

viviparity, and there are only two papers (out of 20 in all) on tropical fishes. Furthermore, the international representation is not well balanced: there are 15 British authors, five Canadians, and four Americans. Nonetheless, the volume is unique in bringing together interesting discussions of so many different aspects of fish reproduction.

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Books Received

Ada: Language, Compilers and Bibliography. M. W. Rogers, Ed. Published on behalf of the Commission of the European Communities by Cambridge University Press, New York, 1984. Various pages. \$17.95. The Ada Companion Series.

Advances in Carbohydrate Chemistry and Biochemistry. Vol. 42. R. Stuart Tipson and Derek Horton, Eds. Academic Press, Orlando, Fla., 1984. xiv, 444 pp., illus. \$65.

Advances in Heat Transfer. Vol. 16. James P. Hartnett and Thomas F. Irvine, Jr., Eds. Academic Press, Orlando, Fla., 1984. xii, 388 pp., illus. \$70.

Advances in Heterocyclic Chemistry. Vol. 36. Alan R. Katritzky, Ed. Academic Press, Orlando, Fla., 1984. xii, 416 pp., illus. \$95.

Advances in Immunology. Vol. 36. Frank J. Dixon, Ed. Academic Press, Orlando, Fla., 1984. xiv, 248 pp., illus. \$36.50.

Advances in Inorganic and Bioinorganic Mechanisms. Vol. 2. A. G. Sykes, Ed. Academic Press, Orlando, Fla., 1983. x, 388 pp., illus. \$75.

Advances in Insect Physiology. Vol. 17. M. J. Berridge, J. E. Treherne, and V. B. Wigglesworth, Eds. Academic Press, Orlando, Fla., 1983. viii, 318 pp., illus. \$50.

Advances in Surface Treatments. Technology—Applications—Effects. Vol. 1. A. Niku-Lari, Ed. Pergamon, New York, 1984. xviii, 258 pp., illus., + appendix. \$40.

Advances in the Biology of Disease. Vol. 1. Emanuel Rubin and Ivan Damjanov, Williams and Wilkins, Baltimore, 1984. viii, 208 pp., illus. \$29.95.

The American Atom. A Documentary History of Nuclear Policies from the Discovery of Fission to the Present, 1939–1984. Robert C. Williams and Philip L. Cantelon, Eds. University of Pennsylvania Press, Philadelphia, 1984. xvi, 333 pp. \$30; paper, \$8.95.

The Analysis of Animal Bones from Archeological Sites. Richard G. Klein and Kathryn Cruz-Uribe, Eds. University of Chicago Press, Chicago, 1984. xii, 266 pp., illus. \$20; paper, \$9. Prehistoric Archeology and Ecology.

Annual Review of Ecology and Systematics. Vol. 15. Richard F. Johnston, Peter W. Frank, and Charles D. Michener, Eds. Annual Reviews, Palo Alto, Calif., 1984. xiv, 601 pp., illus. \$27.

The Bacterial Spore. Vol. 2. A. Hurst and G. W. Gould, Eds. Academic Press, Orlando, Fla., 1983. xiv, 328 pp., illus. \$52.

Basic Issues in Econometrics. Arnold Zellner. University of Chicago Press, Chicago, 1984. xxii, 334 pp. \$48.

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Biochemistry of Steroid Hormones. H. L. J. Makin, Ed. 2nd ed. Blackwell Scientific, Palo Alto, Calif., 1984. xii, 714 pp., illus. \$125.

Biography of a Planet. Geology, Astronomy, and the Evolution of Life on Earth. Chet Raymo. Prentice-Hall, Englewood Cliffs, N.J., 1984. xiv, 176 pp., illus. \$19.95; paper, \$10.95. PHalatope Books.

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Biotechnology in the Marine Sciences. Rita R. Colwell, Anthony J. Sinskey, and E. Ray Pariser, Eds. Wiley-Interscience, New York, 1984. xviii, 293 pp., illus. \$37.50. Advances in Marine Science and Biotechnology. From a seminar, March 1982.

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Introduction to Electric Power Engineering. Richard D. Shultz and Richard A. Smith. Harper and Row, New York, 1984. viii, 264 pp., illus. \$37.95.

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Methods and Tools for Compiler Construction. An Advanced Course. B. Lorho, Ed. Cambridge University Press, New York, 1984. viii, 398 pp., illus. \$49.50.

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(Continued on page 1504)

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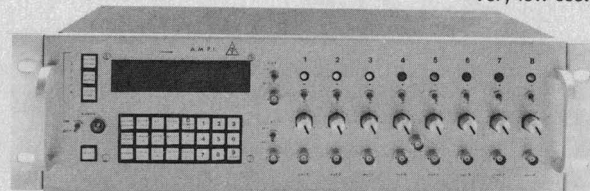


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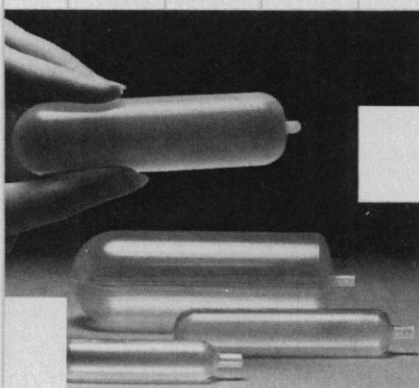
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The Methylxanthine Beverages and Foods. Chemistry, Consumption, and Health Effects. Gene A. Spiller, Ed. Liss, New York, 1984. xii, 418 pp., illus. \$78. Progress in Clinical and Biological Research, vol. 158.

Microbial Development. Richard Losick and Lucy Shapiro, Eds. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., 1984. xiv, 303 pp., illus. \$52; paper, \$28. Cold Spring Harbor Monograph Series. From a conference, Cold Spring Harbor, 1983.

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Modification of Radiosensitivity in Cancer Treatment. Tsutomu Sugahara, Ed. Academic Press, Orlando, Fla., 1984. xx, 544 pp., illus. \$75.

The Mollusca. Vol. 7, Reproduction. A. S. Tompa, N. H. Verdonk, and J. A. M. van den Biggelaar, Eds. Academic Press, Orlando, Fla., 1984. xx, 486 pp., illus. \$55.

Monoclonal Antibodies to Receptors. Probes for Receptor Structure and Function. M. F. Greaves, Ed. Chapman and Hall, London, 1984 (U.S. distributor, Methuen, New York). xii, 324 pp., illus. \$75. Receptors and Recognition, Series B, vol. 17.

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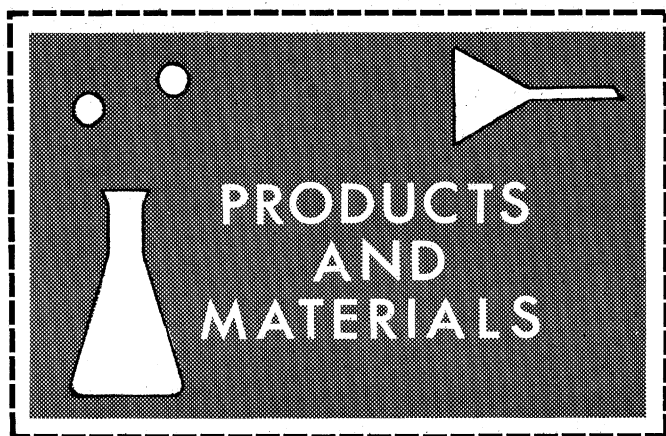
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Literature

Titration describes the Metrohm system for Karl Fischer water determination, equivalence-point recognition and set end-point titrations. Brinkman Instruments. Circle 572.

Plasticware details a complete line of laboratory containers and vessels and includes a guide to the structure and properties of plastic resins. Cole-Parmer Instrument. Circle 573.

New Titles offers more than three dozen handbooks, monographs, and textbooks in medicine, biochemistry, physics, and other sciences. CRC Press. Circle 574.

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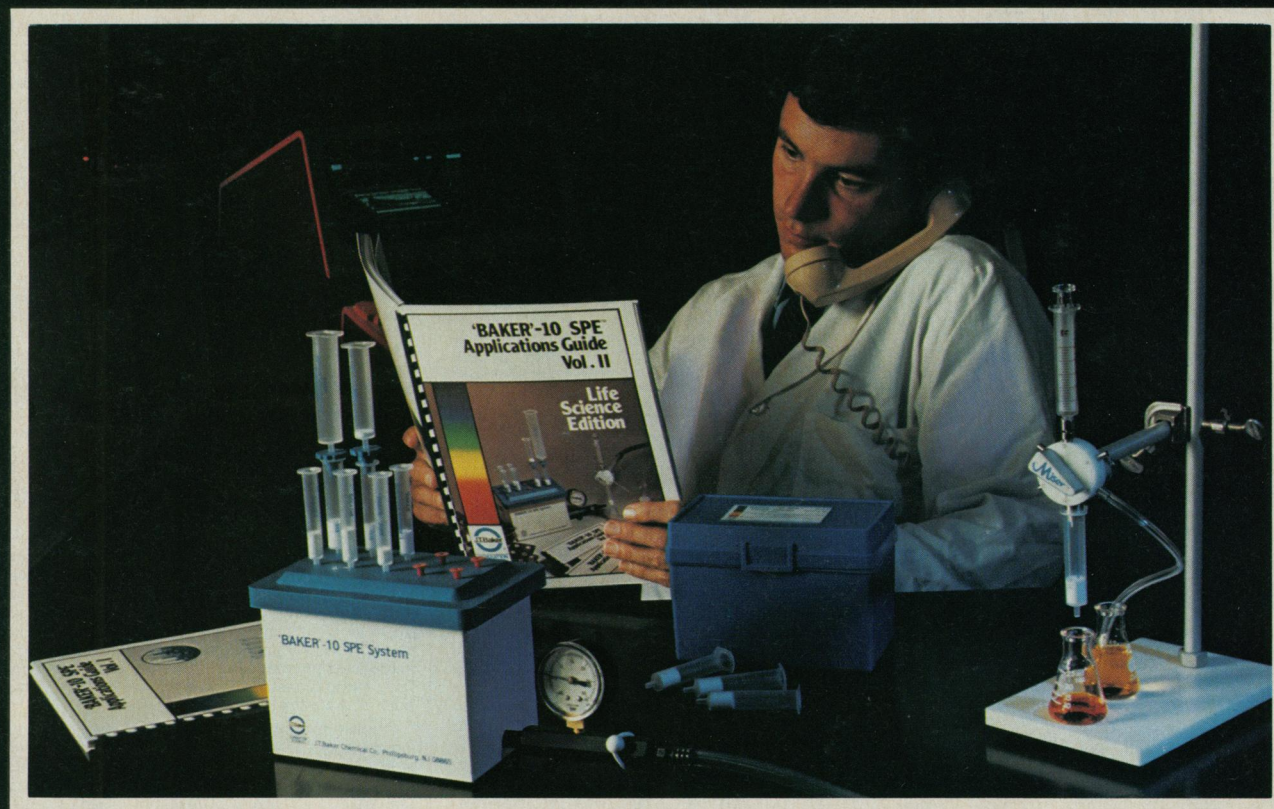
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Ion Analyzers offer models EA 940 and EA 920 pH/ISE meters. Orion Research. Circle 587.

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Immunologist, Ph.D. 1970. Academic and industrial research experience in cellular and molecular immunology, immunopotentiality, lymphokines, lymphocyte-target cell killing, immunoassay development, hybridoma, and monoclonal antibodies. Excellent publications and references. Seeking academic or industrial position. Box 73, SCIENCE. 3/22, 29; 4/5

Insect Toxicologist/Weed Control Expert: Ph.D. in entomology with training and experience in insect and weed control and environmental fate of pesticides seeks suitable teaching/research/management position. Teaching, industrial research, and international insect and weed research management experience. Box 50, SCIENCE. 3/22; 4/5

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Full-time academic appointment to start 1 July 1985 with responsibility for patient care and teaching in the specialized area of oncology, attend as a specialist in hematology/oncology or general internal medicine, and conduct independent research programs in molecular biology or immunology. Applicants must have M.D. or M.D./Ph.D. degree, have Board-certification in internal medicine with eligibility in oncology. He/she must have research funding to provide one-third of annual salary. Qualified candidates should send curriculum vitae, names and addresses of three references, and brief outline of future research interests by 15 April 1985 to: **John C. Hoak, M.D., Chairman, Department of Medicine, Fletcher House 311, Medical Center Hospital of Vermont, Burlington, Vt. 05401.** *The University of Vermont is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

ASSISTANT OR ASSOCIATE PROFESSOR—Department of Botany and Plant Pathology, Michigan State University, East Lansing, Michigan, invites applications for a 12-month, tenure-track appointment. Responsibilities of the position will include developing an active research program in plant physiology, biochemistry, or biophysics and teaching approximately one quarter per year in the plant physiology program. Applicants must hold the Ph.D. degree and have postdoctoral experience. Applicants should submit a statement of research interests, résumé, and the names of three references by 15 April 1985 to: **Dr. C. Somerville, Chairman of Search Committee, Department of Botany and Plant Pathology, Michigan State University, East Lansing, Mich. 48824-1312.** *Michigan State University is an Equal Opportunity/Affirmative Action Employer.*

The Department of Surgery is seeking to fill a position for **ASSISTANT/ASSOCIATE PROFESSOR OF SURGERY.** The successful applicant should have a special interest in coagulation blood disturbances. A Ph.D. in a related field with at least 3 years of laboratory experience in a medical university is preferred.

The principal responsibilities include development of an independent research program, collaboration with other ongoing research activities within the Department of Surgery, and teaching.

Please submit curriculum vitae and names of references to: **Lazar J. Greenfield, M.D., Professor of Surgery, Box 645, MCV Station, Medical College of Virginia/Virginia Commonwealth University, Richmond, Virginia 23298.** *An Affirmative Action/Equal Opportunity Employer.*

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NONTENURED ASSISTANT PROFESSOR-DIRECTOR, BIOCHEMICAL GENETICS LABORATORY. Director of biochemical genetics laboratory, nontenured assistant professor to supervise graduate students in diagnosis and management of patients and in conducting research. Must have Ph.D. in biochemistry or microbiology plus 3 years of postdoctoral experience. Previous experience in amino acid metabolism especially phenylketonuria, characterization of metabolites, protein microanalysis, viral and tissue cultures, and recombinant DNA technology, including cloning and sequencing of nucleic acids. Forty hours per week; \$30,000 per year. Contact: **Dr. M. L. Lee, Department of Pediatrics, University of Medicine and Dentistry of New Jersey (UMDNJ)—Rutgers Medical School, Room 312, CN-19, New Brunswick, N.J. 08903.** *An Equal Opportunity/Affirmative Action Employer, M/F/H/V.*

ASSISTANT OR ASSOCIATE PROFESSOR OF ANATOMY

Applications are invited for tenure-track positions at the assistant or associate professor levels. Applicants should have Ph.D. and/or M.D. and an active research program in one of the general areas of cell biology or molecular biology, genetics, or developmental biology that would complement current research strengths in neurobiology, cardiovascular system, and reproductive biology. Teaching expertise in either gross anatomy, histology, embryology, neuroscience, or cell biology for medical, dental, or allied health students is required. Send curriculum vitae, bibliography, a brief statement of research and teaching preferences, plus names of three references to: **Dr. Gary W. Van Hoesen, Anatomy Faculty Search Committee, University of Iowa College of Medicine, Iowa City, Iowa 52242.**

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ASSISTANT PROFESSOR— MICROBIAL PHYSIOLOGY

The Department of Microbiology in the Faculty of Medicine of the University of Toronto invites applications for a tenure-stream position in the area of microbial physiology. Preference will be given to individuals using recombinant DNA technology or other molecular approaches to study any of several areas of microbial physiology which might include pathogenic mechanisms, gene structure and function, metabolism, the bacterial cell envelope, transport, secreted products, and so forth.

Applicants must have a Ph.D. and postdoctoral experience. Candidates will be expected to develop a strong research program and to participate in graduate and undergraduate teaching. Send curriculum vitae, a statement of research interests, and the names of three references to: **Dr. Leslie Spence, Chairman, Department of Microbiology, University of Toronto, FitzGerald Building, 150 College Street, Toronto, Ontario, Canada M5S 1A8.**

In accordance with Canadian immigration requirements, priority must be given to Canadian citizens or permanent residents of Canada.

ASSISTANT PROFESSOR/MICROBIOLOGY. Tenure-track position available August 1985. Ph.D. required. Postdoctoral experience preferred. Responsibilities include teaching an upper-level course in immunology and developing a research program in pathogenic microbiology or prokaryotic virology. Send curriculum vitae and a statement of professional goals, and have three letters of reference sent to: **Michael A. Poirrier, Chairman, Department of Biological Sciences, University of New Orleans, New Orleans, Louisiana 70148,** by 15 April 1985. *The University of New Orleans is a member of the Louisiana State University System, an Affirmative Action/Equal Opportunity Employer.*

The **BIOLOGY DEPARTMENT** is recruiting for a tenure-track position in **molecular biology.** The candidate should have additional training in one or more of the following: microbiology, immunology, molecular genetics, and tissue culture. Assignments will include upper-division undergraduate and graduate courses in molecular biology and upper-division courses in one or more of the areas mentioned. Candidate will assist in administration of a Human Cytogenetic Technology Program. The department supports research involving graduates and undergraduates. Send curriculum vitae, letter of application, and three reference letters to: **Dr. Gus McCarthy, Chairman, Department of Biology, California State University-Dominguez Hills, Carson, Calif. 90747.** Application deadline is 15 April 1985. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

The Department of Pharmacology, Oral Roberts University School of Medicine, announces the opening of a search for an ASSISTANT PROFESSOR. The successful candidate will have a Ph.D. in pharmacology with appropriate postdoctoral experience and research interest in either cardiovascular or cancer areas. Curriculum vitae plus names and addresses of three references should be sent to: **Dr. Jimmie L. Valentine, Professor and Chairman, Department of Pharmacology, Oral Roberts University School of Medicine, 8181 South Lewis, Tulsa, Okla. 74170.** Oral Roberts University is a Christian ministry that employs without regard to race, color, sex, age, handicap, national origin, or status as a veteran.

ASSISTANT PROFESSOR OF PHYSIOLOGY AND RADIOLOGY

Applications are solicited for a nontenure-stream position for a person with a D.V.M., M.D., D.O. and/or Ph.D. in biochemistry or physiology. Individuals will be responsible for development of a research program in in vivo regulation of adenine nucleotide and nucleoside metabolism using nuclear magnetic resonance. Postdoctoral education should have been several years in duration and included specific training in: isolation and perfusion of rodent hearts, measurement of coronary flow, myocardial performance and oxygen consumption, separation and measurement of adenine nucleotides and nucleosides including use of thin layer and high-performance liquid chromatography, use radioactive tracers, a detailed knowledge of adenine nucleotide and nucleoside metabolism and at least a working knowledge of the principles and operation of nuclear magnetic resonance equipment. This individual will be expected to generate extramural support for the research program and to participate in the education of graduate and medical students and radiology house officers. Mail curriculum vitae and name of at least three references to: **Physiology and Radiology Search Committee, Department of Physiology, Giltner Hall, Michigan State University (MSU), East Lansing, Mich. 48824-1101.** MSU is an Equal Opportunity/Affirmative Action Employer.

University of Minnesota, Department of Radiology, has an opening at the rank of ASSISTANT PROFESSOR for a tenure-track RADIOCHEMIST in its Division of Nuclear Medicine beginning 1 July 1985. Minimum requirements include a Ph.D. in chemistry or pharmacy with an emphasis in organometallic chemistry. Two years of experience in the synthesis of technetium, gallium, and indium radiopharmaceuticals along with positron emitting radionuclides is also required. Applicant must also have a record of publication within the past year. Responsibilities will include performing independent research in the department's nuclear pharmacy, along with graduate and undergraduate medical instruction in radiopharmaceuticals. Individual will manage the nuclear pharmacy, and will direct activities in the development of experimental radiopharmaceuticals for research and clinical applications. Salary is negotiable and competitive, and is dependent upon past scholarly productivity and postdoctoral experience. Applications for this position will be accepted through 30 April 1985. Send letters to: **Robert J. Boudreau, M.D., Ph.D., Department of Radiology, University of Minnesota Medical School, Box 382 Mayo, Minneapolis, Minnesota 55455.** The University of Minnesota is an Equal Opportunity/Affirmative Action Employer and specifically encourages applications from women and minorities.

ASSISTANT PROFESSOR Toxicology

Eastern Michigan University (EMU), Chemistry Department, offers majors in chemistry, biochemistry, metallurgical chemistry, and biochemistry/toxicology, and is currently seeking a tenure-track person to develop and teach courses in toxicology and/or industrial hygiene. Additional duties include departmental teaching and possible involvement in the cooperative education program.

Selected candidate will possess a Ph.D. with strong chemistry or biochemistry background. Industrial experience is highly desirable.

To apply, please contact the University Personnel Office for a standard EMU application. The application must be completed and returned with curriculum vitae, college transcripts, and three letters of recommendation by 22 April 1985 to: **Eastern Michigan University, Personnel Office, 310 King Hall-SM, Ypsilanti, Mich. 48197; telephone: 313-487-3430.**

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It would be an advantage if the applicant had experience in at least one of the following areas of Developmental Morphology: cardiovascular system, respiratory system, central nervous system, endodermal-mesenchymal interaction and comparative morphology.

The applicant should have an M.D. and/or Ph.D. in Physiology/Anatomy or a closely related area. The applicant will be expected to develop an independent research program but have collaboration with others in the Group. The rank salary and benefits will be commensurate with qualifications and experience. The position is to be funded by successful application for Scholarship and establishment funds from the Alberta Heritage Foundation for Medical Research. All qualified individuals are encouraged to apply, but preference will be given to Canadian citizens and permanent residents. Requests for further information or completed applications, including curriculum vitae, and the names of three referees should be submitted by April 30, 1985 to:



Dr. John E. Maloney
Department of Obstetrics & Gynaecology
Faculty of Medicine
The University of Calgary
3330 Hospital Drive N.W.
Calgary, Alberta T2N 4N1
Canada

Research Position in Cell Biology

The University of Calgary, Faculty of Medicine invites applications for a Cell Biologist to be located in the Growth and Development Research Group with an appointment in the Department of Medical Biochemistry. The successful candidate should be an established investigator who has contributed significantly to the field of chromosome structure, particularly in the study of chromosome scaffolds.

The appointment will be at the Assistant or Associate Professor level. Rank and salary will be determined according to experience and qualifications of the successful candidate. A Ph.D., post-doctoral research training and research experience is required.

Funding will be through application to the Alberta Heritage Foundation for Medical Research for a scholarship. The successful candidate will be eligible for an Implementation Grant including funds for equipment, renovations and an initial operating grant. Additional support for post-doctoral fellows and graduate students is also available from A.H.F.M.R. and other sources. 75% of the time of A.H.F.M.R. Scholars is protected for research but opportunities for limited teaching in the graduate and undergraduate programmes exist.

All qualified individuals are encouraged to apply, but preference will be given to Canadian citizens and permanent residents.

Applications will be received by April 15, 1985 for appointment to be effective in 1986. Please send curriculum vitae, a statement of research interests and career goals and the names of three referees to:



Dr. G.H. Dixon
Professor and Head
Department of Medical Biochemistry
Health Sciences Centre
The University of Calgary
3330 Hospital Drive N.W.
Calgary, Alberta T2N 4N1
Canada

MOLECULAR IMMUNOLOGIST

The Upjohn Company, a leader in the worldwide research, production, and marketing of pharmaceuticals, chemicals and agricultural products has openings in its Cell Biology Unit for Molecular Immunologists. The Cell Biology Unit serves as a core resource within Upjohn, and investigates basic mechanisms and processes in areas such as intercellular and intracellular communication, cell growth and differentiation, cell receptors, and gene regulation.

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POSITIONS OPEN

ASSISTANT RESEARCH BIOLOGIST

The Marine Biology Research Division of the Scripps Institution of Oceanography wishes to appoint an **assistant research biologist** in the field of **sulfur biochemistry**. Candidates must possess a Ph.D. (or equivalent) and have experience in the study of sulfur metabolism. An interest in sulfur metabolism of symbioses between marine animals and sulfur bacteria is desired. The appointment will be for up to 2 years and the salary will be commensurate with the appointee's qualifications (\$29,600 to \$37,400 on an 11-month basis). Because the salary support for this position is provided by a private foundation, only U.S. citizens are eligible.

Candidates must submit a letter of application in which they outline a prospective research program and indicate their expertise in sulfur biochemistry. Applications should include curriculum vitae, a set of relevant publications, and the names of three individuals able to serve as references. To be assured of consideration, applications must be received by 15 April 1985. All correspondence should be addressed to: **Dr. George N. Somero, Sulfur Biochemistry Search Committee, Marine Biology Research Division, A-002, Scripps Institution of Oceanography, La Jolla, Calif. 92093.**

The University of California is an Affirmative Action/Equal Opportunity Employer, and invites applications from all qualified individuals.

Tenure-track ASSOCIATE/ASSISTANT PROFESSOR OF BIOMEDICAL ENGINEERING (BME) at the Worcester Polytechnic Institute (WPI). WPI offers the M.S. and Ph.D. degrees in BME and the M.S. in clinical engineering. Close cooperation exists with the University of Massachusetts Medical School, local hospitals, and the Massachusetts Biotechnology Research Park, with shared instrumentation including a proposed major center for magnetic resonance imaging. Ph.D. in BME or a related discipline required. Preferred areas of specialization are: biomedical imaging and signal processing, application of optics to biomedicine, but all specialties will be given consideration. Applicants should be interested in developing a strong research program and be committed to quality teaching. WPI is located near the heart of the high-technology focus of New England yet offers opportunities for urban, suburban, or rural life-styles as well as varied winter and summer recreational activities. Send résumé, statement of professional interests, and names of three or more references to: **Dr. Robert A. Peura, Coordinator, BME, WPI, Worcester, Mass. 01609. Telephone: 617-793-5447. WPI is an Affirmative Action/Equal Opportunity Employer.**

BIOCHEMIST—MOLECULAR ENDOCRINOLOGIST. Research assistant professor, research associate, and postdoctoral research positions available for studies related to biochemistry of reproduction. Emphasis is on mechanism of hormone action, receptor purification and chemistry, hormone binding inhibitors, and related program areas. Ph.D. in biochemistry preferred. Postdoctoral (NIH) training grant positions in reproductive endocrinology also available. Please forward curriculum vitae, general statement of research experience/interests, and names of three references to:

Dr. Leo E. Reichert, Jr.
Professor and Chairman
Department of Biochemistry
Albany Medical College of Union University
Albany, New York 12208

Albany Medical College is an Equal Opportunity Employer.

BIOLOGICAL OCEANOGRAPHER. Applications are invited for a tenure-track assistant professorship to begin August 1985. Applicants must have a Ph.D. and a research specialization in zooplankton biology. We are particularly interested in expertise in microzooplankton research. Submit curriculum vitae, selected reprints, letter of application describing research interests, and names and addresses of three references by 15 April to: **Professor R. L. Iverson, Department of Oceanography, Florida State University, Tallahassee, Fla. 32306. An Equal Opportunity/Affirmative Action Employer.**

BIOLOGIST with strong commitment to undergraduate teaching for introductory courses in field-oriented biology. One-year, half-time position (two days) for September 1985. Send curriculum vitae and letters of recommendation by 5 April to: **Dr. J. L. Kent, Biology, Sarah Lawrence College, Bronxville, New York 10708. Affirmative Action/Equal Opportunity Employer. Minorities and women encouraged to apply.**

POSITIONS OPEN

Biochemistry Chairperson—Associate or full professor. Ph.D. in biochemistry/molecular biology. Distinguished research-teaching record, preferably in a medical school. Administrative experience, good verbal communication in English. Knowledge of Spanish desirable. Starting 1 July 1985. Send résumé and three references by 30 April 1985 to: Search Committee, Academic Affairs Office, Ponce School of Medicine, Box 7004, Ponce, Puerto Rico 00732. Telephone: 809-840-2519. *Equal Opportunity Employer.*

BIOCHEMIST OR MOLECULAR BIOLOGIST. Tenure-track faculty position available starting fall 1985 or spring 1986 in the School of Natural Sciences, California State University, Fresno. Hiring level open and dependent upon experience. The successful candidate is expected to participate actively in the development of an interdisciplinary biotechnology program, to develop a strong research program, and to participate in teaching at the undergraduate and graduate (M.S.) levels with the Chemistry and/or Biology Departments. Ph.D. required and postdoctoral research experience is preferred. It is desirable to have expertise in a biotechnological field such as recombinant DNA technology, applied biochemistry, or protein/enzyme technology. Applicants should submit curriculum vitae, a description of research interests, university transcripts, and three letters of recommendation by 30 April 1985 to: Dr. Howard K. Ono, Chair, Faculty Search Committee, School of Natural Sciences, California State University, Fresno, Fresno, Calif. 93740. *An Equal Opportunity/Affirmative Action Employer.*

BIOLOGY (MICROBIOLOGIST). Tenure-track assistant professor position for a microbiologist beginning August 1985. Ph.D. required. Salary: \$18,000 to \$22,000, depending on credentials and experience. In addition to teaching microbiology courses, successful candidate will be expected to participate in other offerings of the department which may include genetics. Christopher Newport College, with a student enrollment of 4000, is a state-supported undergraduate college located in Newport News on the Virginia Peninsula. Send curriculum vitae, official transcripts, brief statement of teaching philosophy, and three letters of recommendation postmarked no later than 15 April 1985 to: Dr. R. J. Edwards, Biology Search Committee, Christopher Newport College, 50 Shoe Lane, Newport News, Va. 23606. *An Equal Opportunity/Affirmative Action Employer.*

CANCER RESEARCH SCIENTISTS AND TECHNICIANS

Monoclonal Antibody Production. Generation, screening, and cloning of hybridomas; production, purification, and characterization.

Immunocompetence Evaluation. Tissue culture, cellular cytotoxicity against tumor cells; purification and evaluation of lymphocyte subsets and lymphokine responsiveness; cryopreservation of functionally active cells; clonogenic assay for tumor cells.

Protein Biochemistry. Purification and characterization of monoclonal antibodies and cytokines including column chromatography, HPLC, and electrophoresis.

Small Animal Care and Manipulation. Caging, handling, minor surgical manipulations and injections of mice, rats, guinea pigs, and so forth; tissue preparation for histology; tumor implantation and tumor growth measurements; necropsy work.

Laboratory Maintenance. Equipment evaluation and repair; stockroom ordering and receiving; glassware cleaning and sterilization; wash room operation; utilities monitoring; radiation waste disposal; radiation safety and laboratory safety compliance.

Send curriculum vitae/résumé: Robert K. Oldham, M.D., Biotherapeutics, Inc., Riverside Drive, Franklin, Tenn. 37064.

The Terrestrial Ecology Division of the Center for Energy and Environment Research (CEER), University of Puerto Rico, seeks an **ECOLOGIST/CHEMIST** to develop a research program on rainforest ecosystem processes and manage a nutrient analysis laboratory. The position requires a strong background in ecosystem ecology and expertise in nutrient cycling or ecotoxicology. Laboratory facilities are located in San Juan and at the El Verde Field Station. Applicants should send curriculum vitae and the names of three references to: Dr. Laurence J. Tilly, CEER, College Station, Mayaguez, P.R. 00708, by 1 May 1985. *The University of Puerto Rico is an Equal Opportunity/Affirmative Action Employer.*

UNUSUAL OPPORTUNITY FOR A MS BIOCHEMIST DRUG METABOLISM

OPPORTUNITY

You'll be directly involved in new concepts and methodology in drug metabolism, including developing enzyme assays and immunoassays, production of antisera, conducting immunochemical and HPLC studies with drugs and metabolites, and isolation and GC/MS structural elucidation of metabolites. This position requires a person with a Master's in Biochemistry or Biology with strong chemical background. Laboratory research experience, preferably in enzymology and immunology/immunochemistry, is required.

INNOVATION

Bristol-Myers, a world-wide leader in research and development, has a strong heritage of accomplishments and a strong future. Our uninterrupted growth is the direct result of our innovation. Our operating style encourages personal creativity and contribution and we're thoroughly professional.

LOCATION

This unit of Bristol-Myers is located at Mead Johnson in Evansville, Indiana, a community of beautiful residential areas which couples the advantages of southern economy with the changing beauty of four-season living.

To investigate these reasons for joining Bristol-Myers Research is to discover a wealth of others: Excellent salaries, superb benefits including paid relocation, and real growth, both personal and professional. Discover us! When it comes to your career, no one can offer more!

Send resume in confidence to: William Kromann, Employment Dept. 6K36, Bristol-Myers Research Recruitment, Mead Johnson & Company, Evansville, IN 47721-0001.



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PHARMACOLOGISTS

In the stimulating and demanding field of medicine and health care, Merrell Dow stands as an international leader. Due to continued growth, we have an immediate need for experienced Pharmacologists to become part of our innovative group.

Cardiovascular Pharmacologist

To qualify you must possess a PhD with a minimum of 2 years post-doctoral experience to investigate and identify new approaches and novel agents for the treatment of occlusive vascular disease using pharmacological and biochemical techniques. It is essential to have an expertise to study the formation, release and pharmacological actions of mediators of vascular spasms.

Cardiac Electrophysiologist-Pharmacologist

Qualifying candidate will be a PhD level individual with 2 years post-doctoral experience to investigate and identify new approaches and novel agents for the treatment of heart disease involving arrhythmias and/or myocardial dysfunction using cardiac cellular electrophysiological techniques. The position requires research into the cellular mechanisms of myocardial derangements as well as the mechanism of action of antiarrhythmic and/or inotropically active agents.

We offer the opportunity for professional growth and advancement, with a competitive salary and a wide range of benefits. Please forward your resume with salary history for immediate consideration to: Personnel Services Manager

Merrell Dow

MERRELL DOW RESEARCH INSTITUTE
2110 East Galbraith Road
Cincinnati, Ohio 45215
Equal Opportunity Employer M/F

RESEARCH SCIENTISTS

Bristol-Myers Company, a leader in industrial biotechnology and a major international manufacturer of pharmaceutical products, has the following opportunities in its Genetic Engineering Department for scientists to provide support to Genetic Microbiology and Gene Expression Research Programs.

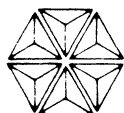
RESEARCH SCIENTIST

To qualify, the successful candidate must have a PhD in Microbiology or related discipline, with 2 or more years postdoctoral research in the molecular biology of antibiotic producing organisms. Experience, documented by publications, should include studies of the genetics of streptomycetes, fungi and recombinant DNA technology as applied to gene cloning in streptomycetes. Responsibilities will involve the development of microbial strains with improved production of antibiotics and the production of novel antibiotics.

ASSISTANT RESEARCH SCIENTIST

To qualify, the successful candidate must have a BS or MS degree in Molecular Biology or related discipline, with strong background in gene cloning. Responsibilities will include the development of expression systems for the production of cloned gene products.

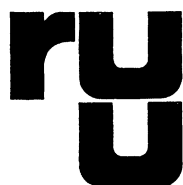
We offer good starting salaries, comprehensive benefits and working environment conducive to your professional growth. For prompt, confidential consideration, forward your resume to: Department Head, Genetic Engineering



BRISTOL-MYERS COMPANY INDUSTRIAL DIVISION

P.O. Box 4755, Syracuse, New York 13221

An equal opportunity employer M F



Faculteit der diergeneeskunde

RESEARCHER

The department of Immunology, Veterinary Faculty State University Utrecht, in the Netherlands, is taking part in a co-operation between the department of Immunology and the National Institute of Public Health and Environmental Hygiene. The project aims at the detection and prevention of illnesses, caused by the canine parvovirus.

The applicant has followed his education on university and should have experience in immunological and virological techniques. The appointment will happen for a term of one year, possible three years, dependent on subsidy.

Salary is based on the qualifications of the selected person, but maximum £4746,-(gross) monthly.

Further information can be obtained from prof. dr. E.J. Ruitenbergh, RIVM, Anthonie van Leeuwenhoeklaan 9, 3721 MA Bilthoven, the Netherlands, tel. 3130742340

Applications accompanied by a full curriculum vitae should be sent to the Veterinary Faculty, Personnel Department, Yalelaan 1, de Uithof, 3508 TD Utrecht, the Netherlands. Our ref.: 170.092

POSITIONS OPEN

CLINICAL NUTRITION FACULTY

Two 12-month, tenure-track positions open in the School of Health Related Professions. **Program Director** to develop and administer new graduate program in clinical nutrition; teach; coordinate and conduct research. Earned doctorate in nutrition or related field. University experience, and documented competence in research and teaching required, R.D. preferred. Assistant/associate professor. **Nutrition Faculty Position** to teach graduate courses, supervise clinical study and research for graduate students, conduct independent and collaborative research. Earned doctorate in nutrition or related field, R.D., 3 years of experience in health care, demonstrated ability to teach and conduct research. Applications and nominations will be accepted, reviewed, and acted upon, on or before 1 June 1985. Send curriculum vitae and names, addresses, and telephone numbers of at least three references to: **Benjamin E. Sanders, Ph.D., Chairperson, Search Committee, Department of Biochemistry, 102 Cary Hall, State University of New York at Buffalo, Buffalo, New York 14214. Affirmative Action/Equal Opportunity Employer.**

CURATOR OF BIRDS

The Smithsonian Institution seeks applications for a curatorial position in ornithology. Candidates must be U.S. citizens with curatorial experience, a vigorous collection-oriented research program in systematic ornithology, a strong publication record, and a willingness to assume an active role in the curation and augmentation of existing collections. Position may be filled at GS-11 to GS-13 (starting salary: \$26,381 to \$37,599) as established by the Director, National Museum of Natural History, on recommendation of peer review of candidate's qualifications in accordance with Office of Personnel Management. Send SF-171 (Personal Qualifications Statement), curriculum vitae, bibliography, statement of career objectives, and names of three references (letters and reprints are not desired at this time) by 15 April 1985 to: **Smithsonian Institution, Office of Personnel Administration, 900 Jefferson Drive, SW, Room 1410, Washington, D.C. 20560; attention: MPA-85-90-F. The Smithsonian is an Equal Opportunity Employer.**

FACULTY POSITION IN NUTRITION/FOOD POLICY AND PLANNING

The Department of Nutritional Sciences, University of California, Berkeley, invites applications for a faculty appointment in nutrition/food policy and planning. The tenure-track position is open at the assistant, associate, or full professor level. The applicant must hold a Ph.D. (or equivalent) degree in nutrition or an equivalent field with experience or training in public policy, nutritional anthropology, economics or political science. The appointee is expected to develop an academic and research program in the department concerned with food systems and distribution and the nutritional state of people, from the point of view of policy analysis at national and international levels. The program will provide a nutritional focus within other ongoing campus activities in nutrition/food policy in agricultural economics, public health, health policy, and international studies. The position will be available fall semester 1985, or soon thereafter. To apply, please send curriculum vitae, bibliography, statement of research and teaching interests, and the names of five referees who may be contacted. Apply to: **Dr. Janet C. King, Chair, Nutrition/Food Policy and Planning Search Committee, Department of Nutritional Sciences, University of California, Berkeley, Calif. 94720. Application deadline: 1 May 1985 or until position is filled. Salary: commensurate with qualifications.**

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

AMHERST COLLEGE—VISITING FACULTY. Position available for a Ph.D. chemist beginning September 1985. Appointment can be for 1 or 2 years, and is highly suited to someone on sabbatical. Since the college seeks the best available candidate for this non-tenure-track position, rank and salary are open. The successful applicant will carry the normal teaching load at Amherst and will be encouraged to carry out either collaborative or independent research. Preference is for a physical chemist, but persons in other areas will be considered. Applications should be filed by 15 April 1985. Submit detailed résumé and names of references to: **Chairman, Chemistry Department, Amherst College, Amherst, Mass. 01002. Amherst College is an Equal Opportunity/Affirmative Action Employer.**

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Allergan provides its R&D professionals the rewarding opportunity to make a positive difference in advancing eye care throughout the world.

Discovery Research has two positions available for researchers with experience in the biochemistry of the lens. One position is at the Scientist level and requires a Ph.D. or equivalent and minimum of two years of post-doctoral experience. The second position is for an Associate Professional or Professional and requires the equivalent of a four year college education. Experience in cell culture techniques is highly desirable for both positions.

Responsibilities of these positions include the planning and conducting of research in a multi-disciplinary team environment.

Beyond making a difference in sight, Allergan brings new dimensions to career satisfaction through a creative scientific environment, a competitive salary and benefits package, and on-site recreational resources. Make a difference in your future today by sending your resume to: **Allergan Pharmaceuticals, A Smith-Kline Beckman Company, Dept. AS, 2525 Dupont Drive, Irvine, CA 92715.** Equal Opportunity Employer m/f/h.



ANNOUNCEMENT

The American Cancer Society is initiating a program of support for preclinical research with interferons.

It will provide reagents (i.e., various preparations of mouse and rat interferons and antibodies to these interferons) as well as financial support where this is critical to conducting the research. In 1985, a total budget of \$1.5 million is available for procurement and research.

Applications should be received by June 1, 1985, for a second cycle of peer reviews.

Areas of high priority are:

1. mechanism(s) of the antineoplastic action of interferons;
2. pharmacokinetics and pharmacology of interferons;
3. studies of the relationship between interferon dose/schedule and antineoplastic response *in vivo*;
4. therapies using combinations of different molecular species of interferons, or interferon and other antineoplastic or immunomodulatory agents;
5. use of interferons for "chemoprophylaxis" following the application of tumor inducing agents.

The purpose of this program is not to supercede regular grant mechanisms. It is designed to support pre-clinical studies whose outcome could be expected to accelerate and/or facilitate the development of maximally effective clinical applications of interferons as single agents or in combination antitumor therapies.

Applications requesting reagents only should consist of a letter describing research goals, rationale, methods (briefly), existing support and justifications for the request. A short supporting letter from an official of the investigator's institution and a C.V. of the principal investigator should be enclosed.

Applications for financial support and reagents should be on standard American Cancer Society forms (including Statements on Human Subjects and Animal Use). The body of the application should not exceed six typewritten pages in length, and should describe research goals, rationale, methods and budgetary needs with justifications. A.C.V. of the principal investigator should be enclosed. Please note that unsolicited applications for financial support by investigators outside the U.S. or Puerto Rico cannot be funded by the Society.

Applications should be sent to: Dr. C. Chester Stock, American Cancer Society, 90 Park Avenue, New York, N.Y. 10016

Research Scientists

Want to play an important role in tomorrow's medical breakthroughs?

Warner-Lambert Company, an industry-recognized worldwide leader in pharmaceutical, consumer and health care products, is on a course of selective expansion. If you are looking for a highly visible, growth-oriented position that has meaning and importance, consider these challenges in diagnostic research:

Diagnostics Research and Development Division

- **Clinical Research Scientist**—Plan and implement clinical field studies for the microbiology diagnostic product line. Requires M.S. or Ph.D. in Microbiology or related science, and experience in clinical microbiology/immunology. Broad technical expertise, strong communications skills and familiarity with clinical laboratory are assets.

- **Senior Scientist**—Develop procedures, conduct research, design experiments and evaluate report results in support of major immunomicrobiology research program. You must have a Ph.D. in Immunology, Microbiology or equivalent and at least 3 years' experience with non-isotopic immunoassay techniques applied to development of diagnostic test systems.

New Diagnostic Technologies Research

The Applied Research Department has openings for innovative, hands-on senior scientists with at least 2 years' post doctoral research experience. You will develop and apply new technologies in microbiology, coagulation and clinical chemistry testing.

- **Microbiologist**—Must have experience developing microbial detection/identification systems. Knowledge of current state-of-the-art clinical microbiology highly desirable.

- **Immunologist/Immunochemist**—Direct experience developing ELISA and fluorimetric immunoassays. Knowledge of protein purification techniques, antigen/antibody labeling.

- **Organic Chemist**—Requires background in peptide synthesis, peptide chemistry and protein molecular modification. Minor in Biochemistry and direct experience synthesizing chromogenic enzyme substrates are highly desirable.

We offer competitive salaries and benefits along with excellent opportunities for professional achievement.

Please send resume, indicating position of interest and salary history, in confidence to: Ms. Dianne Wall, Diagnostics Human Resources, Warner-Lambert Company, 201 Tabor Road, Morris Plains, NJ 07950.

GENERAL DIAGNOSTICS
Division of Warner-Lambert Company

Equal Opportunity in Action! M/F

POSITIONS OPEN

DEAN ETHEL PERCY ANDRUS GERONTOLOGY CENTER UNIVERSITY OF SOUTHERN CALIFORNIA

The University invites nominations and applications for the position of **Dean of the Gerontology Center**. The Center was founded in 1964; its primary subdivisions are the Gerontology Research Institute and the Leonard Davis School of Gerontology.

Candidates should have experience in a multidisciplinary research or educational setting; international recognition as a major research scholar and leader; professional interests compatible with and a commitment to the field of gerontology; administrative experience in an academic setting; and a demonstrated ability to raise funds for research and training programs from public and private sources.

Dr. Joseph P. Van Der Meulen, Chairman, Gerontology Search Committee, Administration Building, Room 102, University of Southern California, Los Angeles, California 90089-4019. An Equal Opportunity Employer.

FOOD AND DRUG ADMINISTRATION (FDA) CENTER FOR VETERINARY MEDICINE ROCKVILLE, MARYLAND

The FDA's Center for Veterinary Medicine is seeking candidates for position of **Director, Division of Toxicology**. The director is responsible for planning, organizing, and managing the evaluation of toxicological data, and safety determinations of residues in the edible tissue of food-producing animals administered veterinary pharmaceutical and feed additives.

Candidates must have an extensive background in general toxicology and should possess an advanced degree (Ph.D. desirable) or equivalent achievement in the biological or physical sciences (that is, pharmacology, biology, microbiology, veterinary medicine, chemistry, and so forth). Each candidate's experience and educational background must demonstrate the ability to make sound and justifiable decisions on the human food safety of animal drugs, and the ability to convey those decisions both orally and in writing.

Salary range: \$52,252 to \$67,940 per annum, depending upon qualifications. Standard Federal Civil Service fringe benefits are available.

Send a Standard Form-171 (Personal Qualifications Statement), which can be obtained from any federal personnel office, or a detailed résumé including salary history to:

**HHS/Food and Drug Administration
Division of Human Resources
Management (HFA-426)
5600 Fishers Lane
Rockville, Md. 20857
Attention: P. Price**

All applicants must meet U.S. Civil Service requirements. *FDA is an Equal Opportunity Employer.*

FACULTY POSITION—ARTHRITIS RESEARCH POSITION. Ph.D. in biochemistry or pharmacology needed to join Arthritis Research Group. Position is instructor in medicine. Candidates should have experience in ELISA, immunochemistry, and connective tissue biochemistry and at least 3 years of experience in basic arthritis research. Send curriculum vitae to: **Dr. E. Harris, Chairman, Department of Medicine, Academic Health Science Center, CN 19, New Brunswick, N.J. 08903. An Equal Opportunity/Affirmative Action Employer, M/F/H/V.**

FACULTY POSITION

The University of Michigan, School of Public Health, Department of Environmental and Industrial Health, has a tenure-track position open at the assistant professor level for appointment in the Toxicology Program in the areas of genetics and/or immunology. Qualifications include doctoral degree, demonstrated commitment to research and ability to obtain research support and to provide quality instruction. Applicants should send curriculum vitae, bibliography, and names of three references to: **I. A. Bernstein, Chairman, Toxicology Search Committee, School of Public Health, The University of Michigan, Ann Arbor, Michigan 48109. The University of Michigan is an Equal Opportunity Employer. Applications are especially sought from minority and women candidates.**

POSITIONS OPEN

THE UNIVERSITY OF FLORIDA Invites Applications and Nominations for the Position of DIRECTOR OF THE CENTER FOR LATIN AMERICAN STUDIES

The Center is a major interdisciplinary institution, recognized as a national resource center with NDEA funding. It has nearly 100 affiliated faculty members and strong links to professional schools on campus. Applicants for the directorship should hold the rank of full professor or equivalent, international standing for their scholarship in Latin America, and experience in administration and in program and research development.

The position will be available as of 1 July 1985, but starting date is negotiable. Minimum 12-month salary is \$55,000, but salary is also negotiable. Disciplinary and regional interests are open. Nominations and letters of interest (the latter with curriculum vitae) must be submitted on or before 30 May 1985 to:

**Search Committee for Director
of Latin American Studies
c/o Linda Black
235 TIGERT HALL
Office of Academic Affairs
University of Florida
Gainesville, Fla. 32611**

The search will be conducted under Florida's "Government in the Sunshine" law. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

EXERCISE PHYSIOLOGY. Ten-month, assistant professor (tenure-track) position with teaching and research requirements. Candidate must have Ph.D. in exercise science, kinesiology, or physical education, with specialization in exercise physiology and the cognate science courses. Postdoctoral training and experience with humans is essential. Candidate must have interest in exercise mechanisms and expertise to investigate the functioning of a specific system. Candidate will have responsibility for teaching graduate level exercise physiology theory and laboratory courses, and must assume a leadership role as director of research, teaching, and service components of an adult fitness program. Success in teaching and pursuit of external funding are strong prerequisites. Effective starting date is 16 August 1985. Salary open. Closing date for applications: 22 April 1985. Submit letter of application, curriculum vitae, and three reprints, and have three letters of recommendation sent to: **Charles M. Tipton, Ph.D., Head, Department of Exercise and Sport Sciences, University of Arizona, Tucson, Arizona 85721. An Affirmative Action/Equal Opportunity Employer.**

HEBREW UNIVERSITY OF JERUSALEM FACULTY POSITION PHARMACEUTICAL CHEMISTRY

The Hebrew University's School of Pharmacy invites applicants for a tenure-track position in pharmaceutical chemistry. The position requires a Ph.D. and postdoctoral experience. The successful candidate is expected to teach, in Hebrew, medicinal chemistry and drug analysis and to conduct research in a related field. Applicants should send curriculum vitae, list of publications, names of three references, and a summary of research objectives to: **Professor Eli Breuer, P.O. Box 12065, Jerusalem, Israel, by 30 April 1985.**

HEMATOPATHOLOGIST—BLOOD BANKER. Joint appointment at East Tennessee State University (ETSU), Quillen-Dishner College of Medicine, and Mountain Home VA Medical Center. We are seeking an AP/CP-trained pathologist to direct the Hematology-Blood Bank section of the clinical laboratory at the VA Hospital and assist in surgical pathology. Experience and Board-certification/eligibility in hematology or blood bank is desired. Evidence of interest in teaching and research requested. Replies to: **Philip S. Coogan, M.D., Chairman, Department of Pathology, P.O. Box 19540A, ETSU, Johnson City, Tenn. 37614. Equal Opportunity/Affirmative Action Employer.**

IMMUNOBIOLOGIST. The Division of Immunology, Webb-Waring Lung Institute, University of Colorado Health Sciences Center, needs a research associate interested and competent in studying cellular immunity against microbial infectious diseases. A Ph.D. or equivalent in relevant training is required, and associated postdoctoral training is desirable. Interested scientists send curriculum vitae to: **Alfred J. Crowle, Ph.D., Container B-122, 4200 East Ninth Avenue, Denver, Colorado 80262.**

POSITIONS OPEN

FACULTY POSITION AVAILABLE. NEUROSCIENTIST—single investigator or team—involved in biochemistry, cell biology, or molecular genetics related to Parkinson's disease, other movement disorders, or diseases of aging brain. Must have grant support. *Department of Neurology, Columbia University College of Physicians and Surgeons, is an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to: **Dr. Stanley Fahn, Coordinator, Search Committee, Neurological Institute, 710 West 168 Street New York, N.Y. 10032.**

DEPARTMENT HEAD—The Veterinary Research Laboratory and the Department of Veterinary Science at Montana State University. Departmental functions include research, teaching, and service with emphasis on livestock disease research. D.V.M. or equivalent required/Ph.D. preferred. Application deadline: 1 June 1985. For further information, contact: **Dr. Lyle Myers, Veterinary Research Laboratory, Montana State University, Bozeman, Montana 59717. An Equal Opportunity/Affirmative Action Employer.**

HEAD: DEPARTMENT OF BIOLOGY SEARCH EXTENDED

Position will be filled at rank of associate professor or higher, with one-half time teaching responsibility. Preferred area of expertise is human physiology, but other specialties will be considered. Requirements include earned doctorate, history of effective teaching and research; administrative experience desirable. Candidate selected will assume duties in August 1985, or upon availability. Submit curriculum vitae and names, addresses, and telephone numbers of three references by 12 April 1985 to: **Professor Samuel D. Paravonian, Chairman, Search Advisory Committee, Graduate Office, PURDUE UNIVERSITY-CALUMET, Hammond, Indiana 46323.**

Affirmative Action/Equal Opportunity Employer

IMMUNOLOGY

The West Virginia School of Osteopathic Medicine (WVSOM) invites applications for a tenure-track, 9-month appointment position in parasitology, as well as immunology. Successful candidate must exhibit a strong commitment to teaching and will be expected to participate in a general and pathogenic microbiology course, participate in the committee structure of the school, and take part in a developing research program.

Qualified individuals must hold a Ph.D. in microbiology or immunology and postdoctoral experience is desirable.

Applications, including current curriculum vitae and three letters of reference, should be sent to: **Michael K. Cope, Ph.D., Associate Dean for Academic Affairs, West Virginia School of Osteopathic Medicine, 400 North Lee Street, Lewisburg, West Virginia 24901. Deadline for accepting applications is 30 April 1985.**

WVSOM is an Affirmative Action/Equal Opportunity Employer.

MAMMALIAN ECOLOGIST

Applications are invited for a full-time, research-oriented faculty position available fiscal year 1986. Candidates must demonstrate success in maintaining an active, extramurally funded research program, have a strong publication record, advise M.S. and Ph.D. students in wildlife and terrestrial ecology, and teach one graduate-level course in specialty. Preference will be given to those conducting field-oriented research on the ecology of mammals, emphasizing community, population, or behavioral characteristics. Rank and salary will be commensurate with qualifications. Applicants should submit curriculum vitae, a brief statement of research interests, and names, addresses, and telephone numbers of five potential references by 30 April 1985 to: **Dr. J. Edward Gates, Appalachian Environmental Laboratory, Center for Environmental and Estuarine Studies, University of Maryland, Frostburg, Maryland 21532. An Equal Opportunity/Affirmative Action Employer.**

POSITION AVAILABLE: RESEARCHER IN MYOCLONUS. A faculty position in the Department of Neurology, Columbia University College of Physicians and Surgeons, is available for an investigator in the field of myoclonus. Must have shown evidence of research productivity. Assistant professor level, depending on credentials. Contact: **Stanley Fahn, M.D., Neurological Institute, 710 West 168 Street, New York, N.Y. 10032. Telephone: 212-694-5277. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

bioplanta

Director of Research

Braslian Plant Biotechnology Company
(Bioplanta do Brasil)

One of Brasil's ten largest companies is currently constructing state-of-the-art research laboratories in the Campinas Region (Sao Paulo State) to accelerate Brasil's participation in the advancements generated by the new plant biotechnologies.

The subsidiary, Bioplanta do Brasil, seeks a director of research. The candidate must have a doctorate, wide knowledge of plant genetics, tissue culture, plant physiology or biochemistry. Must also have proven previous experience in the planning and managing of multi-disciplinary plant research programmes. It will be his responsibility to suggest, plan and manage the research effects of the company, with emphasis on obtaining commercially viable results, in addition to motivating and supervising a team of scientists and technicians. A Brazilian candidate should be able to speak English. Portuguese and Spanish would be helpful for a non-Brazilian applicant.

Please send replies in confidence to:

G. T. Simmons
NPI
417 Wakara Way
Salt Lake City, Utah 84108
U.S.A.

SENIOR RESEARCH BIOLOGIST MICROBIOLOGY

The Sterling-Winthrop Research Institute announces an opening for a senior research biologist in its Microbiology Dept. This scientist will coordinate research activities in a growing oral microbiology program evaluating new agents effective in the control of periodontal disease.

The successful candidate will possess a PhD in bacteriology, microbiology or oral biology with 1-2 years post-doctoral experience in the physiology and ecology of oral microflora. Experience with animal models for the evaluation of periodontal disease is desired.

This position will involve new model development, evaluation of test procedures and parameters and interaction with other research programs and departments. Immediate requirements will involve the use of laboratory and animal models to study the microbial ecology of the oral cavity in the disease state and during therapy.

We offer an attractive salary and benefits package with the opportunity for professional growth. The Institute is located near Albany, New York, which is a major center for summer and winter recreational activities.

Please send CV including salary requirements in confidence to:

Mr. William F. Sheldon
Employment Manager



STERLING-WINTHROP RESEARCH INSTITUTE

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Columbia Turnpike, Rensselaer, New York 12144
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RESEARCH SCIENTISTS

Clinical Diagnostics

Bio-Rad Laboratories has been a recognized leader for 27 years in the fields of clinical diagnostics, separations and identification chemistry, and analytical instrumentation. As a result of our continuing growth, three positions are available to become a part of our research team in Clinical Diagnostics. We seek highly motivated individuals with a record of accomplishment, a commitment to excellence in science, and a need for recognition in their next challenging career step.

Molecular Biologist

The integration of cDNA probe technology into our clinical diagnostics products will be one of your primary responsibilities. Requires a PhD in Molecular Biology or a related field and 2 or more years' post-doctoral academic or industrial experience. Expertise in cDNA cloning, Southern and Northern blotting, restriction mapping, and/or DNA sequencing are desirable.

Immunologist

As a senior member of our Biochemistry/Cell Biology Group, you will be a major participant in key new research programs of our growing research and development team. Requires a PhD in Immunology, Immunochemistry or a related field and 2 or more years' post-doctoral academic or industrial experience. Expertise in hybridoma technology, tumor immunology, protein/peptide purification, and immunoassay development are desirable.

Assay Development Chemist

As a senior member of our Assay Development Group, you will have primary responsibility for the final design and development of immunoassays. Experience in enzyme and fluorescent labeling of proteins and nucleic acids, immobilization of proteins on solid phases, and nucleic acid hybridization technology are desirable. Requires an advanced degree in Biochemistry, Immunology or a related field with experience in the development of immunoassays.

Bio-Rad offers a competitive compensation package including comprehensive benefits and relocation assistance. If you would like to be considered for one of these excellent opportunities, please submit your resume, in confidence, to Bio-Rad Laboratories, Human Resources, Department #293-S322, 2200 Wright Avenue, Richmond, CA 94804. An equal opportunity employer.

BIO-RAD

Bio-Rad Laboratories

POSITIONS OPEN

MEDICINAL CHEMISTRY AND PHARMACOGNOSY FACULTY POSITION—Assistant professor level, tenure-track appointment; available 1 September 1985. Applicants should have strong commitment to the development of a vigorous research program in natural products chemistry, pharmacognosy, biochemistry, or related discipline with biochemical expertise and postdoctoral experience desirable. Duties will include teaching and undergraduate and graduate students; conducting independent research; and service on committees. Application deadline: 1 May 1985. Applicant should submit detailed curriculum vitae, list of publications, graduate transcript, summary of future research interests, and have three letters of recommendation transmitted to: **Duane D. Miller, Chairman, Division of Medicinal Chemistry and Pharmacology, College of Pharmacy, The Ohio State University, 500 West 12 Avenue, Columbus, Ohio 43210. Equal Opportunity/Affirmative Action Employer.**

MICROBIAL GENETICIST/MOLECULAR BIOLOGIST

The Department of Biology, the largest academic component within the Division of Biology and Biomedical Sciences, at **Washington University in St. Louis**, is seeking an individual with research expertise in the genetics and/or molecular biology of prokaryotes. Microbiologists who will interface with existing strong programs in developmental biology, population biology and ecology, plant biology, and molecular biology are especially encouraged to reply. Preference will be given to those candidates with strong credentials for, and commitment to, developing an independent research program. An interest in, and aptitude for, teaching undergraduate and graduate students is of equal importance.

The position can be at any faculty rank but individuals at the assistant professor level will have priority. Interested individuals should send curriculum vitae and a letter indicating past, current, and future research interests, and arrange to have three letters of reference sent to: **Dr. Roy Curtiss III, Chairman of the Search Committee, Department of Biology, Box 1137, Washington University, St. Louis, Mo. 63130. Washington University is an Equal Opportunity/Affirmative Action Employer.**

MICROBIOLOGIST/CELL PHYSIOLOGIST. The Department of Biology, Washington College, invites applications for a position as assistant professor (Ph.D. required). Applicants should have a strong background in microbiology/cell biology and a research interest in marine/estuarine microbiology. Teaching responsibilities include general biology (one semester), microbiology, cell physiology and biochemistry (annually), and immunology or virology and marine/estuarine microbiology (alternate years). Primary responsibility is teaching, but research is encouraged. Washington College is located on the banks of the Chester River, a major tributary to the Chesapeake Bay on Maryland's Eastern Shore; Washington, D.C., Baltimore, and Philadelphia are within easy driving distance. Send curriculum vitae and three letters of recommendation by 15 April to: **Dr. Donald Munson, Department of Biology, Washington College, Chestertown, Maryland 21620.**

MOLECULAR BIOLOGIST

New, privately funded research unit with a strong protein biochemistry emphasis is seeking a qualified investigator to establish a program to study connective tissue protein genes. The successful candidate will have a record of vigorous independent research utilizing recombinant DNA technology. Direct experience with the collagens preferred. This position is permanent and available fall 1985. Interested individuals should send current curriculum vitae and three references to:

**Dr. Robert Burgeson
Research Unit
Shriners Hospital for Crippled Children
3101 Southwest Sam Jackson Park Road
Portland, Ore. 97201**

NEUROSCIENTIST: JOHNS HOPKINS SCHOOL OF MEDICINE

One or two openings available about July 1985 for Ph.D. or M.D. with background in neurosciences at postdoctoral or instructor level. Areas of investigation: nerve-muscle interactions, acetylcholine receptor turnover, nerve-muscle junction formation. Experience in one or more of: neurophysiology, neuropharmacology, cell culture, receptor metabolism. Reply: **Dr. Daniel B. Drachman, Department of Neurology, Johns Hopkins School of Medicine, 600 North Wolfe Street, Baltimore, Md. 21205.**

POSITIONS OPEN

MOLECULAR BIOLOGIST

The Biology Department, Rutgers University-Camden, is seeking a broadly trained molecular biologist for a tenure-track (assistant or associate professor level) position beginning September 1985 or January 1986. A Ph.D. is required. Candidates should have a strong commitment to graduate and undergraduate teaching and are expected to develop a vigorous research program.

Applicants should submit curriculum vitae, a statement of professional objectives, three representative reprints, and three letters of recommendation before 1 May 1985 to: **Dr. H. Lee, Chairman, Biology Department, Rutgers University, Camden, New Jersey 08102.**

Rutgers, The State University of New Jersey, is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST

The Diabetes Unit at the Massachusetts General Hospital seeks a research associate with experience in recombinant DNA techniques, DNA sequencing, cloning, and expression of genes. A protein microsequencing facility is operative within the laboratory. Synthetic peptides and oligonucleotides are available via an adjacent core facility. The laboratory is focused on the role of protein phosphorylation in the actions of insulin and peptide growth factors. Salary and rank are commensurate with experience. Send curriculum vitae and three letters of support to: **J. Avruch, Chief, Diabetes Unit, Massachusetts General Hospital, Boston, Mass. 02114.**

UNIVERSITY MUSEUM DIRECTOR

Nationally recognized facility with 3.5 million specimens in highly regarded research collections in vertebrate paleontology, parasitology, entomology, botany, zoology, and anthropology seeks director. Requires Ph.D. or master's with extensive academic experience to be considered for a tenured position in a department closely related to the work of the museum. Must possess substantial experience in museum or related departmental administration. For complete job description, contact: **402-472-3417. Apply to: John Yost, Chancellor's Office, 308 Administration Building, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0419, Affirmative Action/Equal Opportunity Employer.**

TWO TENURE-TRACK POSITIONS

The **DEPARTMENT OF PHYSIOLOGY** in the Medical School wishes to fill two tenure-track positions. The level is negotiable depending on experience and on research support, but one will likely be at the assistant professor level. There is also an opportunity for a joint appointment at the **Dalton Research Center.** The Department of Physiology and Dalton Research Center have recently been recommended for enhancement of their programs by the University. Our focus in this recruitment is on membrane biophysics, and on cellular and molecular biology which can interact with well-established programs in cardiovascular physiology and pathophysiology (hypertension, coronary occlusive disease). Each successful applicant will be expected to establish an independent laboratory, either in the Department of Physiology or at the Dalton Research Center or a combination of both. Other duties will include teaching in the medical physiology course and at the advanced graduate level. This recruitment is part of a long-range effort to develop a multidisciplinary program in cardiovascular studies. Salary and start-up funds will be competitive.

Send current curriculum vitae to:

**Dr. Allan W. Jones
Department of Physiology
M412, Medical Sciences Building
University of Missouri
Columbia, Missouri 65212**

by 26 April 1985.

The University of Missouri is an Equal Opportunity Employer.

POSTDOCTORAL POSITION. Opportunity is available for 2 to 3 years to investigate plasma membrane function during morphogenesis of *Candida albicans*. Investigation will also include molecular analysis of genes encoding cell surface proteins. Experience in membrane/lipid biochemistry would be helpful. Starting salary: \$18,000 per year. Send curriculum vitae and names of three references to: **Dr. R. L. Cihlar, Department of Microbiology, Schools of Medicine and Dentistry, Georgetown University, Washington, D.C. 20007. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

PLANT MOLECULAR BIOLOGIST/BIOTECHNOLOGIST. The Department of Plant Pathology and Crop Physiology, Louisiana State University, is searching for a faculty member at the assistant professor level to conduct research aimed at developing cellular and molecular approaches for plant improvement with emphasis on plant-pathogen interactions. Strategies of interest include protoplast fusion, haploid culture, and/or genetic engineering techniques. Program development is expected to follow interests of the successful candidate, and basic as well as applied investigations will be encouraged. Teaching a graduate level course and advising graduate students will be encouraged. Applicants must have a Ph.D. with emphasis in plant physiology, plant pathology, and/or biochemistry. Application deadline: 1 May 1985, or until suitable candidate is found. This tenure-track appointment is available 1 July 1985. To apply, a résumé, transcripts, a statement of your research interests, and three letters of reference should be sent to: **Dr. Lowell L. Black, Chairman of the Search Committee, Department of Plant Pathology and Crop Physiology, Louisiana State University, 302 Life Sciences Building, Baton Rouge, Louisiana 70803; telephone: 504-388-1464. Louisiana State University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL ASSOCIATE. Department of Human Genetics. To characterize the molecular organization of the human major histocompatibility complex by analyzing the genes and their products from human MHC. Candidates must have a Ph.D. in the field of microbiology in addition to a prior knowledge of DNA sequencing, gene cloning including the preparation and use of cosmid libraries, and DNA mediated gene transfection and expression in mammalian cells. Also requires proven experience in tissue culture, circular dichroism, and x-ray diffraction techniques. Full-time position with annual salary of \$21,996. Interested applicants should submit their résumés to: **Dr. Sherman Weissman, Yale University School of Medicine, Department of Human Genetics, 1125A SHM, 333 Cedar Street, New Haven, Conn. 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOW IN CONNECTIVE TISSUE BIOCHEMISTRY

Applications are invited for a protein biochemist with an interest in connective tissues to work on isolation, purification, and quantitation of collagen types, cross-links, and turnover. Experience with proteoglycan and/or elastin chemistry would be helpful. Collaborative interactions with clinical and biochemical colleagues will be strongly encouraged.

Applicants should have received a Ph.D. in the relevant area by the time of taking up the position (January to June 1986). Salary will be at the level authorized by the Alberta Heritage Foundation for Medical Research (currently \$21,800 to \$24,000) and support is available for up to 3 years.

All qualified individuals are encouraged to apply but preference will be given to Canadian citizens and permanent residents.

Please reply together with the names of three referees by 30 April 1985 to:

**Dr. C. Frank
Department of Surgery
Foothills Hospital
1403 29th Street, NW
Calgary, Alberta, Canada T2N 2T9**

POSTDOCTORAL POSITION available to study the role of carbohydrate-mediated postsynthetic modification of proteins in diabetes and aging. Applicants should have a recent Ph.D. in biochemistry or chemistry with background in protein chemistry. Send curriculum vitae and names of three references to: **Dr. Vincent M. Monnier, Institute of Pathology, Case Western Reserve University, Cleveland, Ohio 44106. An Equal Opportunity/Affirmative Action Employer.**

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT), DEPARTMENT OF APPLIED BIOLOGICAL SCIENCES. Postdoctoral positions available in the following areas: drug delivery systems, synthesis of new biopolymers, and immobilized enzymes for medical applications. Ph.D. or M.D. with backgrounds in chemistry, chemical engineering, biomedical engineering, pharmacology, biochemistry, biology, polymer science, and pharmaceutical or medicinal chemistry desirable. Apply to: **Professor Robert Langer, MIT E25-342, 77 Massachusetts Avenue, Cambridge, Massachusetts 02139. MIT is an Equal Opportunity/Affirmative Action Employer.**



Albert Einstein College of Medicine

The DEPARTMENT OF CELL BIOLOGY invites applications for positions at the level of Assistant Professor, or, for candidates with exceptional credentials, at a more senior level. The research environment is particularly attractive for candidates who combine genetic and molecular approaches to the study of eukaryotic cells. The Department anticipates appointing faculty in at least two of the following areas: (1) Intracellular structure and organization, e.g., processing and localization of macromolecules, nucleocytoplasmic interactions; (2) Gene regulation, in particular as it relates to cell development or differentiation, including oncogenesis and neuro-development; (3) Molecular virology, including replication, regulation and virus-cell interactions.

Successful candidates will be expected to establish an independent research program, to direct graduate students and post-doctoral fellows, and to participate in graduate-level teaching. To apply, please send a curriculum vitae, a summary of past research experience, and a description of proposed future research, as well as the names of four references, to Dr. Jonathan R. Warner, Chairman, Department of Cell Biology.

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College of Medicine**
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AGRICULTURAL RESEARCH SERVICE

SOIL PHYSICIST/SOIL SCIENTIST

Beckley, West Virginia
This is a leadership position

Excellent opportunity to lead an interdisciplinary group of scientists concerned with crop production systems in hill lands where soils are often acid and infertile. Must be able to transfer fundamental soil science concepts and research results to crop production in Appalachian agriculture. Selectee will conduct personal research in soil physics and closely related areas. The research is to develop and support improved agricultural production systems through the application of fundamental knowledge of soil and system science. Candidates must have a knowledge of soil physics, agronomy, simulation modeling, general soil science, agronomic production systems and coordinating a multidisciplinary research team.

U.S. CITIZENSHIP IS REQUIRED
PH.D. IS DESIRABLE

Salary is based on qualifications and experience. Salary ranges:

GM-13	\$37,599-\$48,876
GM-14	\$44,430-\$57,759
GM-15	\$52,262-\$67,940

Additional information about the position or qualifications and application forms may be obtained by writing to:

**SPECIAL EXAMINING UNIT
AGRICULTURAL RESEARCH SERVICE
U.S. DEPARTMENT OF AGRICULTURE-PA
ROOM 409, BLDG. 003, BARC-WEST
BELTSVILLE, MD 20705**

**ALL APPLICATION FORMS MUST BE RECEIVED BY
APRIL 30, 1985**

USDA IS AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE URGED TO APPLY.

VETERINARY MICROBIOLOGIST

Scientist position available for either a Ph.D. in veterinary microbiology or a DVM with 0-3 years of postdoctoral experience. Applicant will be responsible for establishing and maintaining small animal models for bacterial infection. The position includes research on novel drug formulations and efficacy studies.

BACTERIOLOGIST

Scientist position available for a Ph.D. Bacteriologist with 0-3 years of postdoctoral experience. Successful applicant will participate in research of novel drug formulations and efficacy studies. Experience with small animal models of infectious diseases and knowledge of antibiotic therapies are helpful. Salary negotiable.

Interested candidates, for either position, should submit their resume and 3 letters of reference to: Dr. Mircea Popescu, Director of Microbiology and Immunology, The Liposome Company, 1 Research Way, Princeton, New Jersey 08540.

OPHTHALMIC PRODUCT DEVELOPMENT

Research associate needed to formulate safe, effective and stable liposome and lipid based ophthalmic dosage forms for new and generic drugs, by initiating, designing, coordinating and evaluating appropriate physical, chemical and microbiological studies. Participates in the design and scheduling of appropriate preclinical and clinical ocular distribution, efficacy and toxicity studies. Education and experience equivalent to an MS in pharmaceutical chemistry and 3-4 years or a BS and 5-9 years of industrial ophthalmic product development experience, especially with liposome or lipid based dosage forms. Salary negotiable. Please send resume and references to: Ms. Lee Bucheri, Administrator, Science Support Group, The Liposome Co., 1 Research Way, Princeton, New Jersey 08540.

Associate Level Scientists Protein Biochemistry: Biopharmaceuticals

Smith Kline and French Laboratories is expanding in the area of Biotechnology R&D and we are currently seeking motivated scientists experienced in protein biochemistry, particularly in the areas of purification and characterization, to work at our research center near Valley Forge in suburban Philadelphia. The ideal candidate will have a BS/BA or MS/MA in a chemical or biomedical science with two or more years of experience in the following areas:

- column chromatography including ion exchange, gel permeation and HPLC applications for proteins.
- large scale purification and experience with proteins derived from recombinant technology (highly desirable).
- protein sequencing, chemical modification, fragmentation of proteins, and amino acid analysis (desirable).
- SDS-PAGE, isoelectric focusing, Western Blot analysis.

An interest in drug discovery is essential.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your curriculum vitae and names of three references to: Mr. Walter B. Flagg, Senior Employment Consultant, Smith Kline and French Laboratories, a division of SmithKline Beckman Corporation, 1568 Spring Garden Street, Philadelphia, PA 19101. We are an equal opportunity employer, M/F/H/V.

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POSITIONS OPEN

POSTDOCTORAL POSITION

Available immediately, for a minimum of 1.5 years, for research on the molecular biology and/or protein chemistry of connective tissue enzymes. Send résumé and three references to: **Dr. Herbert M. Kagan, Department of Biochemistry, Boston University School of Medicine, 80 East Concord Street, Boston, Massachusetts 02118.**

POSTDOCTORAL POSITION available immediately for research on pathways of ion transport in human fibroblasts and astrocytes. These studies are part of ongoing projects on the etiology of muscular dystrophy and on the mechanism of cellular swelling in brain edema. Experience in transport physiology is desirable, but prime requisites are creativity, intelligence, and motivation. Send curriculum vitae and names of three references to: **Dr. Eric Gruenstein, Department of Biological Chemistry, University of Cincinnati Medical School, Cincinnati, Ohio 45267-0522. An Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE position available to study structure/regulation of invertebrate globin genes. Experience with restriction analysis, screening DNA libraries, sequencing, and so forth, desirable. Salary: \$16,000 to \$18,500, depending on experience. Send curriculum vitae and three references to: **Dr. Gerald Bergtrom, Department of Biological Sciences, University of Wisconsin-Milwaukee (UWM), P.O. Box 413, Milwaukee, Wisconsin 53201.**

UWM is an Affirmative Action/Equal Opportunity Employer.

FULL PROFESSOR IN EXPERIMENTAL NEUROPSYCHOLOGY. Required: academic title Ph.D. or equivalent degree. Candidates are expected to have a documented interest in experimental work with humans. Experience in the developmental approach will be most welcome. Fluency in French is required. Minimum initial salary: Swiss francs 104,927. Send curriculum vitae and complete list of publications before 17 April 1985 to: **Professor Doise, Psychology Section, University of Geneva, 24 rue Général-Dufour, 1211 Geneva 4, Switzerland.**

POSTDOCTORAL TRAINING IN MOLECULAR, CELLULAR AND DEVELOPMENTAL BIOLOGY

POSTDOCTORAL POSITIONS are available in the Department of Biology at the University of Rochester. Faculty available for training include:

Robert Angerer—Gene expression in early development.

Cheetip Benayati—Gene regulation in *Drosophila*. **Karl Drlica**—Bacterial chromosome structure and function.

Thomas Eickbush—Organization, regulation and evolution of the silkworm chorion gene families.

Martin Gorovsky—Gene organization, reorganization and expression in *Tetrahymena*.

Stanley Hattman—DNA methylation systems in pro- and eukaryotes.

David Hinkle—DNA replication in yeast and bacteriophage T7.

Lasse Lindahl—Regulation of ribosomal protein synthesis.

Joanna Olmsted—Cellular control of cytoskeleton assembly.

Satya Prakash—Structure, function and regulation of DNA repair genes of *Saccharomyces cerevisiae*.

Robert Selander—Molecular population genetics of bacteria.

Edwin Stephenson—Molecular biology and genetics of *Drosophila* development.

William Wasserman—Regulation of meiosis and mitosis in oocytes and embryos.

Abraham Worcel—Chromatin structure and function.

Applications should state the faculty member(s) with whom the candidate wishes to work and should include curriculum vitae, references, and summary of research interests. Inquiries or applications should be sent to:

Professor Stanley Hattman
Acting Chairman of Biology
University of Rochester
Department of Biology
Rochester, N.Y. 14627

The University of Rochester is an Affirmative Action/Equal Opportunity Educational Institution, M/F.

POSITIONS OPEN

POSTDOCTORAL POSITION IN PHYSICAL OCEANOGRAPHY/RESEARCH CORPORATION, UNIVERSITY OF HAWAII. A postdoctoral position is available to do research on theoretical and observational aspects of small-scale oceanic motions. The applicant must hold a Ph.D. in physical oceanography or a related field and should have a strong background in fluid and ocean dynamics. Salary will range from \$26,220 to \$30,972, dependent upon qualifications. Application, with curriculum vitae and names and addresses of three references, should be sent to:

Dr. Peter Muller
Department of Oceanography
University of Hawaii
Honolulu, Hawaii 96822

An Equal Opportunity/Affirmative Action Employer. Deadline for applications is 31 May 1985. Starting date is between 1 June and 1 August 1985.

PROJECT ASSOCIATE. Available 1 July 1985. Project involves purifying toxins and membrane-bound proteins from foodborne pathogens. Must have Ph.D. and 1 year of postdoctoral experience in microbial physiology. One year of experience with enzyme assays, protein purification, bacterial metabolic pathways, and pathogens essential. Experience with anaerobic bacteria preferred. Minimum salary: \$19,000 per year. Send résumé and three references by 25 April to: **Eileen Breitweiser, Job Service, 206 North Broom Street, Madison, Wis. 53703. This is an Equal Opportunity Employer and an employer-paid ad.**

RESEARCH ASSOCIATE

Membrane biologist/immunochemist sought to collaborate with multidisciplinary group on studies of structural and functional aspects of interferon receptors. Salary: \$18,000 to \$22,000 per year, depending on experience. Apply with curriculum vitae, bibliography, and names of three scientific references to: **Dr. S. W. Russell, Department of Comparative and Experimental Pathology, Box J-145, JHMHC, University of Florida, Gainesville, Fla. 32610. An Equal Opportunity/Affirmative Action Employer.**

GENE EXPRESSION IN MAMMALIAN CELLS

Applications are invited on the Ph.D. level to join a group in mammalian cell expression at CBI, an established biotechnology company located in the Palo Alto area which specializes in human and veterinary therapeutics and diagnostics. This position will provide opportunities for innovative research and interaction with an exciting team of scientists. Preference will be given to candidates with experience in the introduction and expression of cloned genes into mammalian cells and mammalian cell expression vectors.

CBI currently employs a scientific staff of seventy and offers an excellent research environment, competitive salaries and benefits and is committed to high scientific standards. Applicants should send a curriculum vitae and the names of three professional references to:

Dr. John Shine
Vice President, R & D
California Biotechnology Inc.
2450 Bayshore Frontage Road
Mountain View, CA 94043



POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE Cell/Molecular Biology

Ph.D. for active research program examining mechanisms of trace metal metabolism and toxicity in aquatic invertebrates. Experience in the design and interpretation of kinetic and pharmacokinetic studies. Familiarity with protein purification, cell fractionation, HPLC, electrophoretic techniques, and an understanding of recombinant DNA techniques. Salary commensurate with experience. Send résumé and/or applications to: **California State University, Long Beach Foundation, P.O. Box 15490, Long Beach, Calif. 90815. Equal Opportunity Employer.**

NATIONAL SCIENCE FOUNDATION (NSF)

NSF, Division of Molecular Biosciences, is seeking qualified applicants for the position of **PROGRAM DIRECTOR** for the Biochemistry Program. The position is in the excepted service and will be filled on a 1- or 2-year rotational or temporary basis. The per annum salary range for the temporary position is at the grade 15, \$52,262 to \$67,940. The salary range for the rotator position is \$45,000 to \$70,000 (currently limited by statute to \$68,700). The rotator candidate receives a leave of absence from his/her employer and salary is set in accordance with NSF's Circular Number 167, Rotator Program. Applicants should have a Ph.D. or equivalent experience. In addition, 6 to 8 years of successful scientific research or equivalent experience beyond the Ph.D. is required. A broad understanding of biochemistry, including research on: the structure and function of proteins, carbohydrates, nucleic acids, and lipids; the mechanism and regulation of biosynthesis; enzyme structure and function; the biogenesis, topography and assembly of membranes; and virus structure, assembly, replication and expression. Experience in writing and evaluating research proposals and research results, and in administration of science activities is highly desirable. For information on how to apply, call: **Catherine Handle, telephone: 202-357-7840.** Hearing-impaired individuals should telephone: **202-357-7492.** For technical information, telephone: **Dr. James H. Brown, Director, Division of Molecular Biosciences, at 202-357-9400. NSF is an Equal Opportunity Employer.**

Chemical

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Sigma Chemical Company is a major international manufacturer and distributor of biochemicals and diagnostic reagents. Due to the success and rapid expansion of a newly developed line of products for tissue culture, a growing opportunity exists for the quality control testing of existing and new products. The successful individual will have a degree in the Life Sciences as well as the following qualifications.

- 4-5 years experience in all phases of quality control testing, preferably in the commercial or industrial setting, for wet/dry media, sera, reagents, biochemicals, and related products.
- Hands on ability in hybridoma and monoclonal antibody techniques.
- Experience with sterility testing of aseptically processed products.
- Working knowledge of CGMP and FDA regulations.
- Strong written and verbal communication skills.
- Organizational skills and supervisory experience would be of value.

Send resume in confidence to:

SIGMA CHEMICAL COMPANY
Personnel Department
P.O. Box 14508
St. Louis, MO 63178

Equal Opportunity Employer M/F

USUHS



Programs:

The Uniformed Services University of the Health Sciences (USUHS) offers opportunities for students to pursue a Doctor of Philosophy degree, a Master of Science degree or both degrees, although emphasis is placed upon the Ph.D. degree. The basic sciences which offer graduate degrees are Anatomy, Biochemistry, Medical Psychology, Microbiology, Pathology (comparative and molecular pathology), Pharmacology, and Physiology. The goal of graduate study in the basic medical sciences at USUHS is to develop independent scholarship, originality, competence in research, teaching and professional service. The graduate education programs are designed for outstanding students with a strong commitment to permanent careers in the basic medical sciences. Within each Ph.D. program, an individualized course of study is designed for each graduate student to fulfill his or her specific scholastic needs.

Location:

USUHS was established by the Congress of the United States in 1972. The legislation required that the main campus be located within 25 miles of the District of Columbia. The site selected for the university is located on the grounds of the National Naval Medical Center, an attractive site in Bethesda, Maryland. The campus is conveniently located near several major federal research and health facilities including the National Institutes of Health, the National Library of Medicine, the Walter Reed Army Medical Center, the Armed Forces Institute of Pathology and the Armed Forces Radiobiological Research Institute.

Faculty Heads & Research Activities:

Department of Anatomy. Malcolm B. Carpenter, M.D., Chairman. Programs of research and study are being developed in the areas of cell biology, developmental biology and neurobiology, with specialties in other areas to be added in the near future.

Department of Biochemistry. Lucy M.S. Chang, Ph.D., Acting Chairman. Research programs in the basic mechanisms of cell replication, understanding of immunological mechanisms, and molecular structure have been established. Interaction of these basic research programs with applied problems is encouraged.

Department of Medical Psychology. Jerome E. Singer, Ph.D., Chairman. Programs of research and study in this area emphasize the application of psychology to field situations and behavioral medicine.

Department of Microbiology. Randall K. Holmes, M.D., Ph.D., Chairman. Research programs use modern molecular and biochemical techniques to analyze fundamental problems in microbiology and immunology, including mechanisms of microbial pathogenicity and host responses to microbial infections.

Department of Pathology. Robert M. Friedman, M.D., Chairman. Programs of research include virology, interferon, pathobiology of cell membranes, viral infections, viral pathogenesis, tumorigenesis, and autoimmune diseases.

Department of Pharmacology. Lewis Aronow, Ph.D., Chairman. Areas of current research interest include cellular toxicology, carcinogenesis, drug metabolism, environmental toxicology, cellular and biochemical pharmacology, reproductive pharmacology, endocrinology, and neuropharmacology.

Department of Physiology. Francis J. Haddy, M.D., Ph.D., Chairman. Programs of research and study focus on the neural, cardiovascular, respiratory, endocrine, renal, and gastrointestinal systems.

Department of Preventive Medicine/Biometrics. Llewellyn J. Legters, M.D., M.P.H., Chairman. Collaborative programs are being developed within this department, with research emphasizing biometrics, epidemiological studies, health services administration, environmental and occupational health, and tropical public health.

Direct inquiries and request for application materials to the Graduate and Continuing Education Office, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Rd., Bethesda, MD 20814-4799.

EVOLUTIONARY PERSPECTIVES AND THE NEW GENETICS

The Department of Human Genetics at The University of Michigan, is pleased to sponsor an international symposium, dedicated to Dr. James V. Neel, on the occasion of his retirement. The symposium takes place on Monday and Tuesday, June 17 and 18, 1985, in Ann Arbor, Michigan.

There are four half-day sessions, dealing with, respectively, the genetics of populations, evolutionary problems posed by the structure of DNA, mechanisms of genetic changes and evolution at the molecular level. Speakers include: Cavalli-Sforza (Stanford); Cockerham (North Carolina); Anderson (Georgia); Weatherall (Oxford); Felsenfeld (Bethesda); Hood (Pasadena); Radding (New Haven); Holliday (London); Schmieke (Stanford); Nei (Houston); Fitch (Madison); Hartl (St. Louis); and Wilson (Berkeley).

For registration or further information, please write or call:

Jolene Glaspie
Office of Continuing Medical Education
Towsley Center Box 057
The University of Michigan Medical School
Ann Arbor, Michigan 48109-0010
(313) 763-1400

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Histology Research Scientist

Functioning as a resource person for our soft tissue program, you will be responsible for interpreting histological specimens for the efficacy of collagen-based materials in soft tissue augmentation and wound healing. This will involve implementing new histological, histochemical, and/or analytical procedures or techniques; designing and conducting experimental studies; and preparing reports suitable for submission to the FDA.

A PhD in a medical or related discipline, a minimum of 1 year of post-degree experience, and extensive training in microscopic anatomy are required. Background in connective tissue research, pathobiology of wound healing, and/or dermatology desirable.

Share Our Future

Collagen Corporation's strong future is assured by our solid foundation for success. To share our future, please send your CV or resume to: D. Webster, Human Resources, Collagen Corporation, 2500 Faber Place, Palo Alto, CA 94303. We are an equal opportunity employer.

Collagen Corporation



POSITIONS OPEN

POSTDOCTORAL POSITION supported by an NIH training grant available immediately, and until filled, to study cardiac muscle bioenergetics with particular emphasis on factors regarding the interaction of the ATPase inhibitor protein (of Pullman and Monroy) with the mitochondrial ATPase during both physiological and pathological metabolic state transitions. Experience in mitochondrial research is preferred. U.S. citizenship or permanent visa required. Send curriculum vitae, including a brief description of research experience, and the names of three references, to: **Dr. William Rouslin, Department of Pharmacology and Cell Biophysics, The University of Cincinnati College of Medicine, Cincinnati, Ohio 45267-0575.** *Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR to conduct research on the mechanisms of NMR relaxation times in biological and physical systems. Develop new innovative means of obtaining in vivo and in vitro NMR images of biological and physical systems. Conduct research in determining the mechanism of reduced diffusive motion of water molecules in biological systems. Must have M.D. and Ph.D. in physics with 1 year of postdoctoral training in cancer therapy or biophysics and 1 year of postgraduate medical training. Also must have 1 year of experience in general medical practice. Must be fluent in English; publication record in NMR in cancer and other biological tissues; NMR technology; \$30,000 per year; 40 hours per week. Apply at the Texas Employment Commission, Houston, Texas, or send résumé to: **The Texas Employment Commission, TEC Building, Austin, Texas 78778; Job Order Number 3663099.** *Ad paid by an Equal Opportunity Employer.*

RESEARCH SCIENTIST (postdoctoral fellow). Ph.D. in microbiology or pharmacology with at least 2 years of postdoctoral training in clinical microbiology and infectious disease required. Analytical chemistry background desirable and should be familiar with modern analytical technology. Full-time, salary: \$15,800. Send curriculum vitae and other particulars to: **Dr. Byungse Suh, Section of Infectious Disease, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, Pa. 19144.**

RESEARCH SPECIALIST ELECTRON MICROSCOPY LABORATORY ATLANTA, GEORGIA

Emory University, Yerkes Primate Center, has a position available to supervise a service laboratory for scanning electron microscopy and x-ray microanalysis. Position maintains and operates equipment as well as participates in training of personnel to use equipment. Applicant must have a master's degree in physical science and electron microscopy experience, or will consider a bachelor's degree and 2 years of experience in the field of electron microscopy. Send résumé to: **Emory University, Personnel Department, Job Number 320-830, 637 Asbury Circle, Atlanta, Ga. 30322; attention: J. Saliers;** or telephone for more information: 404-329-7611.

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WATER QUALITY OR RECLAMATION-SOILS SCIENTIST

Colorado School of Mines, Department of Environmental Sciences, invites applications for a faculty position in water quality or reclamation science. Ph.D. required; rank upon; salary commensurate with experience. Teaching duties will be at both the graduate and undergraduate level. Experience in government or industry is desirable. The successful candidate must have a commitment to excellence in teaching and a demonstrated ability to develop and conduct a vigorous graduate research program. For applicants in water quality science, expertise in applied aqueous chemistry, aquatic biology, microbial interactions in aquatic systems; and familiarity with water and wastewater treatment technology, water quality legislation, regulations, and permitting processes is desirable. For applicants in reclamation/soils science, expertise in reclamation of disturbed lands, soil science, environmental impact analysis; and familiarity with reclamation legislation, regulations, planning, and with NEPA and CEQ regulations is desirable. Send résumé, statement of professional goals, transcripts, and at least three letters of reference by 15 April 1985 to: **Dr. George H. Kennedy, Acting Head, Department of Environmental Sciences, Colorado School of Mines, Golden, Colorado 80401.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, IRVINE (UCI) POSTDOCTORAL RESEARCH

Postdoctoral position available for research on the neurobiology of the striatum. Research includes: (i) quantitative autoradiography/image analysis of receptors for dopamine, serotonin; (ii) studies of regional differences in striatal structure and function; and (iii) the influence of denervation, aging, and pathology on forebrain receptors. Applicant with background in neurochemistry/pharmacology or anatomy should send résumé and names and addresses of three references to: **Dr. John F. Marshall, Department of Psychobiology, University of California, Irvine, Calif. 92717.**

UCI

An Equal Opportunity/Affirmative Action Employer

SENIOR ANALYST UNION OF CONCERNED SCIENTISTS (UCS)

Nationwide public interest organization seeks highly qualified, full-time analyst for senior position in Cambridge, Massachusetts, office. Requires Ph.D. in physics or related field with several years of experience in national security policy, weapons technology, and/or arms control. Potential areas of focus include BMD, ASAT weapons, C3, ASW, and other issues involving emerging trends in weapons technology and defense policy. Excellent writing skills and strong analytical capabilities are required. Salary commensurate with experience. Liberal benefits plan. Send résumé and two examples of recent work to: **Executive Director, UCS, 26 Church Street, Cambridge, Mass. 02238.**

SENIOR SPECIALIST IN AUTOMATED EDUCATION

Position involves a senior level of responsibility in the design, development, and testing of advanced hardware and software systems for computer-based education. Responsible for the development of large processor architecture and the translation of this into operational hardware. Involves senior level responsibility in the development of software systems for the operation of PLATO on such new, high-speed processor design.

Qualifications: Thorough knowledge of CDC 170-730 machine language and the COMPASS assembler. Familiarity and experience with: (i) digital design utilizing emitter-coupled-logic technology, (ii) the PLATO system and TUTOR language, and (iii) large-scale data transmission network and cable TV system. Master's degree plus 10 years of experience or bachelor's degree plus 15 years of experience in large-scale software and hardware system design and development highly desirable.

Closing date: Full-time, 11-month position starting 21 April 1985. To ensure full consideration, résumé must be received by 5 April 1985. Salary: \$30,000 to \$35,000, depending on experience. Continuation of position is contingent upon renewal of funding.

Contact: **Dominic Skaperdas, Senior Research Engineer, Computer-based Education Research Laboratory, University of Illinois, 252 Engineering Research Laboratory, 103 South Mathews Avenue, Urbana, Ill. 61801; telephone: 217-333-6556.**

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The Arabian Gulf University (regional university, supported and supervised by the seven Arabian Gulf States) invites applications for the post of **SENIOR TEACHING POSITION** in the following areas: biology, chemistry, physics, mathematics, computer science, and teaching English as a foreign language. Preference will be given to applicants with knowledge of Arabic and administrative experience. Language of instruction is English. Last day for applying is 15 April 1985. Send applications to:
**Office of the President
(Committee of Premed Program)
The Arabian Gulf University—Bahrain
P.O. Box 26671, Adhya, Bahrain
Telex: 7319 AGU-BN**

Department of VISUAL SCIENCES, School of Optometry, Indiana University, Bloomington, Indiana 47405, anticipates another faculty position for a junior or outstanding senior-level vision researcher in any area (save electrophysiology, where we are already strong). Respondents to our other recent ads need not reapply. *Indiana University is an Equal Opportunity Employer.* Send curriculum vitae and three reference letters by 15 May to: **Dr. S. Lee Guth.**

POSITIONS OPEN

RESEARCH ASSOCIATE in biochemical physics. Experience with pulsed and cw Raman scattering and/or biological systems. Competitive salary. Send résumé and names of references to: **Paul M. Champion, Department of Physics, 106 Dana Research Center, Northeastern University, 360 Hunting Avenue, Boston, Mass. 02115.**

RESEARCH ASSOCIATE in medical chemistry to study interaction of antisickling agents with hemoglobin using EPR, NMR, and computer molecular graphics. Research requires chromatographic screening, isolation and purification, and chemical modification of hemoglobins, EPR and NMR spectroscopy, and computer-assisted design of new chemical entities. Required qualifications: Ph.D. in medicinal chemistry with ability to use chromatography, EPR and NMR spectroscopy to study protein systems, and to design potential drugs. Salary: \$20,900 for 40-hour week, 8:30 a.m. to 5 p.m. Respond to: **Dr. M. Johnson, Medicinal Chemistry Department, University of Illinois, P.O. Box 6998, Chicago, Ill. 60680,** within 4 weeks from the date of this journal. *Affirmative Action/Equal Opportunity Employer.*

COURSES

M.Sc. **COURSES** at University College London. Applications are invited from overseas graduates for 12-month courses (October to September) leading to M.Sc. degrees of the University of London. Full-time study consists of seminars, tutorials, lectures, and practicals, with training in research techniques and research projects. M.Sc. courses in either mineralized tissue biology, biological anthropology, or neurological science are offered. For further information, write to: **The Registrar, University College London, Gower Street, London, WC1E 6BT, United Kingdom.**

CONFERENCES

CHEMRAWN IV CONFERENCE

**The Global Ocean: Its Chemistry and Resources
Minerals, Food, Drugs, Chemicals, Technology
23 to 27 September 1985
Woods Hole, Massachusetts**

The conference will review those oceanic chemical processes, cycles, and resources important to all mankind from an international point of view. This will be done by focusing on the natural chemical processes of the oceans and then concentrating on the chemical resources of the seas and the seabed, including food and biochemical resources and the technology and environmental effects involved in utilizing these resources. This meeting is part of the CHEMRAWN Program (Chemical Resources Applied to World Needs) of the International Union of Pure and Applied Chemistry. **Contact: Dr. P. A. Meyers, Department of Atmospheric and Oceanic Science, The University of Michigan, 2455 Hayward Avenue, Ann Arbor, Michigan 48109-2143.**

**The New York Academy of Sciences
Conference on
METABOLIC REGULATION: APPLICATION
OF RECOMBINANT DNA TECHNIQUES
6 to 8 November 1985
The Barbizon-Plaza Hotel
New York City**

This symposium is intended to facilitate exchanges of ideas and information between scientists who study (i) regulation of the expression of genes of metabolic interest, (ii) regulation of the catalytic activity of enzymes, and (iii) development and use of the techniques of gene transfer, site-specific mutation and expression of cloned genes in heterologous cells. Eminent scientists from each of these areas will be featured.

There will be two contributed poster sessions. The deadline for submission of abstracts is 15 June 1985. The abstracts should include the name of the author(s), institution, and a 200-word summary of the work to be presented. Send abstracts to: **Dr. Alan G. Goodridge, Department of Pharmacology, Case Western Reserve University, Cleveland, Ohio 22106.**

Conference cochairmen: **Alan G. Goodridge, Ph.D.,** and **Richard W. Hanson, Ph.D.,** Case Western Reserve University.

Inquiries should be addressed to: **Ellen Marks, Conference Director, The New York Academy of Sciences, 2 East 63 Street, New York, N.Y. 10021.**

MASS SPECTROSCOPIST

Program Resources, Inc. provides Operations and Technical Support to the NCI-Frederick Cancer Research Facility, a leading biomedical research facility located in Frederick, MD. We have an immediate opening for a Mass Spectroscopist in the Chemical Synthesis & Analysis Laboratory.

This is an outstanding opportunity for a qualified individual to supervise, operate and maintain the facility's mass spectroscopy. The laboratory is equipped with a VG Micromass ZAB-2F high-resolution GLC/MS/DS, an MM-7250E GLC/MS/DS and a Finnigan 3200 GLC/MS/DS. The ZAB Spectrometer is equipped with the latest digital scan unit and high dynamic range capabilities in addition to numerous modes of sample introduction and ionization techniques (FAB, FD, FI, DCI, EI, CI). Qualified candidates will have a PhD in a biological science with experience in biological and high-resolution mass spectrometry.

PRI offers an attractive salary and company benefits including relocation assistance. Interested candidates are invited to send a curriculum vitae, including salary history and names of 3 references, to:



PROGRAM RESOURCES, INC.
NCI-Frederick Cancer
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P.O. Box B
Frederick, MD 21701

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LABORATORY ANIMAL MEDICINE

The Lovelace Inhalation Toxicology Research Institute is seeking an individual with a Doctor of Veterinarian Medicine degree who is trained and experienced in laboratory animal medicine (board certified or board eligible by American College of Laboratory Animal Medicine). The Institute has a strong multi-disciplinary research team of physical, biophysical and biomedical scientists oriented towards comparative animal research involving varied health effects endpoints. The Institute addresses significant societal problems concerning airborne materials inhaled by man with emphasis on those related to energy technologies. Interests include dose-response relationships of lung injury, animal models of human lung disease and functional/structural/biochemical correlations. The successful applicants will have primary responsibility for the care and production of rodents at the Institute including the supervision of 25-30 animal technicians. An interest and demonstrated capability for independent research and supervisory ability are required. Salary and starting date are negotiable. Submit curriculum vitae and summary of experience to: Personnel Unit, Lovelace Inhalation Toxicology Research Institute, P.O. Box 5890, Albuquerque, NM 87185, or call (505) 884-9431.

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CELLULAR IMMUNOLOGIST & HYBRIDOMA SPECIALIST

IMMUNEX CORPORATION is expanding its scientific staff in order to keep pace with its achievements in commercial development of lymphokines and immune response modifiers. Immunex currently has two vacancies for its scientific staff.

Both positions require a Ph.D. with postdoctoral training. One successful candidate will have experience in cellular immunology, with expertise in T-cell hybridomas or in lymphokine/monokine preparation and analysis. The other, will have a clear commitment to and expertise in the area of monoclonal antibody production and analysis. A proven track record of publication and ability to communicate are essential requisites for both positions.

Immunex Corporation is a Seattle-based biotechnology company specializing in immunoregulation by lymphokines. The company offers competitive salaries, an equity participation program, and a generous fringe benefits package. To apply, please send resume and the names of three references to: **Personnel Officer, Immunex Corporation, 51 University Street, Seattle, Washington 98101.** Immunex Corporation is an equal opportunity employer.

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Section Leader of Molecular Pharmacology

Nova Pharmaceutical Corporation, a newly formed company dedicated to the discovery of novel therapeutic entities using the most current techniques, has an immediate opening for a Section Leader of Molecular Pharmacology with at least five years of postdoctoral training. The ideal candidate would be familiar with receptor binding, adenylate cyclase, PI turnover, Quin II and quantitative autoradiography methodology. The ability to initiate and conduct, or to direct, goal-oriented research within a team framework, and a proven publication record, are essential. Pharmaceutical industry experience is preferred. This individual will supervise four Ph.D. and twelve B.S. level scientists.

Nova occupies new facilities at the Francis Scott Key Medical Center in Baltimore, and has strong intra-campus links with The Johns Hopkins University, N.I.D.A., and N.I.A. Nova has a full complement of chemical, biochemical, and pharmacological support personnel.

Nova offers competitive salaries and an excellent benefits package. For further information, please submit a current resume with salary requirements to: **Ms. Lydia Cumor, Personnel Manager, Nova Pharmaceutical Corporation, 5210 Eastern Avenue, Baltimore, MD 21224-2788.** An Equal Opportunity/Affirmative Action Employer.



PROGRAMS

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain a Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: **Ph.D.—O.D. Program Director, Admissions Office, Room 17, The New England College of Optometry, 424 Beacon Street, Boston, Mass. 02115.**

PREDOCTORAL TRAINING PROGRAM IN TOXICOLOGY. The graduate program in toxicology at the University of Mississippi Medical Center offers predoctoral training in these areas of toxicology: pulmonary, liver, CNS, neuromuscular and synaptic transmission, endocrine and cardiovascular system. Requires U.S. citizenship or permanent residence visa in the United States. Candidates should write to: **Dr. H. M. Mehendale, Program Director, Toxicology Training Program, Department of Pharmacology and Toxicology, The University of Mississippi Medical Center, Jackson, Miss. 39216-4505. Equal Opportunity Employer, M/F/H/V.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS TO STUDY GENETIC AND DEVELOPMENTAL DISEASES

Postdoctoral fellowships are available at the Eleanor Roosevelt Institute for Cancer Research and Florence R. Sabin Laboratories for genetic and development medicine located at the University of Colorado Health Sciences Center to study human developmental and genetic diseases using techniques of molecular and somatic cell genetics. Candidates must have the M.D. or Ph.D. degree. Stipends will be commensurate with prior training and experience. Candidates should send curriculum vitae and names of three references to: **Postdoctoral Selection Committee, Dr. Michael Sinensky, Eleanor Roosevelt Institute, B-129, University of Colorado Health Sciences Center, 4200 East 9 Avenue, Denver, Colo. 80262. U.S. citizens only. Affirmative Action/Equal Opportunity Employer.**

PRE- AND POSTDOCTORAL FELLOWSHIPS IN MOLECULAR CARCINOGENESIS LOUISIANA STATE UNIVERSITY SCHOOL OF MEDICINE

NIH training grant program established to investigate the molecular mechanisms involved in carcinogenesis has fellowships available to qualified pre- and postdoctoral (Ph.D. and M.D.) candidates. Research areas include viral carcinogenesis (Dr. R. Luftig); oncogene activation and function (Drs. G. Clinton and D. Sheiness); eukaryotic gene expression (Dr. P. Deininger); hormone regulation (Dr. W. Vedecis); cyclic AMP dependent protein kinases (Dr. R. Roskoski); and cancer genetics (Dr. C. Cohen). Research programs involve the latest in technologies and all are nationally recognized and funded. Innovation instructional program includes clinical oncology orientation. Interested applicants should send their curriculum vitae to: **Dr. J. Craig Cohen, Department of Medicine, Louisiana State University Medical Center, 1542 Tulane Avenue, New Orleans, Louisiana 70112-2822. An Equal Opportunity/Affirmative Action Employer.**

PREDOCTORAL FELLOWSHIPS IN MOLECULAR AND BEHAVIORAL NEUROSCIENCE RUTGERS, THE STATE UNIVERSITY GRADUATE SCHOOL-NEWARK

Applicants with a strong background (bachelor's or master's degree) in the chemical or biological sciences are sought for doctoral level training in a new interdisciplinary program in molecular and behavioral neuroscience at the Newark campus of Rutgers, The State University of New Jersey. Graduate students will receive a fellowship of \$10,000 per year renewable for 4 years, plus tuition remission, or a special assistantship plus tuition remission renewable for 4 years. This training program involves the Chemistry and Zoology Departments and the Institute of Animal Behavior. Send statement of career interest, transcript, GRE scores, and two letters of recommendation to: **Professor Barry Komisaruk, Institute of Animal Behavior, Rutgers University, 101 Warren Street, Newark, New Jersey 07102; telephone: 201-648-5853.**

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FELLOWSHIPS

HARVARD SCHOOL OF PUBLIC HEALTH POSTDOCTORAL FELLOWSHIPS



Interdisciplinary Programs in Health (IPH) invites applications from promising graduates of advanced degree programs in the natural or social sciences interested in turning to research in environmental health and public policy. The program focuses on the scientific and analytical foundations for environmental decisions. In addition to individual research, recent group projects include monographs on the molecular and cellular basis of toxicity, and the susceptible individual and environmental regulation. Further studies will be adapted to interests of fellows. Studies on ground-water contamination and risk analysis are under consideration.

Fellow will be appointed for a term of 1 year starting September 1985. Award may be renewed. Application deadline: 19 April 1985. Decisions announced in May.

For information, write to:

**Professor Donald F. Hornig
Director, IPH
Harvard School of Public Health
665 Huntington Avenue
Boston, Massachusetts 02115**

BIOLOGICAL CONTROL FELLOWSHIP

The Division of Biological Control, Department of Entomology, at the University of California, Riverside, announces the availability of the Professor Harry Scott Smith Predoctoral Fellowship in Biological Control. The fellowship provides a stipend of \$9000 per year for 2 years, plus tuition and fees, and will be awarded to a highly qualified Ph.D. candidate interested in pursuing research on the use of natural enemies to control arthropod pests or vectors. For further information, contact: **Dr. J. A. McMurtry, Division of Biological Control, University of California, Riverside, California 92521.**

FRIEDRICH MIESCHER INSTITUT Basel, Switzerland POSTDOCTORAL FELLOWSHIP

A fellowship is available for 1 year with the possibility to extend for two more years in a group working on the mechanism of action of mammalian proteases and the regulation of their activity through interaction with other proteins. Applicants should have experience in protein chemistry or enzymology. Interested scientists should send their curriculum vitae and the names of two referees to: **Dr. J. Hofsteenge or Dr. S. R. Stone, Friedrich Miescher Institut, P.O. Box 2543, CH-4002 Basel, Switzerland.**

CHARLES H. REVSON FOUNDATION AND NORMAN AND ROSITA WINSTON FOUNDATION FELLOWSHIPS in basic biomedical research are available at Cornell University Medical College in the following areas: (i) To carry out research on enzymology, protein chemistry, and molecular biology in the laboratories of the Department of Biochemistry, under the direction of Drs. Alton Meister, Raymond Lockard, Owen W. Griffith, Esther Breslow, Rudy H. Haschemeyer, and Suresh S. Tate. (ii) To examine the molecular biology of myosin and C-protein isoform expression during myogenesis in the laboratory of Dr. Donald A. Fischman, Department of Cell Biology and Anatomy. (iii) To study the mechanism of action of thyrotropin-releasing hormone (TRH) in pituitary cells, under the direction of Dr. Marvin C. Gershengorn, Division of Endocrinology and Metabolism in the Department of Medicine. (iv) To work on the molecular biology of latent infection by DNA animal viruses in the laboratory of Dr. Kenneth I. Berns, Department of Microbiology. (v) To work in the laboratories of Drs. William Pulsinelli and Fred Plum, Directors; or to work in Developmental Neurobiology with Dr. Ira B. Black, Director. Holders of M.D. or Ph.D. degrees are invited to apply for 2-year fellowships with competitive salaries. Applicants should generally have no more than 3 years of basic or clinical experience beyond the doctorate. Send curriculum vitae and three references, indicating area of interest, to: **The Office of Research and Sponsored Programs, Cornell University Medical College, 1300 York Avenue, Room A-131, New York, N.Y. 10021.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP, July 1985. Pathologist or other biomedical scientist (M.D., D.D.S., D.V.M., Ph.D.) for 1- or 2-year program at the Armed Forces Institute of Pathology beginning July 1985. Excellent research training and educational opportunity. Above average stipend provided as a grant from the American Registry of Pathology. *Equal Opportunity position; women and minorities encouraged.* Send curriculum vitae and brief statement of interests and qualifications to: **Box 69, SCIENCE.**

AWARDS

TOXICOLOGY AND NUTRITION

The International Life Sciences Institute Research Foundation (ILSI Research Foundation) announces that **FOUR AWARDS** for basic research projects in toxicology and nutrition, each of \$100,000 over 3 years, will be made in 1985. The purpose of the awards is to encourage innovative young investigators in basic biomedical sciences to apply modern knowledge and techniques to basic problems in toxicology or nutrition such as comparative toxicology of the nervous system or specific nutritional effects on the development of the nervous system.

The closing date for nominations is 30 April 1985. For further information, write: **International Life Sciences Institute, 1126 16th Street, NW, Suite 111, Washington, D.C. 20036, or telephone: 202-659-0074.**

GRADUATE STUDY

GRADUATE STUDIES IN MOLECULAR PATHOLOGY AND COMPARATIVE PATHOLOGY AT THE UNIFORMED SERVICES OF THE HEALTH SCIENCES. Applications are invited for graduate assistantships with paid tuition leading to the Ph.D. degree available for the 1985-1986 academic year. The department has a strong and competitive research program in diverse areas of pathology-related molecular biology including: oncogenes, viral pathogenesis, interferons, gangliosides, eukaryotic cloning vectors, DNA repair tumorigenesis, AIDS, and natural immunity. Stipends for 12-month appointments beginning at \$6500 are available to U.S. citizens. Highly qualified students (B.Sc. for molecular pathobiology program and D.V.M. for comparative pathology) should apply to: **Dr. John W. Bullard, Assistant Dean for Graduate and Continuing Education, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20814-4799.**

SYMPOSIUM

ENGINEERED ORGANISMS IN THE ENVIRONMENT: SCIENTIFIC ISSUES A CROSS-DISCIPLINARY SYMPOSIUM 10 to 13 JUNE 1985 PHILADELPHIA, PENNSYLVANIA

Organized by the American Society for Microbiology (ASM) in collaboration with eight scientific societies, the symposium will attempt to define the range of impacts of genetically engineered organisms in the environment, describe the state of the art, and define areas of knowledge as well as areas requiring attention. It is designed to encourage cross-disciplinary communication and to elicit a synthesis of thinking on scientific issues. Attendance limited to 150, including contributors to program. Proceedings will be published. Further information may be obtained by contacting: **Janet Shoemaker, ASM Public Affairs Office, 1913 I Street, NW, Washington, D.C. 20006. Telephone: 202-822-9229.**

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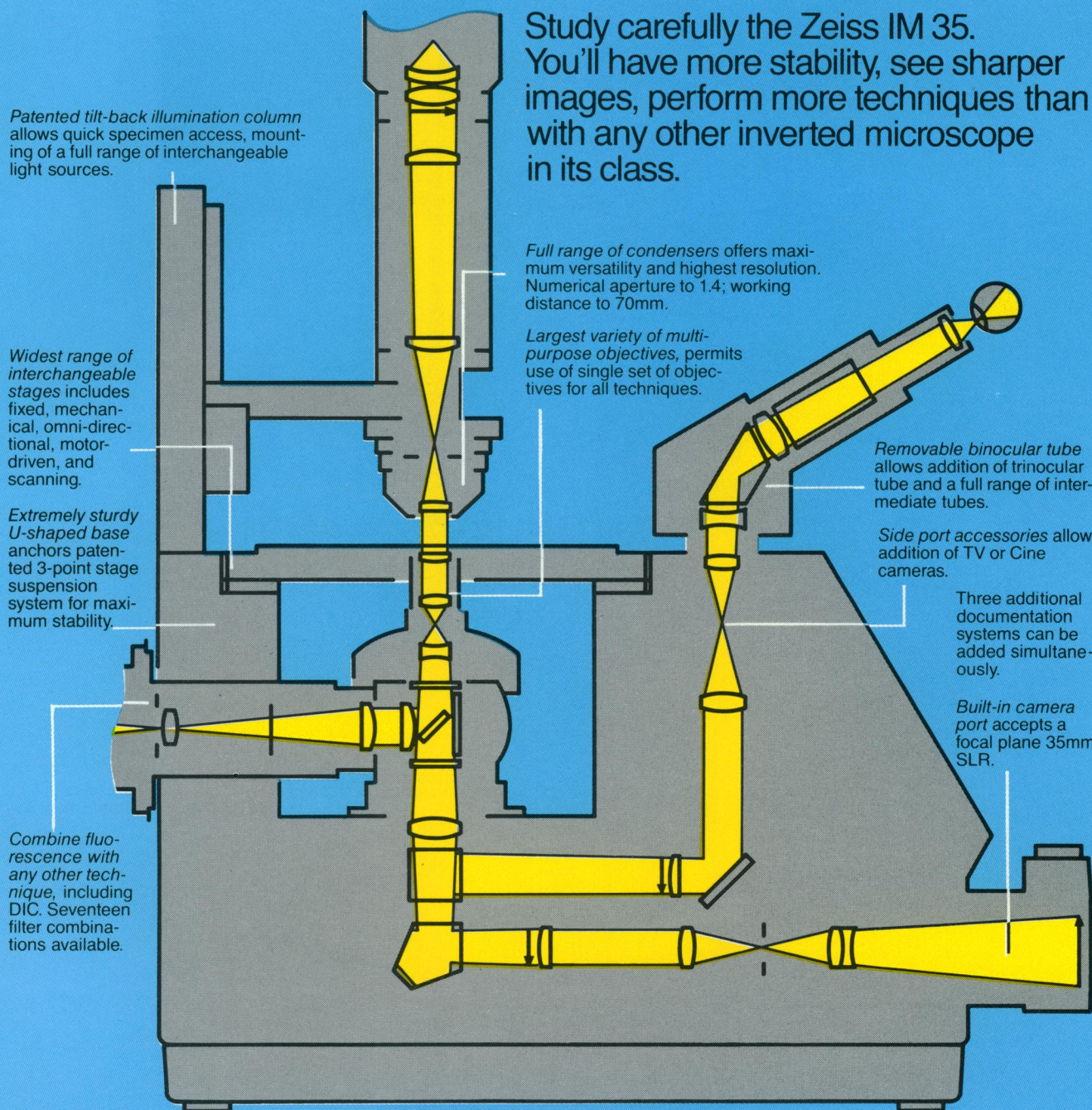
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