

The reader who expects to find suggestions for sites to explore, or to mine, will be somewhat disappointed. Cronan has, wisely or unwisely, avoided recommendations for exploration targets. On the other hand, for the scientist engaged in exploration, he has provided the finest synthesis of information on the principal marine minerals, and in some cases ores, that has been published since H.M.S. *Challenger* scientists first discovered manganese nodules on the deep sea bed over a century ago. The book is readable, the discussion is well documented, the figures are crisp and clear, and the references are pertinent and up to date. Whether our interest in marine mineral deposits is the discovery of new resources in a metal-hungry world or simply the science of mineral genesis of such deposits, Cronan's book is the best idea factory on the subject to date.

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Brain Peptides

The Role of Peptides in Neuronal Function. JEFFERY L. BARKER and T. G. SMITH, Jr., Eds. Dekker, New York, 1980. xvi, 768 pp., illus. \$95.

During the past decade the number of different chemicals thought to act as messengers transmitting information between neurons within the brain has increased dramatically. This has been due to the discovery of a new class of possible neurotransmitter candidates, the neuropeptides. Almost 30 small peptides have been found to occur within neurons and nerve endings in the mammalian central nervous system, and the peptides now heavily outnumber the ten or so previously described amine and amino acid transmitter candidates. Most of the brain peptides are substances previously described as hormones in the periphery, now appearing in new guise within the nervous system. The present volume, the proceedings of a meeting held in 1980, is the latest progress report on this rapidly growing field.

In planning how to cover this large and diverse area of research, one has the alternatives of dealing with the subject in terms of individual peptides or by more general reviews of various aspects of research strategy. In this volume both approaches have been used. Thus, the first half of the book consists of a series of reviews of general strategies for neu-

ropeptide research, including coverage of the immunohistochemical and chemical analytical techniques that have been fundamental to much of the progress made so far. There are also reviews of peptide biosynthesis and release and of the use of electrophysiological techniques for studying peptide actions on single cells, both in vivo and with neurons in tissue culture.

The neurohormones vasopressin and oxytocin are the first known examples of "neuropeptides" synthesized by neurons in the hypothalamus and released into the blood from the terminals of these cells in the neural lobe of the pituitary gland. These peptides are now also known to exist in nerve endings within the brain and spinal cord, where they may serve different functions. The neurosecretory neurons of the hypothalamic-neurohypophyseal system, however, continue to serve as excellent and thoroughly documented models for understanding the general properties of peptidergic neurons. It is not surprising, therefore, to find no fewer than four chapters devoted to this topic, with good reviews of the biosynthesis (J. T. Russell *et al.*), release (J. J. Dreifuss *et al.*), and behavioral actions (R. Walter *et al.*) of vasopressin and oxytocin and of the electrophysiological properties of the hypothalamic neurosecretory neurons (J. D. Vincent *et al.*). Nor is it inappropriate that the opioid peptides, enkephalin and endorphin, receive similarly extensive coverage, with chapters on opiate receptors and endogenous opioids by H. W. Kosterlitz, W. A. Klee and R. A. Streaty, and P. G. Nelson *et al.* and a discussion of the behavioral pharmacology of the opioid peptides by J. W. Lewis *et al.* Other chapters deal with vasoactive intestinal polypeptide, cholecystokinin and bradykinin, hypothalamic releasing hormones, neurotensin, substance P, and some of the numerous peptides found in invertebrate nervous systems.

More than a dozen similar symposia have been held during the past two years; there have also been excellent reviews of the subject (see, for example, S. H. Snyder, *Science* **209**, 976 [1980]), and two new journals exist to cater exclusively to papers on neuropeptides. The reader may reasonably wonder whether there is not already something of a glut in this particular market, and one suspects that the present volume will appeal mainly to those directly involved in neuropeptide research. It can be criticized for the somewhat xenophobic selection of authors (22 of the 29 chapters are from laboratories in the United States, eight from the National Institutes of Health),

but geographical balance can be restored by consulting the complementary volume, *Neuroactive Peptides*, arising from a meeting held at the Royal Society, London, also in 1980 (*Proc. Roy. Soc. B.* **210**, 3). The present volume contains a great deal of useful and up-to-date information and could certainly serve as a useful source book for those interested in finding out more about any aspect of this new growth area of neuroscience.

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Books Received

Asbestosis. A Comprehensive Bibliography. Compiled by Alberta D. Berton assisted by K. Bernice Odom. IFI/Plenum, New York, 1980. vi, 394 pp. \$85. Biomedical Information Guides, vol. 1.

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(Continued on page 1302)

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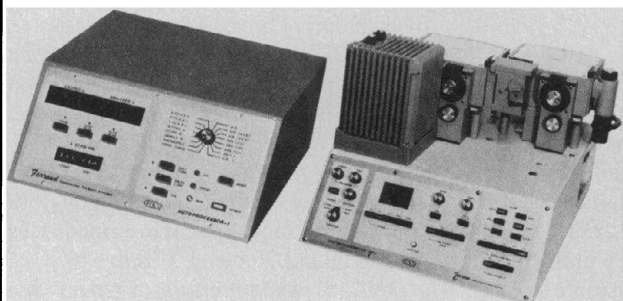
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Baths and Circulators offers laboratory instruments for research that requires control of temperature. Neslab Instruments. Circle 808.

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The Carbohydrates. Chemistry and Biochemistry. Vol. 1B. Ward Pigman, Derek Horton, and Joseph D. Wander, Eds. Academic Press, New York, 1980. xxiv + pp. 643-1628. illus. \$69.50.

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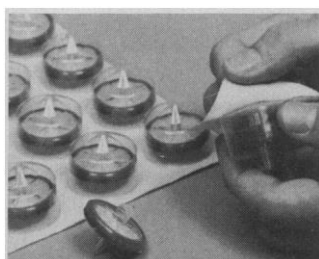
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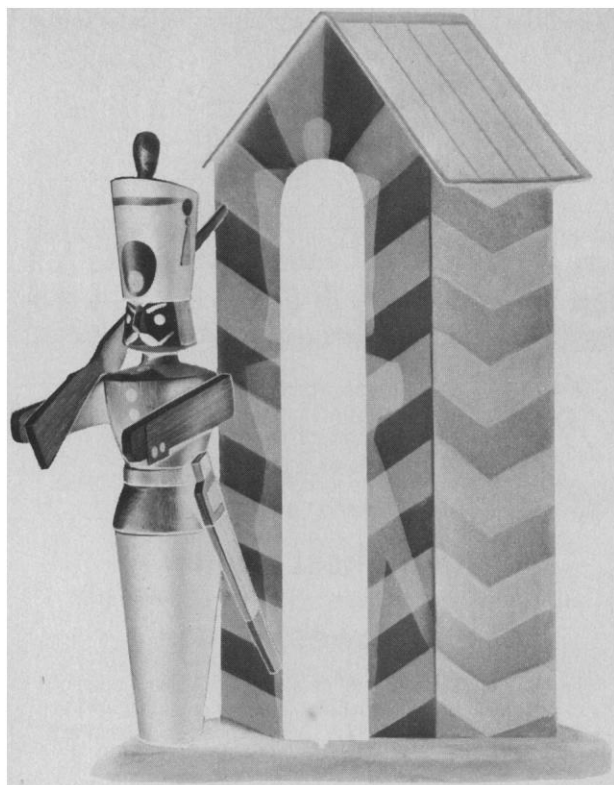
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Molecular Breeding and Genetics of Applied Microorganisms. Kenji Sakaguchi and Masanori Okanishi, Eds. Kodansha, Tokyo, and Academic Press, New York, 1981. xii, 160 pp., illus. \$27.

Molecular Gods. How Molecules Determine Our Behavior. Philip B. Applewhite. Prentice-Hall, Englewood Cliffs, N.J., 1981. xii, 262 pp. \$10.95.

Mosses of Eastern North America. Howard A. Crum and Lewis E. Anderson. Columbia University Press, New York, 1981. Two volumes. xvi, 1328 pp., illus. \$60.

Natural Resources and Energy. Theory and Policy. Chennai Gopalakrishnan. Ann Arbor Science, Ann Arbor, Mich., 1980. xiv, 138 pp. \$12.50.

Never at Rest. A Biography of Isaac Newton. Richard S. Westfall. Cambridge University Press, New York, 1981. xviii, 908 pp., illus. \$49.50.

The Newtonian Revolution. With Illustrations of the Transformation of Scientific Ideas. I. Bernard Cohen. Cambridge University Press, New York, 1981. xvi, 404 pp. \$37.50.

Nitrogen Fixation. Proceedings of a symposium, Sussex, England, Sept. 1979. W. D. P. Stewart and J. R. Gallon, Eds. Academic Press, New York, 1980. xviii, 454 pp., illus. \$62.50. Annual Proceedings of the Phytochemical Society of Europe, No. 18.

Progress in Materials Science. Vol. 24. J. W. Christian, P. Haasen, and T. B. Massalski, Eds. Pergamon, New York, 1980. vi, 344 pp., illus. \$85. First published in *Progress in Materials Science*, vol. 24, Nos. 1-4.

Progress in Nuclear Energy. Vol. 5. M. M. R. Williams and R. Shee, Eds. Pergamon, New York, 1980. vi, 290 pp., illus. \$97. First published in *Progress in Nuclear Energy*, vol. 5, Nos. 1-3.

Progress in Polymer Science. Vol. 6. A. D. Jenkins, Ed. Pergamon, New York, 1980. vi, 260 pp., illus. \$81. Previously published as *Progress in Polymer Science*, vol. 6, Nos. 1-4.

Protocols and Techniques for Data Communication Networks. Franklin F. Kuo, Ed. Prentice-Hall, Englewood Cliffs, N.J., 1981. xii, 468 pp., illus. \$29.95. Prentice-Hall Computer Applications in Electrical Engineering Series.

Puberty to Manhood in Italy and America. Harben Boutourline Young and Lucy Rau Ferguson. Academic Press, New York, 1981. xiv, 284 pp., illus. \$26. Developmental Psychology Series.

Quadratic Form Theory and Differential Equations. John Gregory. Academic Press, New York, 1980. xii, 238 pp. \$29.50. Mathematics in Science and Engineering, vol. 152.

Quantum Mechanics in Chemistry. Melvin W. Hanna. Benjamin/Cummings, Menlo Park, Calif., ed. 3, 1981. xvi, 288 pp., illus. Cloth, \$14.95; paper, \$9.95.

Quarks and Leptons. Proceedings of an institute, Cargèse, Corsica, July 1979. Maurice Levy, Jean-Louis Basdevant, David Speiser, Jacques Weyers, Raymond Gastmans, and Maurice Jacob, Eds. Plenum, New York, 1980. xvi, 720 pp., illus. \$75.

Real Time Programming 1980. Proceedings of a workshop, Leibnitz, Austria, Apr. 1980. V. H. Haase, Ed. Published for the International Federation of Automatic Control of Pergamon, New York, 1980. x, 132 pp., illus. \$40. Reprinted from *Annual Review in Automatic Programming*, vol. 10, Nos. 1-4.

Saving the Tiger. Guy Mountfort. Viking, New York, 1981. 120 pp., illus. \$16.95. A Studio Book.

Science and Conscience. Milton R. Wessel. Columbia University Press, New York, 1980. xxviii, 294 pp. \$15.95.

Science and Ethical Responsibility. Proceedings of a conference, San Diego, June 1979. Sanford A. Lakoff, Ed. Addison-Wesley Advanced Book Program, Reading, Mass., 1980. xvi, 32 pp. Paper, \$17.50.

Science, Synthesis and Sanity. An Inquiry into the Nature of Living. G. Scott Williamson and Innes H. Pearce. Scottish Academic Press, Edinburgh, 1980 (U.S. distributor, Columbia University Press, New York). 352 pp. Paper, \$13. Reprint of the 1965 edition.

Water Resources Planning in New England. Stuart G. Koch. University Press of New England, Hanover, N.H., 1980. xii, 186 pp. \$12.

What Must Humanity Do? Javed Husain. Dorrance, Ardmore, Pa., 1980. xii, 40 pp. \$3.95.

The Whisperings Within. David Barash. Penguin, New York, 1981. x, 274 pp. Paper, \$3.95. Reprint of the 1979 edition.

Wilson and Wilson's Comprehensive Analytical Chemistry. G. Svehla, Ed. Vol. 11, The Application of Mathematical Statistics in Analytical Chemistry; Mass Spectrometry; Ion Selective Electrodes. Elsevier, New York, 1981. xiv, 408 pp., illus. \$119.50.

World Mineral Trends and U.S. Supply Problems. Leonard L. Fischman. Resources for the Future, Washington, D.C., 1981 (distributor, Johns Hopkins University Press, Baltimore). xxxiv, 536 pp. Paper, \$15. Research Paper R-20.

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising closing for a particular Friday issue is Wednesday, 3 1/2 weeks before. Advertising is accepted only in writing; no abbreviations. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, or handicap.

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Biochemist. Ph.D. 1979. Broad research background. Cancer research, polyamines, glycolipids, protein purification, tissue culture, radiometric enzyme assays. Publications. Seeks postdoctoral research position. Box 128, SCIENCE. X

Biochemist/Nutritionist/Toxicologist. Ph.D. Extensive experience; chemical/nutritional carcinogenesis, toxicology, human cancer. Publications. Years of teaching in biochemical nutrition. Ready grant proposal. Seeks academic/industrial position. Box 139, SCIENCE. X

Biochemist. Ph.D. Postdoctoral experience. Academic experience, faculty level. Government experience. Grant-supported independent laboratory research. Academic teaching at undergraduate and graduate levels. Experience with administration and review of federally supported biomedical research grants. Some traveling desired. Instrument-rated private pilot. Seeks challenging position with an enlightened and forward-looking employer who wishes to utilize all the above training and experience. Box 148, SCIENCE. X

Biochemist. Ph.D., Dutch. Extensive lecturing experience (in English) in the tropics. Main area of research: cyanobacteria (photosynthesis, biomass). Also experienced in organic synthesis and Raman spectroscopy. Many publications. Seeks position in research and/or teaching. Box 149, SCIENCE. X

Biological Scientist. M.S. microbiology. Recent graduate with multidisciplinary abilities seeks research position. Project experience in investigating drug-induced changes in bacterial cell-walls. Box 150, SCIENCE. X

Biologist/Administrator. Ph.D. in aquatic botany. Recent M.B.A.; 5 years of basic research in freshwater/marine biology and ecology. Presently a university administrator. Seeks academic/industrial position. Box 124, SCIENCE. X

Veterinary Pathologist. ACVP Board-certified; 11 years of experience in laboratory animal and diagnostic pathology. Seeks industrial position, preferably in Sunbelt. Box 155, SCIENCE. 6/12, 19, 26

POSITIONS WANTED

Electron Microscopist. Wishes to relocate in San Francisco-Palo Alto area; 20 years of experience with TEM of plants, animal central nervous system, and insect embryos. Also SEM, B.S. in chemistry. Prefers managing service or teaching facility in hospital, university, or industry. Available 1 September 1981. Box 130, SCIENCE. 6/12, 19

Immunobiochemist—Enzymologist. Ph.D. Experience in hybridoma, monoclonal antibodies, cell-cell interactions, enzymic modulation of cell membrane antigenicity. Long list of publications. Seeks academic or industrial position. Box 151, SCIENCE. X

Immunopharmacologist/Toxicologist. Ph.D. 1979. Recipient of NCI New Investigator Award with funding through December 1983. Seeks research and/or teaching position. Box 152, SCIENCE. 6/12, 19, 26

Pesticide Residue Chemist/Agronomist—Ph.D. Experience includes pesticide residue analysis of feed, animal tissue, soil and water, and adsorption and characterization studies of agricultural wastes by soils and analysis of priority pollutants. Experience in GC, GPC, AA, NMR, and wet analysis. Seeks industrial/academic position. Box 107, SCIENCE. 6/12, 26

Physiologist. Ph.D. Postdoctoral training, teaching, publications. Metabolism, membrane research. Good physiological and biochemical background. Communication and writing skills. Energetic, hard-working. Desires opportunity for professional growth, career advancement in academic or industrial setting. Box 153, SCIENCE. X

Systems Analyst. M.S. Seeks variety in systems and disciplines worked with. Presently, desires work with control theory and applications; microcomputer architecture/applications. Languages: FORTRAN IV and assembly (IBM 360/370 and Z80). Experience includes: 3 years of FORTRAN programming; helicopter flight instructor; technical writing. Master's thesis: analytical modelling and optimization of the BSC data communications protocol. Box 154, SCIENCE. X

POSITIONS OPEN

ANIMAL/HUMAN PHYSIOLOGIST—Ph.D. (physiology emphasis) to develop and teach undergraduate lecture and laboratory courses in animal physiology, pathophysiology, and human anatomy and physiology. These courses serve biology majors, preprofessional students, allied health professions students, and prenursing students. Background must also permit teaching traditional courses in general biological science and/or general zoology as needed. Strong commitment to teaching and student advisement essential. Quality published record helpful. Must be capable of directing undergraduate and graduate research. Also required is ability to function as a member of a faculty team dedicated to furthering the aims of curriculum development and coordination, student guidance, research, and production of quality graduates. Position to begin 17 August 1981, and will be reviewed annually. Send curriculum vitae and have three references send letters with emphasis on how well the candidate meets above requirements to: **Personnel Services, Northeastern State University, Tahlequah, Okla. 74464.** Deadline: 26 June 1981. An Affirmative Action/Equal Opportunity Employer.

AQUATIC TOXICOLOGIST—ECOLOGIST. A postdoctoral position for team investigation of the bioavailability, bioaccumulation, and recycling of mercury, selenium, and arsenic in aquatic ecosystems. Background in biology and experience with at least one of the above chemicals. Submit curriculum vitae and names of three referees to: **Dr. U. T. Hammer, Department of Biology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0.**

University of Florida, Department of Medicine, seeks an **ASSISTANT IN MEDICINE** for the Division of Endocrinology. M.S. or Ph.D. degree and expertise in lipid enzymology and lipoprotein analysis required, and familiarity with isolated hepatocyte techniques desired. Salary range: \$13,000 to \$20,000. Application recruiting deadline: 15 July 1981. Anticipated starting date: 1 August 1981. Contact: **Peter W. Stacpoole, Ph.D., M.D., Division of Endocrinology, Box J-226, J. Hillis Miller Health Center, University of Florida, Gainesville, Florida 32610.**

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POSITIONS OPEN

The Division of Environmental and Scientific Studies, Johnson State College, seeks an **ASSISTANT PROFESSOR** in environmental quality management to teach water and air quality management, environmental pollution, solar or alternative energy, and general physics. Ph.D. required with evidence of superior teaching ability. Salary: \$12,500 to \$16,000. Send résumé and three letters of reference by 15 July to: **Search Committee, c/o Susan Mann, Johnson State College, Johnson, Vermont 05656.**

ASSISTANT PROFESSOR, Ph.D., and ASSOCIATE PROFESSOR, Ph.D., positions. Research and teaching experience in human genetics and metabolic diseases. Should have experience in cellular enzymology and studies of amniotic fluid fibroblasts. Will participate in undergraduate and graduate teaching programs in the Departments of Pediatrics and Biochemistry. Interested individuals should send curriculum vitae to: **Sanford N. Cohen, M.D., Chairman, Department of Pediatrics, Wayne State University, 3901 Beaubien Boulevard, Detroit, Michigan 48201.**

Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR OF MICROBIOLOGY. Tenure-track position in microbiology, College of Medicine and Dentistry of New Jersey. Primary appointment: New Jersey School of Osteopathic Medicine. Adjunct appointment: Rutgers Medical School. Applications will be accepted from individuals with a doctoral degree and postdoctoral experience in molecular aspects of immunobiology, cellular physiology, or virology. Responsibilities will include participating in departmental program for medical and graduate students and developing independent research program. Willingness and ability to collaborate with others as well is important. Address inquiries, including curriculum vitae, bibliography, and three letters of recommendation, to: **Harriet Rouse, Ph.D., Acting Chairperson, Department of Microbiology, COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854. An Equal Opportunity/Affirmative Action Employer, M/F.**

CHEMISTRY HEADSHIP

Oklahoma State University is searching for a head for its Chemistry Department. A chemist with outstanding scholarly credentials is being sought to be part of a College drive for excellence. Previous administrative experience will be considered but not required. Salary competitive. Nominations are welcome. Applications and three letters of recommendation should be sent to: **Professor L. E. Halliburton, Chairman of Search Committee, Department of Chemistry, Oklahoma State University, Stillwater, Okla. 74078. Telephone: 405-624-5796.** To receive full consideration, applications should be received by 15 September 1981. *Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.*

DIRECTOR OF THE SECTION OF ULTRASOUND DEPARTMENT OF DIAGNOSTIC RADIOLOGY

The Department of Diagnostic Radiology of Rush-Presbyterian-St. Luke's Medical Center is searching for a director of the Section of Ultrasound. The Medical Center, located on the west side of Chicago, has a hospital bed capacity of 1048.

The Radiology Department performs over 130,000 examinations each year, including computed tomography (three units) and ultrasound. The department has a professional corporation of 20 attending staff practitioner/teaching faculty members and a training program with 20 resident physicians and fellows.

The Ultrasound Section is located within the Diagnostic Radiology Department and performs about 6000 procedures annually including general and obstetrical referrals. Applicants for the position of director should be Board-certified radiologists with extensive clinical experience and should possess demonstrated management and administrative skills, a significant bibliography or research background in the subspecialty, and have a proven commitment to a teaching program.

Résumés must be received by 15 August 1981. Please mail them to:

**Richard E. Buenger, M.D.,
Chairman
Department of Diagnostic Radiology
Rush-Presbyterian-St. Luke's Medical Center
1753 West Congress Parkway
Chicago, Illinois 60612.**

Rush is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT RESEARCH BIOCHEMIST position in a large, active laboratory available 1 October 1981. Successful candidate must have Ph.D. with extensive experience in recombinant DNA techniques, cloning, expression screening, sequencing, protein isolation, lipid and carbohydrate analysis, and protein glycosylation. Experience with yeast and cell culture desirable but not essential. Candidate should have sufficient experience to carry out independent research involving cloning, isolation, and characterization of secretory and membrane proteins. Base salary: \$21,600. Submit curriculum vitae, a list of at least three persons willing to write letters of reference, and any other relevant material by 1 July to: **Dr. J. Baxter, Chairman, Search Committee, Endocrine Research Division, Department of Medicine, University of California, San Francisco, California 94143. The University of California, San Francisco, is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

The School of Veterinary Medicine of the University of Wisconsin-Madison invites applications and nominations for the position of **ASSOCIATE DEAN FOR RESEARCH AND GRADUATE TRAINING.**

Candidates should have a distinguished career in higher education including extensive experience in research and graduate training programs. A knowledge of research funding mechanisms and sources of extramural support is necessary. Candidates must have the D.V.M. and/or Ph.D. degree and must be eligible for senior faculty status at the University of Wisconsin-Madison.

The School of Veterinary Medicine is a new school. It will accept its first class in fall 1983. Faculty recruiting has begun and will continue over the next 4 years. The associate dean will provide leadership in developing research programs in the School of Veterinary Medicine and will assist new faculty in identifying sources of extramural support for their research. Specifically, the responsibilities of the associate dean are: (i) research administration including grant review, administration of research resources and facilities, and administration of intramural research funds; (ii) administration of graduate programs including recruitment and admission of graduate students and coordination of the development of graduate programs in the academic departments; and (iii) coordination of postgraduate specialty training with the Associate Dean for Clinical Affairs.

Interested candidates should forward complete curriculum vitae and names and addresses of three references. Address correspondence to: **Dr. B. C. Easterday, Dean, School of Veterinary Medicine, Room 328, 333 North Randall Avenue, University of Wisconsin-Madison, Madison, Wisconsin 53715.** Closing date for applications is 15 August 1981, or until filled.

The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMISTRY POSTDOCTORAL POSITION

Our laboratory is interested in a membrane biochemist joining our group for 1 or 2 years to collaborate on studies of membrane alterations in experimental epilepsies. Assessing changes in the structural and functional properties of synaptosomal membranes will be given high priority. Prior experience in membrane biochemistry is essential. The starting date is December 1981 and the stipend is \$16,500 per year. Applications will be accepted until 31 July 1981. Contact:

**Richard J. Cenedella, Ph.D.,
Professor and Chairman
Department of Biochemistry
Kirksville College of Osteopathic Medicine
Kirksville, Mo. 63501**

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BIOCHEMISTRY POSITION AVAILABLE

The Department of Biochemistry, Rice University, announces the availability of a research position from 1 September 1981. The project entails the application of magnetic circular dichroism and electron paramagnetic resonance to a characterization of the structure and function of mammalian cytochrome oxidase, and preference will be given to applicants with prior experience in spectroscopy and in the investigation of membrane-bound redox enzymes. Applications, together with the names of three individuals familiar with the applicant's abilities and record, should be sent to: **Dr. G. Palmer, Department of Biochemistry, Rice University, P.O. Box 1892, Houston, Texas 77001.**

Rice University is an Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF PATHOLOGY

We have available a primary research position in our medical teaching school. A minimum of 2 years of postdoctoral experience in cellular immunology (hybridoma technology, cell culture techniques, and care of in-bred mouse lines) is required. The qualified applicant must have a Ph.D. in biochemistry/immunology/microbiology/virology. Please send your curriculum vitae to: **David Koffler, M.D., Department of Pathology, HAHNEMANN MEDICAL COLLEGE & HOSPITAL, Philadelphia, Pa. 19102.**

**HAHNEMANN MEDICAL
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Equal Opportunity Employer, M/F

BIOLOGICAL RESEARCH SCIENTIST

Stauffer Chemical Company is seeking applications for positions in our biological research group.

PLANT BIOCHEMIST

Applicants should have a Ph.D. or equivalent in plant biochemistry or a related field. Preference will be given to those applicants with interest and experience in plant metabolism and plant cell culture.

We offer a competitive salary and fringe benefits package in addition to an attractive San Francisco Bay location. If you are interested in an opportunity with Stauffer, send your confidential résumé, statement of research interests and experience, and names of three references to: **D. A. Walker, Personnel Manager, Stauffer Chemical Co., 1200 South 47 Street, Richmond, Calif. 94804. Stauffer is an Affirmative Action/Equal Opportunity Employer.**

BIOLOGICAL RESEARCH SCIENTIST

Stauffer Chemical Company is seeking applications for positions in our biological research group.

PLANT MOLECULAR BIOLOGIST

Applicants should have a Ph.D. or equivalent in molecular biology or a related field with experience in cloning techniques. Preference will be given to those candidates who have experience and interest in yeast, higher plants, or transposons. The position involves working with plant systems.

We offer a competitive salary and fringe benefits package in addition to an attractive San Francisco Bay location. If you are interested in an opportunity with Stauffer, send your confidential résumé, statement of research interests and experience, and names of three references to: **D. A. Walker, Personnel Manager, Stauffer Chemical Co., 1200 South 47 Street, Richmond, Calif. 94804. Stauffer is an Affirmative Action/Equal Opportunity Employer.**

MICROBIAL GENETICIST

Stauffer Chemical Company is seeking applications for a microbial geneticist position in our biological research group located in Richmond, California. Applicants will be considered at the Ph.D. level. Expertise in genetic manipulations by transduction, transformation, conjugation, and the use of transposons required. It is desirable for the applicant to have some experience in manipulation of plasmid cloning vectors in Gram-positive organisms.

We offer a competitive salary and fringe benefits package in addition to an attractive San Francisco Bay location. If you are interested in an opportunity with Stauffer, send your confidential résumé, statement of research interests and experience, and names of three references to: **D. A. Walker, Personnel Manager, Stauffer Chemical Co., 1200 South 47 Street, Richmond, Calif. 94804. Stauffer is an Equal Opportunity/Affirmative Action Employer.**

MOLECULAR BIOLOGIST

Stauffer Chemical Company is seeking applications for a molecular biologist position in our biological research group. The position is located in recently constructed laboratories in Richmond, California. Applicants should have a Ph.D. with postdoctoral experience. The successful candidate should have hands-on experience with isolation of eukaryotic messenger RNA and the preparation of cDNA and cloning into prokaryotic host-vector systems.

We offer a competitive salary and fringe benefits package in addition to an attractive San Francisco Bay location. If you are interested in an opportunity with Stauffer, send your confidential résumé, statement of research interests and experience, and names of three references to: **D. A. Walker, Personnel Manager, Stauffer Chemical Company, 1200 South 47 Street, Richmond, Calif. 94804. Stauffer is an Equal Opportunity/Affirmative Action Employer.**



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MEDICAL OFFICER - EPIDEMIOLOGIST

1

Salary: \$36,786 – \$45,808

Ref. No.: 81-NCRSO-NHW-6 (SC)

Health and Welfare Canada
Health Protection Branch
Bureau of Chemical Hazards
Ottawa, Ontario

The Industrial Chemicals and Product Safety Section requires a Medical Officer to co-ordinate epidemiological and medical research on diseases. The assignment will be for a period of approximately 3 years, ending March 31, 1984. The Officer will provide consultative medical services to federal, provincial and local governments or outside agencies on a variety of matters relating to the health impact of exposure to air pollutants.

Qualifications

Graduation from a recognized school of medicine and eligibility to practice medicine in a province of Canada

as well as experience in physiology and epidemiology.

Language requirements

Knowledge of both official languages is essential. Because of the nature of this position bilingual capability is required immediately.

Clearance No.: 311-056-010

How to apply

Send your application form and/or résumé to:

Diane Léger
National Capital Region Staffing Office
Public Service Commission of Canada
300 Laurier Avenue West
Ottawa, Ontario K1A 0M7
(613) 593-5331

Closing date: July 6, 1981

RESPIRATORY PHYSIOLOGIST

2

Salary: \$28,550 – \$34,655

\$31,120 – \$37,774 eff. 7/7/81

Ref. No.: 81-NCRSO-NHW-5 (SC)

Health and Welfare Canada
Health Protection Branch
Bureau of Chemical Hazards
Ottawa, Ontario

The Industrial Chemicals and Product Safety Section requires a Respiratory Physiologist to participate in the implementation of the Long Range Transport of Air Pollutants program. The assignment will be for a period of approximately 3 years, ending March 31, 1984. The incumbent will develop and conduct tests to assess lung function with respect to the general public and selected sub-groups, such as asthmatics, who may be exposed to air pollutants.

Qualifications

University graduation with specialization in a biological

science, as well as experience in physiology and in the measurement and study of lung function. Willingness to travel across Canada is also required.

Language requirements

Knowledge of both official languages is essential. Because of the nature of this position bilingual capability is required immediately.

Clearance No.: 311-056-039

How to apply

Send your application form and/or résumé to:

Diane Léger
National Capital Region Staffing Office
Public Service Commission of Canada
300 Laurier Avenue West
Ottawa, Ontario K1A 0M7
(613) 593-5331

Closing date: July 6, 1981

Additional job information is available by writing to the appropriate address.

Toute information relative à ce concours est disponible en français et peut être obtenue en écrivant à l'adresse indiquée à la suite de chaque offre d'emploi.

Please quote the applicable reference number at all times.

Canada

POSITIONS OPEN

ASSISTANT PROFESSOR, FOOD SCIENCE. To conduct research in food science with emphasis on processing and storage of agronomic crops at the University of Georgia Agricultural Experiment Station, Experiment (Griffin), Ga. 30212. Ph.D. required. Available 1 July 1981; closing date: 15 August 1981. Send résumé, transcripts, and three letters of reference to:

**Dr. Tommy Nakayama, Head
Department of Food Science
University of Georgia Experiment Station
Experiment, Ga. 30212**

The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

DEPARTMENT OF BIOCHEMISTRY AND BIOPHYSICS University of California, San Francisco

Applications are invited for two tenure-track positions in the area of cell biology, molecular biology, or molecular genetics at either the junior or senior level. Please enclose curriculum vitae and a two-page summary of proposed research, and arrange to have three letters of recommendation forwarded to: **Dr. William Rutter, Chairman, Department of Biochemistry and Biophysics, University of California, San Francisco, San Francisco, California 94143.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

BIOTECHNOLOGY

Biochemists, cell physiologists, geneticists, immunologists, and scientists with experience in working with viral or protozoan pathogens are being actively recruited by Codon. Experience using recombinant DNA techniques preferred but not required.

Codon's new Genetic Engineering Laboratories, located just south of San Francisco, are offering employment opportunities at several levels.

Send résumé in confidence to:

**Codon
430 Valley Drive
Brisbane, Calif. 94005**

POSITIONS OPEN

CHIEF OF CHEMISTRY SECTION of the Clinical Laboratories sought for University of California, San Francisco (UCSF), Hospitals and Clinics, with academic appointment in the Department of Laboratory Medicine. Requirements include: (i) a demonstrated ability to perform independent research, (ii) a commitment to, and preferably experience in, managing and long-term planning for a large, active laboratory service, and (iii) capacity for effective involvement in the teaching of clinicians, residents, medical students, and master's students in clinical laboratory science. Please send curriculum vitae to: **R. Curtis Morris, Jr., M.D., General Clinical Research Center, Room 1202 Moffitt Hospital, University of California, San Francisco, San Francisco, California 94143.** *UCSF is an Equal Opportunity/Affirmative Action Employer. Women and members of minorities are encouraged to apply.*

DIRECTOR, Interdisciplinary Clinical Nutrition Program at West Virginia University. Applicants should possess an M.D. degree, some clinical experience, a strong research background, and interest in community outreach programs. Deadline for applications is 1 August 1981, but please send curriculum vitae immediately. Contact: **Dr. R. H. Waldman, Search Committee for Director of Clinical Nutrition Program, Department of Medicine, West Virginia University School of Medicine, Morgantown, West Virginia 26506.** *West Virginia University is an Equal Opportunity/Affirmative Action Employer.*

ECOLOGY AND EVOLUTIONARY BIOLOGY

Lecturer. We anticipate funding two lecturers in 1981-1982 to participate in a large (400 students per quarter), upper-division course in evolution and ecology, and to teach a specialized advanced course. Continuation for a second year contingent on funding and satisfactory performance. Quantitative/theoretical background desired for one position. Send curriculum vitae and three letters of recommendation to: **Chair, Lecturer Search, Department of Ecology and Evolutionary Biology, University of California, Irvine, California 92717.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

University of Michigan Medical School, Department of Pathology, Clinical Pathology Program/Chemical Pathology Laboratory, is seeking a **CLINICAL CHEMIST OR CHEMIST** with a Ph.D. in analytical chemistry, interested in the area of lipid chemistry. Duties will include assistance with the administration of the Chemical Pathology Laboratory, teaching of medical school students and resident staff, and an opportunity for basic and applied research. Faculty rank and salary will be commensurate with experience and qualifications. Please direct inquiries to: **Harold A. Oberman, M.D./Kenneth D. McClatchey, M.D., Department of Pathology, University of Michigan Medical School, 1335 East Catherine Street, M5240 Medical Science I Building, Ann Arbor, Mich. 48109.** *A nondiscriminatory, Affirmative Action Employer. Code 0200NO.*

DEAN, COLLEGE OF CHEMISTRY AND PHYSICS. Louisiana State University seeks applications. Initial appointment will be for 5 years beginning in summer 1982. College includes Departments of Biochemistry, Chemistry, Computer Science, and Physics and Astronomy, and the Allied Health Programs. The successful candidate must merit appointment as professor in one of the departments and also must demonstrate outstanding potential leadership. Applicants should submit their curriculum vitae and statement of their philosophy of governance, and have three letters of recommendation sent directly to: **Chemistry and Physics Dean Search Committee, Wayne L. Mattice, Chairman, Office of Academic Affairs, Louisiana State University, Baton Rouge, La. 70803.** Deadline: 15 August 1981. *An Equal Opportunity/Affirmative Action Employer.*

EDITOR/WRITER

A staff editor position at *Technology Review* is open. Duties include evaluating, writing, and editing material for the magazine. Background and/or experience in journalism, as well as in science, engineering, or related policy issues, is required. Send résumé and writing samples to: **Managing Editor, Technology Review, Massachusetts Institute of Technology, Room 10-140, Cambridge, Mass. 02139.** *An Affirmative Action/Equal Opportunity Employer.*

Recombinant DNA Research

New England Nuclear, an established company in the scientific community for the past 25 years, offers challenging career opportunities in the rapidly expanding fields of genetic engineering and molecular biology. Accessibility to a stimulating Boston academic community encourages an individual's personal as well as professional growth.

Qualified scientists will be familiar with current recombinant DNA methodology and will have direct experience with eukaryotic gene cloning and expression. Requires Ph.D. in molecular biology/biochemistry with one to three years postdoctoral experience.

Our modern Biotechnology Center is located in Newton, MA, a pleasant suburban area ten miles west of Metropolitan Boston. NEN offers competitive salaries and a comprehensive benefits package including relocation assistance.

Candidates interested in exploring this opportunity further should submit resume and salary requirements to Carol Rondomanski, New England Nuclear, 549-1 Albany Street, Boston, MA 02118.



New England Nuclear
...A Better World.

An Equal Opportunity Employer M/F

SQUIBB

DIRECTOR OF VETERINARY PATHOLOGY

E.R. SQUIBB & SONS, INC., a respected leader in the health care industry, has an immediate opening for a Director of the Department of Pathology at the Squibb Institute for Medical Research in New Brunswick, New Jersey. The company offers an excellent compensation package and the opportunity for professional growth.

The successful candidate should be a Veterinary Pathologist and have a minimum of 10 years experience in toxicologic-pathology in the pharmaceutical industry. Interested candidates should submit resume including salary history to: **Mr. Howard Kucks, Employment Manager, E.R. SQUIBB & SONS, INC., Department RK, P.O. Box 191, New Brunswick, NJ 08903.** *Equal Opportunity Employer, M/F/H/V.*

National Institute of Mental Health
Intramural Research Program
Alcohol, Drug Abuse and
Mental Health Administration
Public Health Service
Department of Health and Human Services

OPENING DATE: June 1, 1981
CLOSING DATE: June 30, 1981
All applications must be postmarked by the
closing date

DIRECTOR, MENTAL HEALTH INTRAMURAL RESEARCH PROGRAM

The National Institute of Mental Health is recruiting for a Director of its Mental Health Intramural Research Program. The Director plans and administers a comprehensive long-term intramural research program of clinical, behavioral, and biological research dealing with the causes, diagnosis, treatment, and prevention of mental disorders and the biological and psycho-social factors that determine human behavior and development. The program provides a focus for national attention in the area of mental health research. The total staff numbers about 500 and has a FY 80 operating budget of approximately \$35 million.

This is a Civil Service position in the Senior Executive Service (SES), with base salary from \$49,198 to \$50,112 per year depending on qualifications. SES members are eligible for various bonuses and awards, and physicians are eligible for payments of up to \$10,000 per year, although total compensation cannot exceed the rate for Executive Level I (currently \$69,630 per year). (Alternatively, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The SES individual selected, if not presently in the Senior Executive Service, must serve a one-year probationary period.

Mandatory Professional/Technical Requirements:

The nature of the responsibilities of this position and the qualifications required are such that the duties may be performed with equal effectiveness by individuals trained in medicine, psychology, or the general health sciences. As a physician, minimum requirements include a degree of Doctor of Medicine or Doctor of Osteopathy; as a Psychologist, minimum requirements include completion of a 4-year course of study in an accredited college or university, leading to a bachelors or higher degree which included or was supplemented by a total of 24 semester hours in psychology; for all others, minimum requirements include completion of a 4-year course of study in an accredited college or university, leading to a bachelors or higher degree, with major study in academic field related to the health sciences pertinent to the work of the position. All candidates must also have progressively responsible experience in scientific research administration

and proven professional competence and experience in research programs directed toward the causes, diagnosis and treatment of mental disorders and/or the biological and behavioral processes related to normal and abnormal functioning.

In addition, candidates must meet the following **Mandatory Managerial/Executive Requirements:** Experience in the management of a basic or clinical research program, demonstrating competence to assume leadership responsibility in:

1. Planning, organizing, staffing, directing, coordinating, allocating resources; and selecting, developing, and utilizing subordinate staff.
2. Developing basic program goals, and assuring that national and agency goals and priorities are considered in carrying out the functions and responsibilities of the organization.
3. Establishing and maintaining relationships with key individuals and groups outside the organization.
4. Directing and guiding programs and projects, including long-term and short-term planning, establishing objectives and priorities, and conducting periodic analysis and evaluation.
5. Developing processes and overseeing activities to assure the fair and equitable employment of qualified persons, and implementing EEO objectives.

Candidates who meet the mandatory requirements will be further evaluated on the degree to which they exceed those minimum levels, and in addition, on the following desirable qualifications: scientific reputation/peer recognition, training and education, and honors and awards.

Applications (Personal Qualifications Statement, SF-171) are to be sent to: Mr. Michael H. Rosenthal, Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, National Institute of Mental Health, IRP, Personnel Office, 9000 Rockville Pike, Building 36, Room 1B10, Bethesda, MD 20205. A current curriculum vita, bibliography, and letters of reference and/or appraisals of performance must accompany all applications. An Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS IN CANCER RESEARCH

Assistant/associate professors in: (i) molecular biology (recombinant DNA), (ii) somatic cell genetics, (iii) pharmacology, and (iv) radiobiology. Ph.D. and/or M.D. with postdoctoral experience. Successful candidates are expected to establish strong research programs relevant to cancer.

Send curriculum vitae and the names of three references to:

Chairman, Search Committee, Oncology Research Group, Faculty of Medicine, The University of Calgary, 2500 University Drive, NW, Calgary, Alberta, Canada T2N 1N4.

The University of Florida has two tenure-track **FACULTY OPENINGS** to begin 1 September 1981. To pursue active research programs in any of the following areas: cardiovascular, cellular endocrinology, fetal or newborn development of hormone balance, and renal/cardiovascular system. Teaching responsibility will be in endocrine or renal for medical students and advanced graduate courses. The department has strengths in respiration, endocrine and neo-natal physiology. Cell physiology and neuroendocrinology are being developed under the new chairman, Dr. M. Ian Phillips. Send curriculum vitae and names of three references by 1 July 1981 to: **Chairman, Search Committee, College of Medicine, Box J-274, JHMC, University of Florida, Gainesville, Florida 32610.** Competitive salary and set up funds. *An Equal Opportunity Employer. Women and minorities are encouraged to apply.*

FACULTY POSITIONS IN BIOCHEMISTRY. The Department of Biochemistry of the University of Texas Health Science Center at Dallas is seeking qualified applicants for one, and possibly two, tenure-track faculty positions to be activated after 1 September 1981 at the level of assistant or associate professor. Teaching responsibilities include participation in medical biochemistry instruction and in teaching graduate students. Applicants should have postgraduate experience and be capable of developing an independent research program that includes studies on recombinant DNA techniques and genetic engineering as applied to problems concerning eukaryotic gene transcription, RNA processing, or expression of foreign DNA in eukaryotic cells. Please send curriculum vitae, description of intended research program, and at least two letters of recommendation to:

**Search Committee
Department of Biochemistry
The University of Texas
Health Science Center at Dallas
5323 Harry Hines Boulevard
Dallas, Texas 75235**

Equal Opportunity/Affirmative Action Employer

GEOGRAPHY/ENVIRONMENTAL SCIENCE. Assistant professor. Full-time (9 months) position with tenure-track possibility. Ph.D. and teaching experience required. Minimum salary: \$16,500. Teach world, Europe, and resource geography; and environmental science courses. Independent liberal arts university. New science building. Send application, including detailed letter, curriculum vitae, educational transcripts, and three letters of reference, postmarked by 26 June 1981, to:

**William G. Berberet, Dean
College of Liberal Arts
Willamette University
Salem, Oregon 97301**

Equal Opportunity Employer. Women and minorities urged to apply.

TUFTS UNIVERSITY SCHOOL OF VETERINARY MEDICINE—IMMUNOLOGIST, INSTRUCTOR OR ASSISTANT PROFESSOR with research experience in cellular immunology and immunochemistry. Participation is expected in funded research projects involving basic cellular immunology and autoimmunity. Independent studies utilizing these models are encouraged. The successful applicant, who will help develop and teach a course in immunology to veterinary students, should have: (i) a D.V.M. or equivalent degree and research experience in immunology (internal medicine training and an interest in clinical immunology are desirable); or (ii) a Ph.D. or equivalent degree and postdoctoral research experience in immunology (strongly recommended). Send curriculum vitae, a short description of research interests and names and addresses of three references to: **Dr. Anthony Schwartz, Tufts University School of Veterinary Medicine, 136 Harrison Avenue, Boston, Mass. 02111.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS IN BIOCHEMISTRY

The Department of Biochemistry of The University of Texas Health Science Center at Dallas is seeking qualified applicants for one, and possibly two, tenure-track faculty positions to be activated after 1 September 1981 at the level of assistant or associate professor. Teaching responsibilities include participation in medical biochemistry instruction and in teaching graduate students. Applicants should have postgraduate experience and be capable of developing an independent research program that includes studies on steroid hormones, lipid peroxidation, prostaglandin synthesis and metabolism as related to membrane structure and function. Please send curriculum vitae, a description of intended research program, and at least two letters of recommendation to:

**Search Committee
Department of Biochemistry
The University of Texas
Health Science Center at Dallas
5323 Harry Hines Boulevard
Dallas, Texas 75235**

An Equal Opportunity/Affirmative Action Employer

MEDICAL MICROBIOLOGY—ASSISTANT PROFESSOR. We are seeking a full-time faculty member with expertise in the area of medical laboratory microbiology. Major teaching duties include responsibility for the Microbiology Laboratories for sophomore medical students and a graduate course in medical laboratory microbiology. Candidates are expected to have a Ph.D. or equivalent with postdoctoral experience, and a strong research background. Should be able to develop an independent research program preferably in an area at the interface between the basic and applied aspects of medical microbiology. The position carries with it the opportunity to train graduate students and to assist in the administration of our postdoctoral training program in clinical microbiology and M.S. program in medical technology (microbiology). Please send a résumé and the names of three references to: **Chairperson, Medical Microbiologist Search Committee, Department of Microbiology and Immunology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3400 North Broad Street, Philadelphia, Pa. 19140.** *An Equal Opportunity/Affirmative Action Employer.*

MICROBIOLOGY ASSISTANT PROFESSOR. Position available immediately for an ongoing research project involving bacterial food contamination and poisoning. The candidate must have a Ph.D. in microbiology and some experience with isolating, identifying, and culturing anaerobic bacteria, especially *Clostridium botulinum*. The salary is commensurate with training and experience. Send your curriculum vitae and three letters of recommendation by 26 June 1981 to: **Director of Personnel, Virginia State University, Petersburg, Va. 23803.** For specific information, call or write: **Dr. J. Upadhyay, Professor of Microbiology, telephone: 804-520-5177.** *Virginia State is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGY—Applications are invited for tenure-track position as assistant professor in molecular biology and genetics for studies on cellular aging. Ph.D. or M.D. with two or more years of postdoctoral experience. Preference will be given to those with background in genomic organization and expression. Apply, with curriculum vitae and names and addresses of three references, to: Dr. Sam Goldstein, Departments of Medicine and Biochemistry, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, Arkansas 72205.

POSTDOCTORAL

A postdoctoral position funded by an NIH training grant is available in the area of epidemiology and/or genetics in the Department of Epidemiology. The applicant should have a strong background in epidemiology or human genetics. A very large data base is available, it includes an ongoing community-based registry, family and pedigree studies and followup on over 1500 juvenile onset diabetic children identified since 1956. Excellent opportunities are available for collaborative research with epidemiologists, pediatricians, and endocrinologists interested in diabetes research.

Interested applicants should send copy of curriculum vitae and letter describing interests to: **Dr. Diane Wagener or Dr. Lewis Kuller, Department of Epidemiology, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pa. 15261.**

The University of Pittsburgh is an Affirmative Action/Equal Opportunity Educational Institution.

POSITIONS OPEN

MOLECULAR AND CELLULAR BIOLOGY

The Program in Molecular, Cellular and Viral Biology at the Hutchinson Cancer Research Center invites applications for a faculty research position from individuals who have demonstrated ability to do creative independent research. Rank and salary are open. We are interested in attracting the best qualified individuals, regardless of specialty, who will be able to develop a strong research program in molecular biology, cell biology, or virology. Send curriculum vitae and a brief statement of research interests by 1 August 1981 to:

**Chairperson, MCV Search Committee
Hutchinson Cancer Research Center
1124 Columbia Street
Seattle, Wash. 98104**

An Equal Opportunity Affirmative Action Employer, M/F/H

The University of Connecticut Health Center is seeking a **NEUROPATHOLOGIST** with academic background to conduct brain conferences, teach neuropathology to medical and dental students, review biopsy and autopsy material with residents, and pursue research in aspects of neuromuscular disease. The individual should be Board-certified in pathology and neuropathology and is expected to have held previous academic positions. Appointment will be at the senior faculty level. Submit curriculum vitae and letter of reference to: **Bernard Gondos, M.D., Professor and Acting Chairman, Department of Pathology, University of Connecticut Health Center, Farmington, Conn. 06032.**

An Affirmative Action/Equal Opportunity Employer, M/F/H

PATHOLOGY FACULTY POSITIONS

The Department of Pathology and Laboratory Medicine of the University of Pennsylvania is interested in recruiting two junior faculty to strengthen and expand research activity in the pathobiology of heart, blood vessels, and lung. Candidates must have M.D. or M.D.-Ph.D. degrees and qualified training to actively participate in the diagnostic and teaching activities of the Autopsy Division. Excellent opportunities for collaborative research exist on campus but the applicants are expected to have or develop independent research programs and to successfully compete for grant support.

Salary is commensurate with training and experience. Fringe benefits are excellent. Qualified applicants send curriculum vitae and names of references to: **Giuseppe G. Pietra, M.D., Director, Division of Autopsy Pathology, Box 750, Hospital of the University of Pennsylvania, 3600 Spruce Street, Philadelphia, Pa. 19104.**

The University of Pennsylvania is an Equal Opportunity Employer.

PATHOLOGIST—ACADEMIC POSITION. The Department of Pathology, University of South Carolina School of Medicine, invites application for appointment at the level of professor. Applicants must have M.D. degree or equivalent. The position involves teaching medical students and establishing an active research program. Send replies and curriculum vitae to: **Dr. J. B. Caulfield, Chairman, Department of Pathology, University of South Carolina, Columbia, South Carolina 29208.** *An Affirmative Action/Equal Opportunity Employer.*

PHARMACOLOGY AT THE UNIVERSITY OF PENNSYLVANIA—The Department of Pharmacology has openings for up to six faculty members. Emphasis will be on recruitment at the rank of assistant professor, but a limited number of tenured positions are also available. Applicant must have an advanced degree and at least 2 years of postdoctoral research experience. Preference will be given to individuals with background in molecular pharmacology, neuropharmacology, or analytical pharmacology, but applications from outstanding candidates in any area relevant to pharmacology will be welcome. One position may relate to problems in ophthalmology. These positions will be available over a period of 18 months beginning in October 1981. Each appointment will include the use of renovated, air conditioned laboratory space and reasonable start-up funds. *Applications from female and minority persons are especially encouraged.* Inquiries, which should include curriculum vitae, list of publications, reprints or preprints of selected papers, and at least three letters of reference, should be addressed to: **Faculty Search Committee, Department of Pharmacology, University of Pennsylvania, School of Medicine, Philadelphia, Pa. 19104.** *An Equal Opportunity/Affirmative Action Employer.*

GROUP LEADER

Immunodiagnostics

We are a leading clinical diagnostics manufacturer with a research career position available for a Group Leader. This person will assume technical leadership and participate in the development of immunodiagnostic kits and reagent systems. Background should include broad knowledge of immunochemistry, biochemistry, organic chemistry, and immunology. Development of immunoassay kits or related experience as well as organizational skills are required.

This is an opportunity for technical challenge and career growth in an achievement-oriented environment (located in the San Francisco Bay Area).

For confidential consideration, send resume to Personnel Director, Department G52, Bio-Rad Laboratories, 2200 Wright Avenue, Richmond, CA 94804.

An equal opportunity employer.

 *Bio-Rad Laboratories*

FOOD PRODUCT DEVELOPMENT SCIENTIST



Frito-Lay is a recognized leader in the growing \$12 billion snack food industry. During the past five years our revenues have doubled to almost \$2 billion; 1980 was our twelfth consecutive year of record earnings. As you would expect, state-of-the-art technology, brought about through research and development, is a key ingredient in our success.

Frito-Lay's centralized Corporate Research and Development Department is expanding and has an immediate opening for a Food Scientist in New Product Development. The position involves both laboratory and pilot plant investigative work in the development, improvement, and line extension of new and existing products.

To qualify, you must have a Ph.D. in Food Science, Biochemistry or a related field, or a MS, with experience. Work in consumer food development is desirable.

Frito-Lay offers an excellent starting salary and a comprehensive benefits package as well as a chance to grow with the leader. Send replies, including salary history, in strictest confidence to:

FRITO-LAY INC.
MANAGER, TECHNICAL RECRUITING
P.O. BOX 35034
DALLAS, TEXAS 75235
equal opportunity employer m/f

RESEARCH SCIENTIST

A position is available for a Research Scientist in the field of immunoinflammatory diseases research.

The successful candidate should be an established scientist and will be responsible for developing a research program which applies animal models to the identification and development of therapeutics useful in immunoinflammatory diseases.

Candidates must have a DVM or Ph.D. degree in pathology, immunology or pharmacology, and should have a minimum of two years of post-doctoral or comparable experience in the area of inflammation. The incumbent should have a demonstrated ability to do independent research. Minimum salary will be \$2,500 per month, plus fringe benefits. Send c.v. in confidence to:

Michigan Employment Security Commission, c/o Diane Ranieri, 6054 S. Westnedge, Portage, MI 49002. (616) 323-0003.

An Equal Opportunity Employer M/F

Toxicologist Section Head

We are the Research and Development Division of the Revlon Health Care Group, a worldwide group of diversified companies providing products and services in the field of human health.

Our Drug Safety Department, based at our Lower Westchester County location, currently has an outstanding opportunity for a PhD Toxicologist to supervise drug safety studies and evaluations. The candidate we seek should have 5-10 years pharmaceutical industry experience and

possess strong managerial skills as well as familiarity with GLP, IND and NDA activities.

We offer a competitive salary and excellent fringe benefits. Please send resume, including salary history, in complete confidence to: Manager of Selection and Placement, Research and Development Division, Dept 6130, Revlon Health Care Group, Suite 816, 50 Rockefeller Plaza, New York, NY 10020.

An equal opportunity employer M/F

REVLON Health Care Group

POSITIONS OPEN

PLANT PHYSIOLOGIST/CELL BIOLOGIST (Clonal Propagation)

Assistant professor level with academic and Experiment Station title. Ph.D. is required; postdoctoral experience is preferred. Research experience in horticulture, tree crop physiology, and molecular and cellular biology is desirable but candidates with other backgrounds are also encouraged to apply. The appointee will be expected to develop a research program on the application of cell, tissue, and meristem culture techniques for clonal propagation and genetic modification of fruit and nut crop species. Teaching responsibilities will include an undergraduate course in plant propagation and guidance of graduate student research.

Submit curriculum vitae, official undergraduate and graduate transcripts, publication list, reprints, and names of at least three references to: **Dr. Julian C. Crane, Search Committee Chairman, Department of Pomology, University of California, Davis, Calif. 95616.** Consideration of applications received after 31 August 1981 cannot be assured.

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

POSTDOCTORAL ASSOCIATE at Massachusetts Institute of Technology (MIT). To work in the area of biotechnological applications of enzymes. Background or extensive experience in microbiology required. Send résumé and names of three references to: **Dr. A. M. Klibanov, c/o Massachusetts Institute of Technology, Personnel Office, E19-239, Cambridge, Massachusetts 02139.** MIT is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL PHYSIOLOGISTS—University of California, Davis. The Enzymology Research Laboratory is seeking a systemic physiologist Ph.D. to join a dynamic multidisciplinary group of five Ph.D. scientists investigating the physiology and biochemistry of pancreatic proteolytic enzymes/zymogens in blood and the hormonal/neuronal control of entrance of these proteins into the bloodstream. The laboratory is located approximately 35 miles from San Francisco. Salary: \$18,000 to \$20,000 per year. Send curriculum vitae to: **Dr. Corey Largman, Room B71A, Martinez VA Medical Center, 150 Muir Road, Martinez, Calif. 94553.**

Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available immediately for study of membrane transport in bacterial and animal cells. Areas of interest include genetic, biochemical, and physiological approaches to analysis of ion-coupled transport, including ATPases and substrate cotransport. Send letter with curriculum vitae and names of references to: **Peter C. Maloney, Department of Physiology, Johns Hopkins Medical School, Baltimore, Maryland 21205.**

POSTDOCTORAL POSITION available for study of the regulation and enzymology of the *E. coli* DNA polymerase II holoenzyme. Research will entail cloning holoenzyme subunit genes and studying their structure and expression or purification and characterization of auxiliary polymerase subunits which are required for the replication of natural chromosomes. Please send curriculum vitae and the names of three references to: **Dr. Charles McHenry, Department of Biochemistry and Molecular Biology, The University of Texas Medical School, P.O. Box 20708, Houston, Texas 77025.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available 1 August 1981 in physical chemistry of intercalator-nucleic acid interactions using spectroscopic, stopped-flow, and NMR studies. Experience in DNA physical chemistry preferable. Salary: \$15,000; second year possible. Send curriculum vitae and two letters of reference to: **Dr. Richard Shafer, Department of Pharmaceutical Chemistry, University of California, San Francisco, Calif. 94143.** An Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study neurohormone receptor and secretion mechanisms, that is, "stimulus-secretion coupling" in adrenal chromaffin cells. Experience in any of following areas desirable: cholinergic, adrenergic, and opiate receptors; cell isolation, culture, and fractionation; assays for catecholamines, cyclic nucleotides, membrane marker enzymes. U.S. citizens or permanent residents send curriculum vitae and letters of recommendation to: **Dr. Allan S. Schneider, Sloan-Kettering Institute, 1275 York Avenue, New York, N.Y. 10021.**

POSITIONS OPEN

POSTDOCTORAL POSITION IN NATURAL PRODUCTS CHEMISTRY to work in the identification of the chemical basis of plant resistance to foliage feeding insects. Familiarity with chromatography, NMR, and MS is essential. Available immediately. Salary to \$18,000. Send curriculum vitae, publications, and three letters of reference to: **C. Michael Smith, Department of Entomology, Louisiana State University, Baton Rouge, La. 70803.** An Equal Opportunity Employer.

POSTDOCTORAL POSITION. Genetic and biochemical studies of protein synthesis errors in *Tetrahymena* and yeast [see *Journal of Molecular Biology* 147, 381 (1981)]. Available immediately; long-term funding. Please contact: **Dr. James Wilhelm, Department of Microbiology, University of Rochester Medical Center, Rochester, N.Y. 14642.** The University of Rochester is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study effector-regulated protein phosphorylation in cultured cells. Experience in gel electrophoresis, protein purification, peptide analysis, and tissue culture desirable. Send curriculum vitae, a brief description of research interests, and two letters of recommendation to: **Dr. R. A. Steinberg, Biological Sciences Group, U-44, University of Connecticut, Storrs, Conn. 06268.**

POSTDOCTORAL POSITION available immediately to study secretion of cellulases in fungi. A background in microbial biochemistry, physiology, and genetics is required. Opportunity for experience in biotechnology. Two-year appointment. Send résumé and names of three references to: **B. S. Montencourt, Department of Biology and the Biotechnology Research Center, Lehigh University, Bethlehem, Pennsylvania 18015.**

TWO POSTDOCTORAL POSITIONS available immediately in the areas of protein or carbohydrate chemistry, carbohydrate biosynthesis, membrane receptors, gene cloning, and monoclonal antibodies. Salary: \$16,000 to \$20,000. Send curriculum vitae and three letters of reference to: **Dr. O. P. Bahl, Department of Biological Sciences, 109 Cooke Hall, State University of New York at Buffalo, Amherst, N.Y. 14260.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available. Research on hepatic microsomal electron transport, active oxygen in microsomal reactions, and hepatic cytochrome P-450 mechanism of action. Contact:

**Dr. John B. Schenkman
University of Connecticut Health Center
Pharmacology Department
Farmington, Conn. 06032**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITIONS in transmembrane signalling events with emphasis on: (i) structure and function of receptors for NGF and EGF; and (ii) regulation and reconstitution of hormone-sensitive adenylate cyclase. Applicants should have recent Ph.D. or M.D. with background in biochemistry or cell biology. Experience in protein purification is desirable. Send résumé and names of three references to: **Dr. Gary L. Johnson, Department of Biochemistry, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Mass. 01605.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE—Position available July to August 1981, for Ph.D. or M.D. to study the role of extracellular matrix components in cell growth and differentiation. Send curriculum vitae and three letters of reference to: **Dr. M. Wicha, Department of Oncology, Simpson Memorial Institute, University of Michigan, 102 Observatory, Ann Arbor, Michigan 48109.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE. Position for a Ph.D. in biochemistry or cell biology available immediately for research on the effects of peptide and steroid hormones on tumor cell growth. Training in tissue culture, radioreceptor assays, cell fractionation, cell kinetics desired. Salary: \$18,000. Apply to:

**Dr. Barbara Rae-Venter
Department of Surgery
University of Texas Medical Branch
Galveston, Texas 77550**

An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

PROFESSOR AND HEAD DEPARTMENT OF MICROBIOLOGY

The Department of Microbiology in the College of Arts and Sciences at the Oklahoma State University, Stillwater, Oklahoma, invites applications and nominations for the position of professor and head. The University is seeking a recognized scientist to head and provide leadership for expansion of a department which has a sound research base in programs in virology, immunology, molecular biology, ecology, and genetics, as well as in several applied areas. Candidates should have a doctoral degree with an active research program. Degrees offered are the Ph.D. and M.S. in microbiology and the B.S. in microbiology or medical technology. The head will be expected to provide leadership for enlarging and expanding research and graduate programs. Salary is negotiable. To receive full consideration, applications, including complete curriculum vitae and references, should be received no later than 15 August 1981. Please forward applications to: **Dr. Norman N. Durham, Dean, Graduate College, Chairman of Search Committee, Oklahoma State University, Stillwater, Oklahoma 74078.** Telephone: 405-624-6368. *The Oklahoma State University is an Equal Opportunity/Affirmative Action Employer.*

The Division of Neurological Surgery, University of North Carolina School of Medicine, is seeking applicants for the position of **RESEARCH ASSISTANT PROFESSOR** to develop and direct basic and clinical research in the immunobiology of brain tumors. Prospective candidates should have several years of postgraduate (M.D. or Ph.D.) experience in: recovery and identification of systemic and intratumoral immune-related cells, analysis of immune cell function in tumor-bearers, serologic analyses of tumor cell-surface antigens and/or hybridoma technology. Qualified individuals should submit curriculum vitae and three letters of recommendation to: **M. Stephen Mahaley, Jr., M.D., Ph.D., Professor and Chief, Division of Neurosurgery, 148 Clinical Sciences Building 229H, University of North Carolina, Chapel Hill, N.C. 27514.** An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE—Position available for Ph.D. in biochemistry with at least 2 years of postdoctoral training. Project includes perfusing the endocrine pancreas of fish and measuring ion transport during stimulation of hormone secretion. Background in membrane biochemistry and endocrinology and ability to perform microsurgery are essential. Salary: \$15,500 per year. Please send résumé and names of two references to: **Burvin Hardy, Philadelphia Job Bank, 1709 South Broad Street, Philadelphia, Pa. 19148.** The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

RESEARCH PROFESSOR

The Marine Laboratory of Duke University at Beaufort, North Carolina, is a small research and teaching facility with traditional strength in biology. The laboratory intends to broaden its activities by the creation of research professor positions in the physical and geological marine sciences. The laboratory invites applications for research appointments in the following areas:

- 1) **Physical oceanography** (especially estuarine, coastal, and continental shelf processes, but the laboratory is also well situated for work on Gulf Stream problems or shelf/open ocean interactions),
- 2) **Sedimentary geology** (especially the dynamics of sediment transport, sorting, and deposition), and
- 3) **Nutrient chemistry or geochemistry** (especially regeneration and cycling in marine environments).

These positions enable investigators with existing research support to further develop their research at an established and well-equipped laboratory. In addition to a modern research facility, running seawater and excellent library, the Duke laboratory is the base of operations of a new 131-ft., NSF-funded research vessel to be delivered in summer 1981. Primary emphasis of the new positions is research, but there are opportunities for teaching in the educational program of the Marine Laboratory.

Interested individuals should send a résumé and the names of three references to: **Director, Marine Laboratory, Duke University, Beaufort, North Carolina 28516.**

Duke University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT ORGANIC CHEMISTRY DEPARTMENT

MERRELL DOW PHARMACEUTICALS INC., located in Cincinnati, Ohio, has an opportunity for a Research Assistant in our Synthetic Organic Chemistry Department. The successful candidate will have earned a Bachelor's or Master's Degree and have experience in organic synthesis and routine instrumental methods. This person should possess the potential to comprehend and execute standard synthetic procedures with a minimum of supervision.

The varied and scientifically stimulating atmosphere as evidenced by our mechanistic approach to drug design, will provide ample opportunities for the personal growth of the exceptional individual. Cincinnati, surrounded by the scenic, gentle, rolling countryside of the Miami Valley, offers many of the cultural advantages of a larger urban area.

Qualified individuals are invited to send their curriculum vitae in confidence to:

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A total commitment to integrity and excellence is required. Financial package will be appropriate to the chosen individual.

Contact or send resume to Bobby Joe Payne, D.V.M., Ph.D., Director of Pathology and/or Gordon S. Dean, Ph.D., President.

TOXICITY RESEARCH LABORATORIES, LTD.
510 West Hackley Avenue
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Telephone 6167332584

D.V.M., Ph.D. Veterinarian and Toxicologist

Career opportunity with top quality toxicology and pathology research laboratory located in Wonderful Western Michigan. Responsibilities will include animal care and disease control; the design, implementation and the management of studies; the evaluation of data; the preparation of reports; and finally, contact with clients and regulators.

A total commitment to integrity and excellence is required. Financial package will be appropriate to the chosen individual.

Contact or send resume to E. C. Tompkins, Ph.D., Director of Toxicology and/or Gordon S. Dean, Ph.D., President.

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CSIRO SENIOR RESEARCH SCIENTIST/PRINCIPAL RESEARCH SCIENTIST (SENIOR RESEARCH FELLOW) DIVISION OF FISHERIES RESEARCH MARINE LABORATORIES BRISBANE, QUEENSLAND, AUSTRALIA

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 7400 employees, 2500 of whom are research and professional scientists, located in divisions and sections throughout Australia.

FIELD: Crustacean behaviour.

GENERAL: The CSIRO Marine Laboratories, which include the Division of Fisheries Research and the Division of Oceanography, and a joint technical and administrative services group, is Australia's principal marine research institution with about 100 scientists investigating the physical, chemical, and biological features, including fisheries, of the oceans around Australia.

The appointee will be located at the Cleveland Laboratory near Brisbane where he/she will join a team of 14 scientists currently investigating the biology of penaeid prawns.

DUTIES: Develop and carry out behavioural research on prawns, particularly that relevant to the immigration of postlarvae to nursery grounds, the emigration of juveniles from these grounds, their subsequent distribution, and species interaction. It is expected that the research will be experimentally oriented, but that some field work will be conducted in conjunction with other researchers.

QUALIFICATIONS: Ph.D. or equivalent qualification in aquatic biology. In addition, at least 7 years of postdoctoral research experience in behaviour of aquatic animals, preferably crustaceans, including at least 3 years in fisheries research. Demonstrable independent research ability is also essential.

SALARY: senior research scientist/principal research scientist (senior research fellow): A\$22,807 to A\$30,727 per annum.

TENURE: 3 to 5 years. Superannuation benefits available.

APPLICATIONS: In writing, stating full personal and professional details, the names of at least two referees, and quoting reference number A2362, should reach:

The Acting Chief
Division of Fisheries Research
CSIRO

P.O. Box 21
Cronulla, New South Wales, 2230, Australia

by 6 July 1981.

POSITIONS OPEN

RESEARCH ASSOCIATE

Experience in cell culture, biochemistry and/or carcinogenesis needed for development of assays for chemical carcinogens and tumor promoters, based on the role of calcium ions in cell proliferation, and to investigate the role of calcium ions, calmodulin, cyclic nucleotides, and protein kinases in tumor promotion and carcinogenesis. Salary: \$21,670 to \$30,430. Send curriculum vitae and three references to: Dr. A. Boynton or Dr. J. F. Whitfield, Biological Sciences, M-54, National Research Council, Ottawa, Ontario, Canada K1A 0R6. Telephone: 613-993-9090.

RESEARCH SCIENTISTS in PROTEIN CHEMISTRY AND ORGANIC CHEMISTRY—The Sidney Farber Cancer Institute, affiliated with Harvard Medical School, announces openings for research scientists experienced in organic chemistry and protein chemistry, including protein purification and covalent derivatization. Applicants should have postdoctoral experience in protein chemistry and biochemistry. Appointees will join a team involved in research and development of immunotoxins as reagents for treatment of human cancers. Appointees will be on the research ladder at a level equivalent to an instructor or assistant professor. Applicants should arrange for curriculum vitae and three letters of recommendation to be sent to: Dr. Barbara H. Sanford, Director for Research, Sidney Farber Cancer Institute, 44 Binney Street, Boston, Mass. 02115. An Affirmative Action/Equal Opportunity Employer.

RESEARCH SCIENTIST POSITION IN RADIOLOGY

The Department of Radiology, University of Texas Health Science Center at San Antonio, is seeking an individual with a Ph.D. in a biomedical science and expertise in sister chromatid exchange/cytogenetics to participate in an ongoing research program studying the genetic effects of microwave radiation at nonthermal levels on mammalian cells. The position begins 1 July 1981, and is a 1-year appointment, with the possibility of continuation. Starting salary: \$20,400. Send detailed curriculum vitae, brief letter of research interests, and names of three references to: Dr. Martin L. Meltz, Department of Radiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284; telephone: 512-691-7251. An Equal Opportunity/Affirmative Action Employer.

Massachusetts Institute of Technology (MIT), **RESEARCH SPECIALIST** (electron microscope technician), in the Whitaker College of Health Sciences, Technology and Management. To assist in installation, operation, and maintenance of college EM facility; train faculty, students and laboratory personnel in the operation of the systems; and coordinate alterations, modifications, and routine maintenance with factory service personnel. Will carry out, under the direction of the faculty director, research on new technologies in electron microscopy; assist faculty, students, and laboratory personnel in the use of the facility; serve on user committees; and maintain current training manuals for EM equipment as well as library references on the technologies of electron microscopy. Requires B.S. in physical or life sciences. M.S. desirable, but not essential. A minimum of 3 years of experience in electron microscope technology, photography, sample presentation, and instrument maintenance is also necessary. Please submit résumé (attention: job number R470) to: Vera J. Ballard, MIT Personnel Office, E19-239, 77 Massachusetts Avenue, Cambridge, Mass. 02139. MIT is an Equal Opportunity/Affirmative Action Employer.

VIROLOGIST-ASSISTANT PROFESSOR—Ph.D. or equivalent, full-time, tenure-track position beginning 1 January 1982. The applicant is expected to teach virology to sophomore medical students and to participate in the teaching of graduate virology courses. Candidates are expected to be able to carry out an active independent research program and to serve as preceptors to graduate students. Opportunities also exist to develop collaborating research programs in existing programs. Send curriculum vitae and the names of three references to: Chairperson, Virologist Search Committee, Department of Microbiology and Immunology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3400 North Broad Street, Philadelphia, Pa. 19140. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE IN MEMBRANE PHYSIOLOGY. Postdoctoral position available 1 March 1982 to study H ion transport and intracellular pH regulation with microelectrodes and tracers. The laboratory is part of an active group studying ion regulation in cells. Interested candidates should send résumé and three letters of recommendation to: Dr. Albert Roos, Department of Physiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, Missouri 63110. An Equal Opportunity/Affirmative Action Employer.

Research Biologist

An outstanding opportunity exists for a research biologist with experience in oral microbiology. A B.S. or M.S. in medical or oral microbiology with 2 or more years of laboratory experience is required. We will consider candidates with appropriate educational background. A working knowledge of laboratory models for studying dental plaque, dental caries, and gingivitis is a strong plus. Primary efforts will be directed towards inhibition of dental plaque with newly synthesized chemical compounds and known reference drugs. Located near Albany, N.Y., we offer excellent salary and benefits and solid growth potential.

Send résumé with salary requirement to: Personnel Administrator,

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CONGRESS

The XV Pacific Science Congress will be held in Dunedin, New Zealand, from 1 to 11 February 1983. The First Circular is now available and may be obtained from: The Secretary-General, P.O. Box 6063, Dunedin North, New Zealand.

GRANTS

THE ERNA AND VICTOR HASSELBLAD FOUNDATION announces that in 1981 it will award **GRANTS** totaling 250,000 Swedish Crowns (approximately U.S.\$54,500) for further education and research in the natural sciences.

Applications for grants are invited, and the Foundation requests that the following information be included: curriculum vitae, description of the scientific project, cost estimate, amount of funding received from other sources, and other documents the applicant wishes to submit for consideration.

Granted funds will be disbursed before the end of 1981.

Please submit applications in triplicate, before 1 July 1981, to:

The Erna and Victor Hasselblad Foundation
P.O. Box 18
S-401 20 Göteborg
Sweden

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP in the Endocrine Research Unit, Mayo Clinic/Mayo Foundation. The candidate must be an organic chemist or biochemist with a strong organic chemistry background prepared to pursue a career in biomedical research relating to vitamin D metabolism or oncology research. Additional opportunities may be available in the area of organic analytical methodology, particularly GC/MS. Write to: R. Kumar, M.D., Mayo Clinic, Rochester, Minn. 55901, or telephone: 507-285-5607.

An Equal Opportunity/Affirmative Action Institution

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP: To study hormonal regulation of vitamin D metabolism in mammals. Theoretical and/or practical experience required. Contact: Dr. E. M. Spencer, Children's Hospital of San Francisco, 3700 California Street, San Francisco, Calif. 94118.

Equal Opportunity Employer, M/F/H

POSTDOCTORAL FELLOW SYNTHETIC PEPTIDE CHEMISTRY

Two-year fellowship emphasizing the synthesis of new biologically active peptides, starting fall 1981. Experience in the synthesis of peptides required. Stipend: \$18,000 per year. Submit résumé to: Dr. John C. Houck, Director, Virginia Mason Research Center, 1000 Seneca Street, Seattle, Wash. 98101. Virginia Mason Research Center is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP MOLECULAR OR DEVELOPMENTAL BIOLOGIST

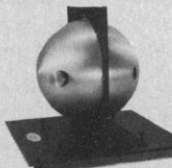
A postdoctoral position will be available 1 September 1981 in the laboratory of William R. Jeffery at the University of Texas at Austin. The position will be to study the molecular basis of localization phenomena during early embryonic development and/or the structure and role of messenger ribonucleoprotein. Credentials and the names of three references should be sent to: Dr. William R. Jeffery, Department of Zoology, University of Texas, Austin, Texas 78712.

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

TRAINEESHIPS

PRE- AND POSTDOCTORAL TRAINEESHIPS IN PARASITES, Johns Hopkins University School of Hygiene and Public Health, Tropical Medicine Center. Applications are being accepted for NIH-sponsored training in the immunology and biochemistry of parasitic infections. Positions in the Departments of Biochemistry and Pathobiology are available 1 September 1981. Applicants must be either citizens or permanent residents of the United States. Send curriculum vitae and names of three references to: Dr. David A. Levy, Department of Biochemistry, The Johns Hopkins University, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205. Telephone: 301-955-3442. An Equal Opportunity/Affirmative Action Employer.

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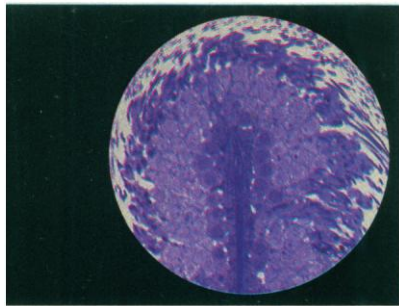
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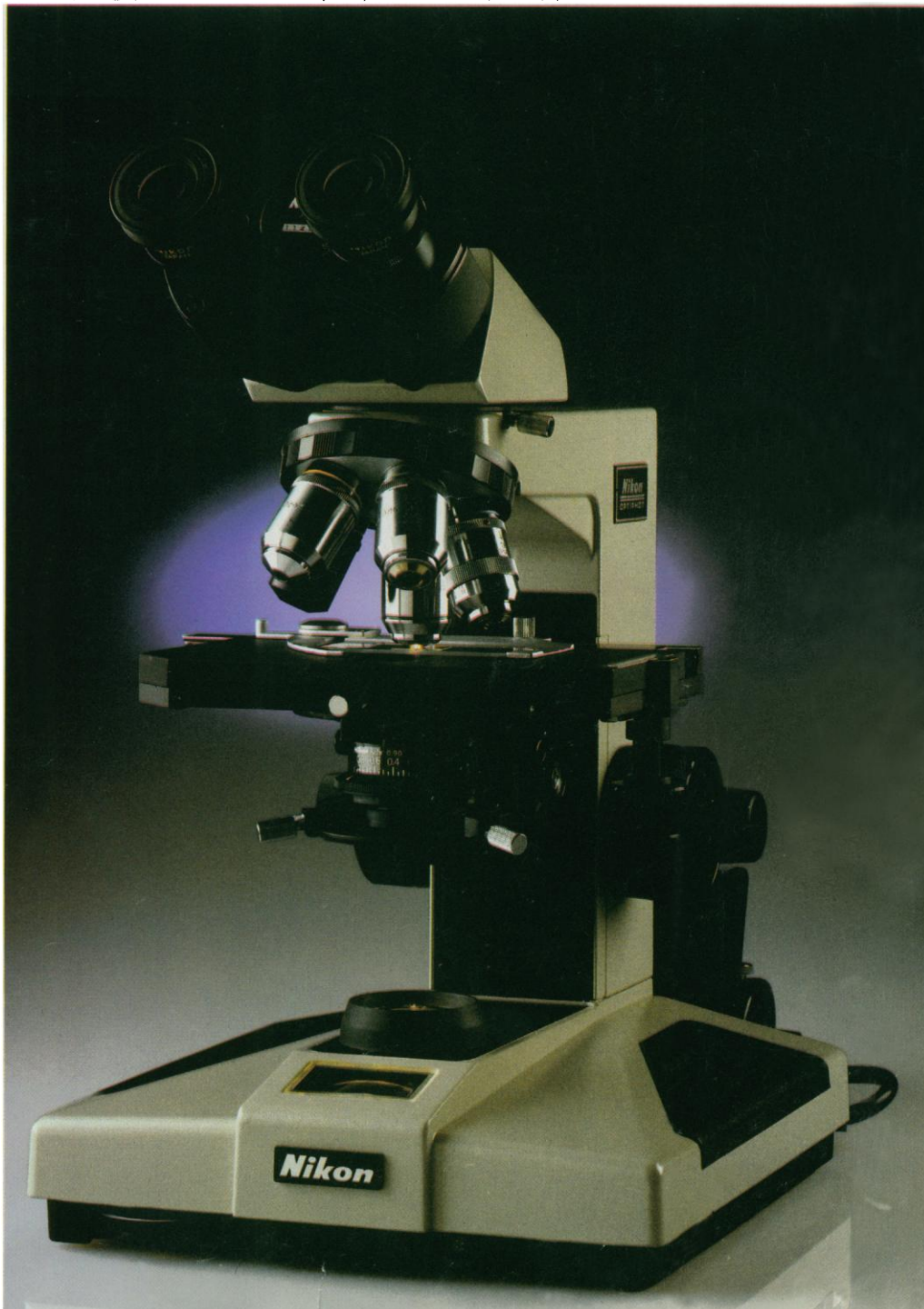
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optical system are designed to eliminate fatigue. And the infinity corrected objectives face away from the user, permitting unobstructed access to the specimen. □ Why not custom design your own laboratory scope for your specific operation? For a demonstration of the ultra-versatile One-Ten see your AO dealer or representative or write for our brochure: American Optical, Instrument Division, Box 123, Buffalo, NY 14240. The flexible One-Ten has cameras and TV adapter for video systems.



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