Ph.D. or equivalent, at least 3 years of postdoctoral experience in relevant areas desired. Please forward curriculum vitae and two references to: **Dr. Jiri Messtky, University of Alabama in Birmingham, University Station, Birmingham, Ala. 35294.** An Equal Opportunity/Affirmative Action Employer.

LIFE SCIENCE RESEARCH POSITIONS Agricultural Research Service

Career positions in areas of (i) animal production and protection; (ii) plant production and protection; (iii) use and improvement of soil, air, and water; (iv) processing, storage, distribution, food safety, and consumer service; and (v) human nutritional requirements and the composition and nutritive value of food. A monthly Listing of Positions in Life Science Research with the U.S. Department of Agriculture, listing current vacancies, is issued by:

**Special Examining Unit 421/408
Science and Education
U.S. Department of Agriculture
6505 Belcrest Road, Room 555
Hyattsville, Maryland 20782**

MYCOLOGIST—HAWAII, ASSISTANT PROFESSOR, tenure-track position. Duties: courses in general mycology and general botany; participation in research relating to basic aspects of agriculture and natural resources. Appointee will be expected to develop advanced courses. Research areas open with respect to systematics, ecology, physiology, or combinations. Write for details: **Chairman, Department of Botany, University of Hawaii, 3190 Maile Way, Honolulu, Hawaii 96822.** An Equal Opportunity/Affirmative Action Employer. Closing date: 15 August 1982.

NUTRITIONIST

Interested candidates are invited to submit application for the following responsibilities: (i) developing a research program or participating in research activities in the area of **NUTRITION AND PUBLIC HEALTH** or **HUMAN NUTRITION**; (ii) teaching graduate courses in nutrition; and (iii) advising graduate students at Ph.D. level. Ph.D. and evidence of research competence required; experience in teaching desirable. Candidate expected to teach in French after 1 year.

Applications, including curriculum vitae, reprints, and three letters of recommendation, should be sent to:

**Dr. G. J. Brisson, directeur
Programme de doctorate en nutrition
Centre de recherche en nutrition
Université Laval
Québec, Canada G1K 7P4**

PATHOLOGIST. Applications sought for director of surgical pathology, Los Angeles County—University of Southern California Medical Center. California license required. Candidate should have a strong interest in teaching and scholarly activity. Reply to: **Chair, Department of Pathology, 2025 Zonal Avenue, Los Angeles, California 90033.** An Equal Opportunity/Affirmative Action Employer

THREE POSTDOCTORAL POSITIONS in neuropharmacology/neurotoxicology available immediately to study acute and chronic organophosphate toxicity using biochemical techniques in brain (Dr. Burt) and electrophysiological techniques applied to spinal and peripheral neurons and synapses and to skeletal muscle (Dr. Warnick) and to autonomic neurons and synapses (Dr. Weinreich) and of various animal species. Experience in biochemical or electrophysiological techniques preferred; knowledge of computer science helpful. Send résumé and three references to: **Dr. D. R. Burt, Dr. J. E. Warnick, or Dr. D. Weinreich, Department of Pharmacology and Experimental Therapeutics, University of Maryland School of Medicine, Baltimore, Md. 21201.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE positions in a malaria research program, to begin September to December 1982. Candidates should have experience either in preparation and cloning of cDNA or in production of monoclonal antibodies. Send curriculum vitae and the names of three references to: **Dr. Araxie Kilejian, The Public Health Research Institute of the City of New York, 455 First Avenue, New York, N.Y. 10016.** An Equal Opportunity Employer.

POSTDOCTORAL POSITION available in September or October 1982, for studies on the isolation and cloning of eukaryotic mRNA from selected cell lines. Prior experience in recombinant DNA technology required, and hybridoma technology highly desirable. Send curriculum vitae, a description of research interests, and names and addresses of three references to: **Dr. Andrew H. Kuniyuki, Department of Pomology, University of California, Davis, California 95616.**

POSTDOCTORAL POSITION available September 1982 for biochemical and pharmacological studies of muscarinic receptors in mammalian brain. Starting salary: \$15,000 for this 2-year position. Send curriculum vitae and names of three references to: **Dr. Robert S. Aronstam, Department of Pharmacology, Medical College of Georgia, Augusta, Ga. 30912.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION—Available for a Ph.D. in immunochemistry. The project involves development of human-human hybridomas which secrete clinically useful antibodies. Experience in mammalian cell culture techniques necessary. Salary negotiable, depending on qualifications. Send curriculum vitae and three references to: **Dr. Herbert Kupchik, Department of Microbiology, Boston University Medical Center, 80 East Concord Street, Boston, Mass. 02118.** An Equal Opportunity Employer, M/F.

POSTDOCTORAL POSITION available for research on the structure and control of expression of normal and abnormal human hemoglobin genes. Background in nucleic acid technology desirable. Send curriculum vitae to: **Dr. R. F. Rieder, State University of New York—Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, N.Y. 11203.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to study biochemistry of blood vessel formation and vascular disorders. Studies include molecular nature and biological functions of vascular endothelial growth factor (VEGF), VEGF antibody, and VEGF receptors in normal and pathological tissues and in tumors. Strong background in protein chemistry, cell culture, or immunology is desirable. Send résumé to: **Dr. C. H. Chen, Wilmer Institute, Johns Hopkins University School of Medicine, CMSC-7, Room 106, 601 North Broadway, Baltimore, Md. 21205.**

POSTDOCTORAL POSITION IN RESPIRATORY PHYSIOLOGY AND BIOCHEMICAL PHARMACOLOGY to study airway smooth muscle during aging. Salary negotiable. Send curriculum vitae and three names of reference to: **Dr. James S. Douglas, The John B. Pierce Foundation Laboratory (an affiliate of Yale University), 290 Congress Avenue, New Haven, Conn. 06519,** by 15 July 1982.

PROTEIN CHEMIST

Cetus, the bioindustrial company, is seeking an associate scientist skilled in microsequencing of peptides and proteins. The successful candidate should have a Ph.D./M.S. in biochemistry with 3 to 6 years of protein chemistry research and state-of-the-art, hands-on experience with Edman Sequencing methods. Interested applicants should submit their résumé as soon as possible to:

**CETUS CORPORATION
Box S080
600 Bancroft Way
Berkeley, Calif. 94710**

*An Equal Opportunity Employer,
M/F/Handicapped*

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study molecular mechanisms of drug mutagenesis. Photoaffinity analogs of ethidium and acridine will be used to identify and characterize DNA target sites responsible for specific biological processes. Research will require recombinant DNA technology and nucleic acid sequencing. Therefore, experience with nucleic acids is desirable. Please send curriculum vitae and the names of three references to: **Dr. Jim Gaubatz, Department of Biochemistry, University of South Alabama, Mobile, Alabama 36688.**

POSTDOCTORAL POSITION available for 2 years at the **Marine Biological Laboratory (MBL)** to study: (i) mechanism of a rotary axostyle in a protozoan; (ii) membrane fluidity in the shear zone; (iii) control of ciliary motion in ctenophores; or (iv) mechanosensory transduction by ctenophore cilia. Experience in biochemistry, microscopy, or electrophysiology required. Send curriculum vitae and names of references to: **Dr. Sidney Tamm, Boston University Marine Program, MBL, Woods Hole, Mass. 02543.**

POSTDOCTORAL RESEARCH ASSOCIATE position available in fall 1982 for studies of membrane interaction in both model and biological membrane systems. Background in biochemistry, biophysics, and chemistry preferred, but other areas are also welcome. Send curriculum vitae and three letters of reference to: **Dr. Shinpei Ohki, Department of Biophysical Sciences, State University of New York at Buffalo, 224 Cary Hall, Buffalo, New York 14214.**

PROTEIN CHEMIST required to perform the following duties: perform the isolation, electrophoresis, and detection of enzymes for genetic variant enzyme preparation or enzymes related to aging, develop methods for preparation of human abnormal enzymes, amino acid sequence analysis of enzyme, production and purification of antibody against enzyme, RIA and immunochemical, analytical ultracentrifuge, circular dichroism spectroscopy. Must have knowledge of enzyme purification, affinity chromatographic methods, peptide isolation and fingerprinting, antibody purification, and radioimmunoassay circular dichroism spectroscopy. Must have experience in protein chemistry research. Skill in use of amino acid analyzer solid-phase protein sequencer, analytical ultracentrifuge, electrophoresis, and electrophoresis are necessary. Must have a Ph.D. in biochemistry and have 2 years of laboratory training and 2 years of experience in the laboratory. This is a full-time position for \$1250 per month. Apply at: **Texas Employment Commission, Denton, Texas,** or send résumé to: **Texas Employment Commission, TEC Building, Austin, Texas 78778; Job Order Number 2612596.** This ad paid by an Equal Opportunity Employer.

RESEARCH ASSISTANT PROFESSOR, RHEUMATOLOGY AND CLINICAL IMMUNOLOGY, UNIVERSITY OF VERMONT (UVM). Full-time position in medicine to supervise research laboratory and establish a fundable independent research program. Ph.D., with background in cellular immunology, plus 3 years of postdoctoral training required. Send curriculum vitae and inquiries by 2 July to: **Dr. Sheldon M. Cooper, Director, Rheumatology and Clinical Immunology Unit, UVM Department of Medicine, Given Medical Building, Burlington, Vermont 05405.** An Affirmative Action Employer; women and minorities encouraged to apply.

RESEARCH ASSISTANT/TECHNICIAN MARINE BENTHIC ECOLOGY

Office of Research and Development, McNeese State University, is accepting applications for a position in benthic ecology. Primary responsibility: laboratory supervision of sorting marine and estuarine benthic samples. Preference given to candidates with taxonomic expertise in Mollusca. Send curriculum vitae to: **Dr. Larry DeRouen, Director, Office of Research and Development, McNeese State University, Lake Charles, La. 70609.** Position available after 1 July 1982. *McNeese State University is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE with Ph.D. in biochemistry, microbiology, or molecular biology. Position available immediately to join a small team working on a promising eukaryotic genetics project. Recent experience with recombinant DNA techniques desirable. Salary commensurate with experience. For applications, contact: **Dr. Richard Voellmy, Department of Biochemistry, University of Miami School of Medicine, P.O. Box 016129, Miami, Florida 33101.** Telephone: 305-547-5817. *Equal Opportunity/Affirmative Action Employer.*

The University of Calgary FACULTY POSITION IN BIOLOGY

The University of Calgary invites applications for the position of **Assistant Professor** in the Department of Biology. The successful candidate will be expected to teach a course in virology to senior science students, to assist in teaching a senior course in immunology, eventually to make some contribution to teaching of an introductory biology course, and to develop an active research programme in the field of virology. Applicants must hold the Ph.D. degree or equivalent. Post-doctoral work and experience in university-level teaching are desirable. The appointment will begin no later than January 1, 1983, with an expected starting salary in the range of \$25,000 to \$32,000, based on the 1981-82 scale. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Applicants are requested to submit a complete curriculum vitae and arrange for three academic references to be sent by September 1, 1982 to: Dr. D. Parkinson, Head, Department of Biology, The University of Calgary, 2500 University Drive, North West, Calgary, Alberta T2N 1N4 Canada.

The University of California, Irvine, Department of Psychiatry and Human Behavior, has faculty openings for the following positions:

- 1) **PROFESSOR to direct Research Program in Visual Imaging of the Brain.** Candidates must have an M.D. degree and extensive experience in:
 - a) Cerebral glucography with positron emission tomography;
 - b) Visual evoked potential topography;
 - c) Computerized bioelectric data collection and analysis;
 - d) Electrophysiology of cognitive dysfunctions;
 - e) Experience in nociceptive research.
 Professorial level appointees in the University of California must have achieved national recognition for their research and have demonstrated an extensive publication record. Teaching duties required.
- 2) **PROFESSOR to direct Research and Educational Program and Biological Resource Laboratory.** Candidates must have a Ph.D. degree in one of the biological or chemical sciences and have:
 - a) A proven ability to organize and lead international symposia in the neurosciences;
 - b) An extensive record of publications which demonstrates outstanding editorial expertise;
 - c) An ability to review and write grant applications;
 - d) Familiarity with most aspects of psychopharmacology;
 - e) Expertise in organizing cooperative national and international investigative biological resource programs.
 Professorial level appointees in the University of California must have achieved national recognition and have demonstrated an extensive publication record. Teaching duties required.

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

Send curriculum vitae and letters of reference to:

**Dr. Lawrence Sporty
Vice Chairman
Department of Psychiatry and Human Behavior
California College of Medicine
University of California
Irvine, Calif. 92717**

before 2 July 1982.

**Food and Drug Administration (FDA)
Public Health Service
Department of Health and Human Services**

DIRECTOR, DIVISION OF CHEMISTRY, NCTR

Applications are invited for the position of Director, Division of Chemistry, National Center for Toxicological Research (NCTR), Jefferson, Arkansas. The incumbent plans, directs, and evaluates a broad program involving research in carcinogenic evaluation of chemicals; developing, improving, and standardizing analytical and biochemical methodology and instrumentation; and servicing NCTR programs with necessary analyses. The director of the division coordinates and directs all phases of the program within the division of 27 persons and collaborates with other divisions at the NCTR. Experience in administering programs and dealing with governmental agencies is desirable in the incumbent.

The division is organized for the purpose of developing new or improved chemical procedures for the trace analysis of carcinogens, teratogens, mutagens, toxicants, and other biologically active substances in a wide variety of substrates for use in initiating or supporting toxicological research at the Center.

The NCTR is a multidisciplinary toxicology research facility which has ongoing programs of scientific excellence in chemistry, carcinogenesis, mutagenesis, teratogenesis, and cell biology as well as excellent research support facilities in animal husbandry, diet preparation and analysis, pathology, microbiology, chemistry, and others. The Center has over 220 civil service employees and another 350 contract personnel and is located in a rural wooded area between Little Rock and Pine Bluff, Arkansas.

This is a civil service position at the GS-14 (\$39,689 per annum) or GS-15 (\$46,685 per annum) level. The salary will be determined by Office of Personnel Management certification and Research Peer Review evaluation. *The FDA is an Equal Opportunity Employer.* For further information, telephone: Mr. King at 501-541-4475. Send curriculum vitae to: FDA-NCTR, Personnel Office, Jefferson, Arkansas 72079.

RESEARCH SCIENTIST

Carcinogenesis Bioassay/Toxicology

Southern Research Institute, an established contract-research organization with a staff of 600, has an immediate opportunity for a qualified professional with managerial potential to assume a challenging, responsible role as the No. 2 scientist/manager in expanding carcinogenesis bioassay programs.

Position requires a PhD in Toxicology or Physiology, or a DVM. Previous experience with laboratory rodents preferred. Candidate must have strong potential and desire to assume managerial responsibilities, and have excellent skills in communication, leadership, and interpersonal relationships, as well as a good technical background. Duties involve participation in all phases of bioassay programs, including studies in clinical chemistry, hematology, metabolism, and acute and subchronic toxicology. Responsibilities include assisting in the management of a \$2 million research budget and supervision of a group of 40 professionals and technicians, writing technical proposals, reports and publications, and assisting in the technical liaison with sponsors, and in the generation of new research. Potential opportunity exists to ultimately develop independent research in one's own area of interest within the framework of existing programs. This position offers unusual opportunity for career growth as both a scientist and manager, to a candidate with little or no previous experience.

Southern Research Institute offers a stimulating working environment, generous benefits, up-to-date research facilities, and an extensive technical library.

Birmingham offers abundant educational, cultural, and recreational opportunities, a progressive civic environment, attractive residential areas, a mild climate and lower-than-average taxes and cost of living.

Send resume and salary requirements to: Denise R. Johnson, Technical Recruiter, SOUTHERN RESEARCH INSTITUTE, P.O. Box 3307-A, Birmingham, Alabama 35255. An Affirmative Action/Equal Opportunity Employer.



Southern Research Institute

IMMUNOPHARMACOLOGIST

Sterling-Winthrop Research Institute announces 2 research and drug development positions in Immunopharmacology.

CELLULAR IMMUNOLOGIST

With an interest in macrophage function and cell-mediated immunity.

BIOCHEMICAL PHARMACOLOGIST

To participate in a multi-disciplinary research effort on the pharmacologic modulation of arachidonic acid metabolism.

Both positions require a PhD or equivalent with a minimum of 1 year related experience.

We offer an attractive salary and benefits package with the opportunity for career growth. The Institute is located near Albany, N.Y. which is the center of major summer and winter recreational activities.

Please send your Curriculum Vitae including salary requirement in confidence to:

Mr. John G. Barry
Employment Administrator

STERLING-WINTHROP RESEARCH INSTITUTE

A Division of Sterling Drug, Inc.
Columbia Turnpike, Rennselear, NY 12144

An Equal Opportunity Employer M/F/H



POSITIONS OPEN

RESEARCH ASSOCIATE

Joint research project between a Cardiovascular Physiology Laboratory and a Cardiology Research Laboratory to work on projects related to prostaglandins, thromboxanes, and cardiovascular diseases. Position available 1 September 1982. Send curriculum vitae and have three letters of reference sent to:

Dr. Allan M. Lefer
Department of Physiology
Ischemia-Shock Research Center
Jefferson Medical College
1020 Locust Street
Philadelphia, Pa. 19107

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE

A permanent position at the rank of research associate is available in the Department of Physiology and Biophysics of the University of Tennessee Center for the Health Sciences. Candidates should have a Ph.D. or M.D. degree, and a research background in prolactin or oxytocin physiology. Send curriculum vitae, a brief statement of research interests, and the names of three references to: Dr. Clark Grosvenor, Professor, Department of Physiology and Biophysics, University of Tennessee Center for the Health Sciences, Memphis, Tennessee 38163. *An Equal Opportunity/Affirmative Action Employer.*

SENIOR BOTANIST, GS-430-16, National Museum of Natural History, Smithsonian Institution, Washington, D.C. Responsible for research programs in plant biology, especially plant anatomy and morphology and plant/animal relationships, and in biological conservation. Qualifications: professional recognition as a national and international authority in plant anatomy, morphology, and systematics; substantial research experience in several related fields, including medicinal botany, economic botany, plant/animal relationships, ethnobotany, and relationship of botany to human needs; extensive service on national and international panels in the fields of biological conservation, medicinal and economic botany, and food and energy sources. Salary range: \$54,755 to \$57,500. Send a Personal Qualifications Statement, SF-171, curriculum vitae, and bibliography by 9 July 1982 to: Personnel Office, Smithsonian Institution, Washington, D.C. 20560; attention: MPA-EX-02-82. *An Equal Opportunity Employer.*

STAFF MEDICAL RESEARCH SCIENTISTS

Guthrie Foundation for Medical Research, affiliated with the Guthrie Medical Center, Sayre, Pa., seeks full-time core staff for new research program in **HUMAN IMMUNOLOGY** starting spring/summer 1983. Applicants should have advanced degree and postdoctoral experience, and have worked on human immune regulation and disease mechanisms. Advantages include a well-equipped new facility; endowed support of base-line research activities and salary; possible collaborative/teaching affiliations with nearby institutions; generous travel and working arrangements; attractive life-style in rural, culturally rich area of Susquehanna Valley on the New York/Pennsylvania border; and opportunity to be involved in development of new program. Send letter and résumé to:

S. D. Litwin, M.D.
Guthrie Foundation for Medical Research
Sayre, Pa. 18840

ZOOLOGIST. Assistant professor of biology. Strong field experience; master's degree required. Duties include teaching vertebrate natural history, invertebrate zoology, comparative anatomy, general ecology, human anatomy and physiology, and general zoology; 9-month, tenure-track position; \$14,000 to \$18,500.

HEALTH SCIENCE. Assistant professor of health science. Master's degree required; doctorate preferred. Knowledge and teaching experience in medical and other professional courses; duties include human gross and microscopic anatomy, human physiology, and other professional courses; 9-month, tenure-track position; \$14,000 to \$18,500.

Deadline for applications is 2 July 1982. Please send curriculum vitae and request for application to: Dean Gary McAllister, Vice President for Academic Administration, Salem College, Salem, W.Va. 26426.

POSITIONS OPEN

RADIATION BIOLOGIST. Opening is anticipated for an assistant professor with a doctoral degree in radiation biology with research experience in radiation cytogenetics, radiation health, environmental sciences, or related fields. Responsibilities will include participation in graduate level teaching and research and initiation of appropriate independent research projects. Send résumés to: Dr. Niel Wald, Department of Radiation Health, RC510 Scaife Hall, University of Pittsburgh, Pittsburgh, Pa. 15261. *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE/SLUDGE MANAGEMENT—Cornell University, Ithaca, New York. Individual will conduct research on chemical interactions between toxic components of sewage sludge and soils, and the effects on plant growth. General requirements include a Ph.D. in chemistry, soil chemistry, or related area with a strong background in analytical organic and inorganic chemistry. Send résumé to: Dr. Murray B. McBride, Department of Agronomy, Cornell University, Ithaca, N.Y. 14853. *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH POSITION available immediately for Ph.D. experienced in enzyme isolation and kinetics, and with an interest in studies of mechanism of action of antiviral and anticancer drugs. Salary negotiable. Send résumé and names of three references to: Dr. W. Prusoff, Department of Pharmacology, Yale University School of Medicine, New Haven, Conn. 06510. *An Equal Opportunity/Affirmative Action Employer.*

COURSES

SHORT COURSE ON LASERS AND MICROBEAMS

13 to 17 September 1982. Laser Microbeam Program (LAMP), Department of Developmental and Cell Biology, University of California, Irvine, Calif. 92719. Contact: M. W. Berns at above address or telephone: 714-833-6291. Tuition fee: \$500.

A minicourse will be given at the NIH-sponsored Biotechnology Resource Facility. The course will consist of lectures and laboratory exercises on the operation and construction of a laser microbeam, lasers, laser interactions with cells and tissues, laser microsurgery in cell biology and developmental biology, and diagnostic and clinical applications of lasers. Students will gain hands-on experience in laser operation, tissue culture, microirradiation of cell organelles, and embryonic systems.

EXTRAMURAL FUNDING

The Johns Hopkins Center for Alternatives to Animal Testing will receive **APPLICATIONS FOR EXTRAMURAL FUNDING**.

Application instructions can be obtained by contacting:

Barbara J. Williams, Secretary to the Director
Center for Alternatives to Animal Testing
615 North Wolfe Street
Baltimore, Maryland 21205-2179

FELLOWSHIPS

POSTDOCTORAL RESEARCH FELLOWSHIPS IN DIABETES-METABOLISM. Applications for 1983 are being considered for NIH-sponsored postdoctoral research fellowships in the following areas: hormonal control of glucose, ketone body and amino acid metabolism; insulin, glucagon and somatostatin secretion; insulin receptors and insulin action. For information, write: John Gerich, M.D., Director, Endocrine Research Unit, Mayo Medical School/Mayo Clinic, Rochester, Minnesota 55905. *An Equal Opportunity/Affirmative Action Institution.*

POSTDOCTORAL FELLOWSHIP for Ph.D. or M.D./Ph.D. with extensive experience in protein chemistry. Individual will study the apolipoproteins and learn recombinant DNA techniques as they are being applied to this group of proteins. Planned projects are very relevant to understanding human atherosclerosis. Salary: \$16,000 per year. Harvard Medical School Fellowship Appointment. Contact: Dr. Jan L. Breslow, Children's Hospital Medical Center, Boston, Mass. 02115.

FELLOWSHIPS

IMPERIAL CANCER RESEARCH FUND RESEARCH FELLOWSHIP

Applications are invited for a 3-year post-doctoral appointment to work with Dr. M. F. Greaves on human leukaemia associated membrane proteins. The project involves raising monoclonal antibodies against hybrid cells selected for the expression of particular membrane glycoproteins or chromosomal translocations. Experience in immunology and tissue culture is desirable.

Candidates should be free to take up the position by October 1982. Salary range: £8,787 to £10,837 (inclusive of London Allowance), with entry according to qualifications and experience.

For further information, contact: Dr. M. F. Greaves (telephone: 01-242 0200, extension 378). Applications with full curriculum vitae and the names and addresses of two referees should be sent to: Secretary, Imperial Cancer Research Fund, Lincoln's Inn Fields, London WC2, England (if possible quoting reference 70/82).

POSTDOCTORAL FELLOWSHIP POSITION IN NEUROANATOMY available immediately or by 1 September 1982 to participate in light and electron microscopic studies of the limbic system, brainstem, and autonomic nervous system. Previous experience in neuroanatomical tracing techniques or immunohistochemistry would be an asset. Interested candidates should send curriculum vitae, reprints, and the names and addresses of three referees to: Dr. David A. Hopkins, Department of Anatomy, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4H7.

UNIVERSITY OF TORONTO, BOTANY. NSERC UNIVERSITY RESEARCH FELLOWSHIPS. The Department of Botany, University of Toronto, invites applications from Canadian citizens and permanent residents who wish to be sponsored for an NSERC University Research Fellowship, to be held at any of our three campuses (St. George, Scarborough, or Erindale). Applicants from all fields of interest will be considered but applicants in the areas of genetics, microbial ecology, and growth and development of higher plants are particularly encouraged. Positions are available in April 1983, and would involve some teaching opportunities appropriate for the specialization of the appointees. NSERC University Research Fellowships are awarded for 5 years and carry a salary at the assistant professor level and include financial support for research. Submit curriculum vitae with names of three referees and representative reprints by 15 August 1982 to: Chairman, Department of Botany, University of Toronto, Toronto, Ontario, Canada M5S 1A1.

MARKETPLACE

\$\$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Celtek, Inc., desires to expand its hybridoma collection by purchasing clones producing clinically important monoclonal antibodies from researchers in the academic community. We are also interested in purchasing clinically significant antigens. Payment options include cash or cash plus royalties. For more information, call or write: Celtek, Inc., 102 West Eufaula, Norman, Oklahoma 73069; telephone: 405-329-6452.

INTERFERON WANTED

The Cancer Institute, Hahnemann University of Health Sciences, is soliciting bids for 2 billion units of natural (human diploid cell-derived) human beta interferon for clinical use in the summer of 1982. Responders should represent in their letters that their interferon is FDA-approved and give the number of their approved drug master file for appropriate cross reference under our IND. Responders should be prepared to send a representative sample of interferon for potency, purity, and stability testing. Letters and accompanying samples should be sent no later than 16 July 1982 to: M. Sheinson, Administrator, H. L. Orlowitz Cancer Center, Hahnemann University of Health Sciences, 230 North Broad Street, Philadelphia, Pennsylvania 19102.

Inflammation/ Allergy Scientist

G. D. Searle & Co., Research and Development Division, has a position available immediately in the Department of Biological Research. Qualified candidates should have a Ph.D. or equivalent degree with emphasis on the pharmacology/physiology of inflammatory and allergic disorders. Applicants should have 5 or more years postdoctoral research experience. A working knowledge of various in vivo experimental animal models of mediator release and pulmonary dynamics and experience in their application to studies on the mechanisms of inflammation and allergy is essential.

The individual would be involved in basic research as a member of a multi-disciplinary group that conducts research focused on discovery of new drugs for treating inflammatory and allergic diseases.

We offer a liberal salary and benefits package including relocation assistance. Candidates are encouraged to send a resume, including a summary of research experience and the names of three references to:

Sheila Copeland

Research & Development Division

G. D. Searle & Co.

Box 5110 / Chicago, IL 60680

*Equal Opportunity M/F/H...A Practice,
Not Just A Policy*



Toxicologist

Springborn Institute For Bioresearch, a thriving contract research laboratory serving the pharmaceutical, chemical, and personal care products industries, offers a highly visible opportunity for the individual wishing to advance a career in toxicology; nationally and internationally.

The ideal candidate will hold a PhD, be strong in physiology, confident of skills as a toxicologist and interested in further developing expertise in teratology or immunology. Some experience in an industrial or contract laboratory setting preferred. Excellent verbal and written communication skills essential. In addition, individual must be well published and capable of organizing and performing high quality work within a budget and on time.

We offer salary commensurate with experience, an excellent benefit package, and a RURAL OHIO LOCATION to the right individual.

Please send resume in strictest confidence specifying salary requirements to **C. S. Cridler-Smith: Manager, Human Resources, SPRINGBORN INSTITUTE FOR BIORESEARCH, INC.,** a member company of Springborn Group, Inc., Springborn Center, Enfield, CT 06082. An equal opportunity/affirmative action employer m/f.



**SPRINGBORN
INSTITUTE FOR
BIORESEARCH, INC**

Chief Patent Counsel

AGRIGENETICSTM

Research Corporation

AGRIGENETICS, a private genetic research/seed company, with revenues exceeding \$100,000,000, is establishing new career openings in the legal area. Opportunities now exist for several imaginative patent attorneys of demonstrated experience to apply for permanent positions with our growing company.

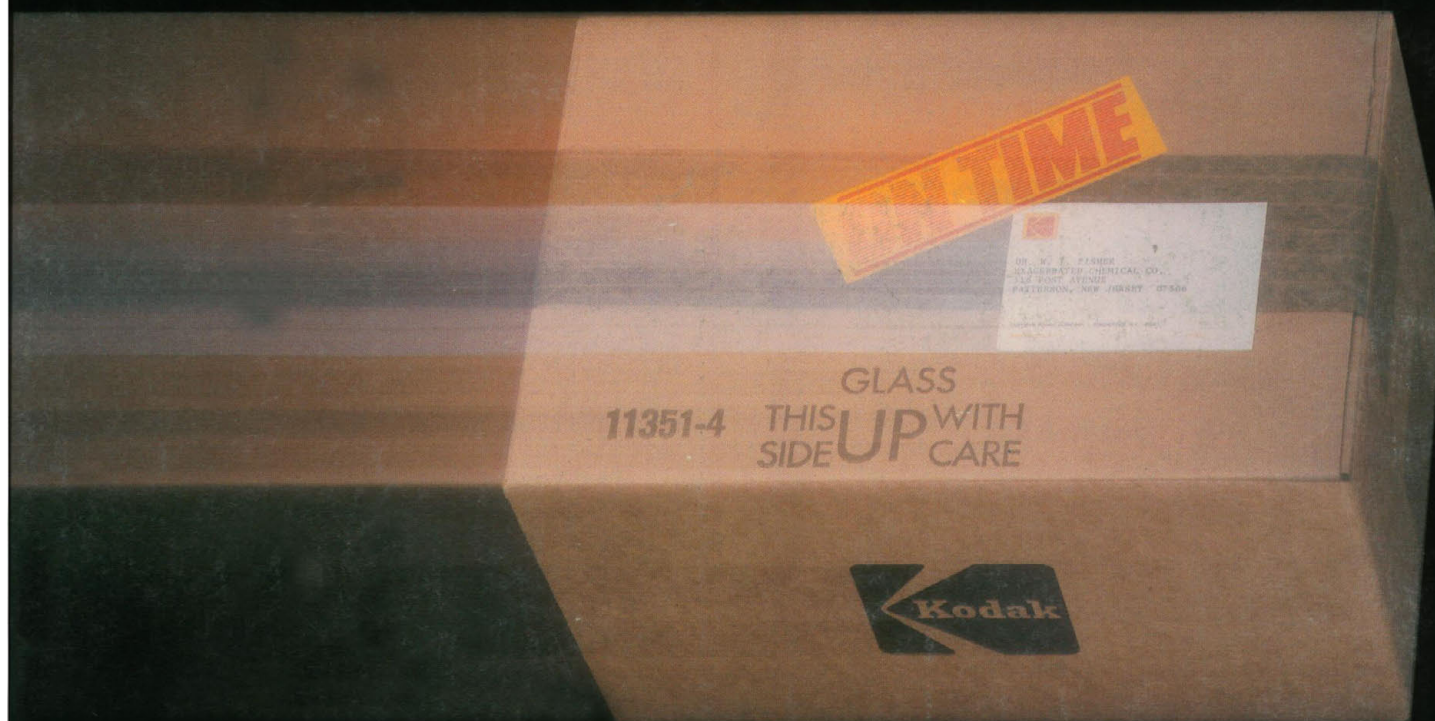
The Chief Patent Counsel will join a strong and enthusiastic team of business and scientific professionals and will be expected to direct and coordinate an extensive patent program in plant molecular and cellular biology as well as related technologies. The Company has been granted two United States Patents, 42 Plant Variety Patents and numerous others are in preparation or application. The Chief Patent Counsel will interact with top management as well as outside counsel, and be responsible for developing and coordinating the vigorous worldwide activities of AGRIGENETICS in patent prosecution, counseling, and licensing.

This position demands a creative and aggressive lawyer with an advanced biological or biochemical science degree.

Write, in confidence, to: **Chairman, AGRIGENETICS,
14142 Denver West Parkway, Denver, Colorado 80401.**



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