New York, 1977. viii, 364 pp., illus. Paper, \$14.30. Lecture Notes in Physics, vol. 71. To order this book circle No. 416 on Readers' Service Card

Proceedings of the Seventh Hawaii Topical Conference in Particle Physics. Honolulu, Aug. 1977. R. J. Cence, P. N. Dobson, Jr., S. Pakvasa, and S. F. Tuan, Eds. University Press of Hawaii, Honolulu, 1978. viii, 482 pp., illus. Paper, \$15.

Professionals in Chemistry: 1977. American Chemical Society, Washington, D.C., 1978. xii, 108 pp., illus. Paper, \$20. To order this book circle No. 417 on Readers' Service Card

Progress in Neurobiology. Vol. 8. G. A. Kerkut and J. W. Phillis, Eds. Pergamon, New York, 1978. viii, 376 pp., illus. \$50. To order this book circle No. 423 on Readers' Service Card

Properties of Ceramic Raw Materials. W. Ryan. Pergamon, New York, ed. 2, 1978. vi, 114 pp., illus. + plates. Cloth, \$10; paper, \$4. Pergamon International Library.

The Psychological Society. A Critical Analysis of Psychiatry, Psychotherapy, Psychoanalysis and the Psychological Revolution. Martin L. Gross. Random, New York, 1978. xii, 372 pp. \$10.95.

Psychology. The Frontiers of Behavior. Ronald E. Smith, Irwin G. Sarason, and Barbara R. Sarason. Harper and Row, New York, 1978. xxii, 632 pp., illus. \$14.95. **Psychology.** Gardner Lindzey, Calvin S.

Psychology. Gardner Lindzey, Calvin S. Hall, and Richard F. Thompson. Worth, New York, ed. 2, 1978. xvi, 710 pp., illus. \$14.95. Study Guide. vi, 270 pp. Paper, \$4.95.

Psychopharmacology. A Generation of Progress. Morris A. Lipton, Alberto Di-Mascio, and Keith F. Killam, Eds. Raven, New York, 1977. xxviii, 1732 pp., illus. \$49.50.

Psychopharmacology of Thiothixene. Thomas A. Ban. Raven, New York, 1978. xiv, 236 pp., illus. \$12.50.

Puzzlequiz. Wit Twisters, Brian Teasers, Riddles, Puzzles, and Tough Questions. Stephen Barr. Illustrated by Colos. Crowell, New York, 1978. Not paged. \$8.95.

The Quest for Justice. The Politics of School Finance Reform. Richard Lehne. Longman, New York, 1978. viii, 246 pp. Cloth, \$11.95; paper, \$4.95.

The Quest for Therapy in Lower Zaire. John M. Janzen with the collaboration of William Arkinstall. University of California Press, Berkeley, 1978. xxii, 266 pp. + plates. \$19.50. Comparative Studies of Health Systems and Medical Care, No. 1.

Raman Effect Golden Jubilee Number. Council of Scientific and Industrial Research, New Delhi, 1978. xvi + pp. 129-424, illus. Paper, \$10. *Indian Journal of Pure and Applied Physics*, Vol. 16, No. 3.

Readings in Sociobiology. T. H. Clutton-Brock and Paul H. Harvey, Eds. Freeman, San Francisco, 1978. x, 394 pp., illus. Cloth, \$18; paper, \$9.

Real and Functional Analysis. A. Mukherjea and K. Pothoven. Plenum, New York, 1978. x, 530 pp. \$25. Mathematical Concepts and Methods in Science and Engineering, vol. 6.

The Red Cell. Proceedings of a conference, Ann Arbor, Mich., Sept. 1977. George J. Brewer, Ed. Liss, New York, 1978. xxviii, 760 pp., illus. \$54. Progress in Clinical and Biological Research, vol. 21. *To order this book circle No. 424 on Readers' Service Card*

The Sea against Hunger. C. P. Idyll. Crowell, New York, ed. 2, 1978. xiv, 222 pp., illus. Paper, \$6.95.

Selected Readings in Quantitative Urban

348

Analysis. Samuel J. Bernstein and W. Giles Mellon, Eds. Pergamon, New York, 1978. viii, 304 pp., illus. \$20. To order this book circle No. 425 on Readers' Service Card

Single Subject Research. Strategies for Evaluating Change. Thomas R. Kratochwill, Ed. Academic Press, New York, 1978. xx, 316 pp., illus. \$22.50. Educational Psychology.

Sir John Richardson. Arctic Explorer, Natural Historian, Naval Surgeon. Robert E. Johnson with the assistance of Angela Pierro Bell and four others. Crane, Russak, New York, 1977. xii, 210 pp. + plates. \$32.50.

Software Engineering. Proceedings of a symposium, Belfast, Apr. 1976. R. H. Perrott, Ed. Academic Press, New York, 1977. xii, 204 pp., illus. \$16. A.P.I.C. Studies in Data Processing, No. 14.

Sounds of Music. Charles Taylor. Scribner, New York, 1978. vi, 184 pp., illus. \$15.95.

Spectral Atlas of Nitrogen Dioxide, 5530 to 6480 Å. Donald K. Hsu, David L. Monts, and Richard N. Zare. Academic Press, New York, 1978. x, 638 pp. \$39.50.

Structures and Approximations for Electrons in Molecules. D. B. Cook. Horwood, Chichester, England, and Halsted (Wiley), New York, 1978. 296 pp. \$32.50.

Studies in the Organization of Conversational Interaction. Jim Schenkein, Ed. Academic Press, New York, 1978. xvi, 276 pp. \$18. Language, Thought, and Culture.

Superconductor Applications: SQUIDS and Machines. Proceedings of a NATO Advanced Study Institute, Gardone Riviera, Italy, Sept. 1976. Brian B. Schwartz and Simon Foner, Eds. Plenum, New York, 1977. xxiv, 738 pp., illus. \$65. NATO Advanced Study Institute Series B, vol. 21.

Tales of an Old Ocean. Tjeerd van Andel. Norton, New York, 1978. xii, 176 pp., illus. \$8.95. Reprint of the Portable Stanford Series edition.

Testing Machine Tools. For the Use of Machine Tool Makers, Users, Inspectors and Plant Engineers, Georg Schlesinger. Revised by F. Koenigsberger and M. Burdekin. Pergamon, New York, ed. 8, 1978. iv, 110 pp. illus. \$12.

Textbook of Immunology. An Introduction to Immunochemistry and Immunobiology. James T. Barrett. Mosby, St. Louis, ed. 3, 1978. xxii, 506 pp., illus. Paper, \$13.95.

Theory of Group Representations and Applications. Asim O. Barut and Ryszard Raczka. PWN—Polish Scientific Publishers, Warsaw, 1977 (distributor, Ars Polona, Warsaw). xx, 718 pp. \$35.

The Theory of Relativity Revisited. H. W. Grayson. Dorrance, Philadelphia, 1978. 262 pp., illus. \$10.

This Amazing, Amazing, Amazing but Knowable Universe. V. Gott. Translated from the Russian edition (Moscow, 1974). Progress Publishers, Moscow, 1977 (U.S. distributor, Imported Publications, Chicago). 256 pp. \$2.30.

Transition Metals in Biochemistry. Arthur S. Brill. Springer-Verlag, New York, 1977. viii, 188 pp., illus. \$23. Molecular Biology, Biochemistry and Biophysics, 26. To order this book circle No. 426 on Readers' Service Card

World Food, Pest Losses, and the Environment. Papers from a Symposium, Denver. Feb. 1977. David Pimentel, Ed. Published for the American Association for the Advancement of Science by Westview Press, Boulder, Colo., 1978. xxvi, 206 pp., illus. \$16.50. AAAS Selected Symposia Series, 13.

Personnel Placement

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.

Positions Wanted: 40¢ per word; \$4 extra for use of box number. \$10 minimum charge, per insertion. Prepayment required. This rate is available only to individuals; personnel agencies, companies, colleges, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter; \$145 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207 1515 Massachusetts Ave., NW Washington, D.C. 20005 Telephone: 202-467-4456

Send copy for display ads, $1/6\ \text{page}$ and larger, to:

Scherago Associates, Inc. 1515 Broadway New York, N.Y. 10036 Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

Box (give number) SCIENCE 1515 Massachusetts Ave., NW Washington, D.C. 20005

POSITIONS WANTED

Fishery Biologist. M.A. Experienced in ecology, taxonomy, migratory, reproductive, and scale characteristic studies. Publications. Collection computerization and data capture experience. Box 328, SCIENCE. X

Generalist. Ph.D. pharmacologist, pharmacist. Experienced in animal pharmacology and toxicology, clinical drug investigations, regulatory compliance, biomedical writing, professional services, NIH grants and contracts, teaching. Seeks challenge. Box 324, SCIENCE. X

Genetic Toxicologist, Ph.D. 1973. Extensive supervisory and research experience in human cytogenetics and the analysis of body fluids for the presence of mutagens. Strong background in biochemistry and laboratory techniques. Twenty-seven publications. Seeks research/administrative/teaching or combination position. Box 322, SCIENCE. X

Entry-level Laboratory Position wanted immediately. B.S. in biology, August 1978. Box 326, SCI-ENCE. X

Microbiologist—Biochemical Genetics. Ph.D. 1975. Interested in industrial or academic research position in New York, New Jersey, or Philadelphia area. Research in gene control in bacteria, bacteriophage, and yeast. Experience in protein and peptide purification and recombinant DNA technology. Publications. Box 325, SCIENCE. X

Microbiologist/Virologist, M.A. Experience in all phases of mass cell and virus propagation and purification. Supervisory and management capabilities. Seeks a position with industry or a regulatory agency. Box 323, SCIENCE. X

Physiologist: Ph.D. August 1978; experience with prostaglandins, radioimmunoassay, and calcium flux. Seeks postdoctoral position in Washington, D.C., or Baltimore area. W. Freas, Zoology Department, University of Maryland, College Park, Md. 20742. 10/20, 27

Physiologist, Ph.D., wants to relocate at different medical school as soon as possible. Research-diabetes: transmembrane sugar transport; involves novel experimental technique. Just awarded major funding. Publications. Good teacher. Box 327, SCI-ENCE. X

ANATOMIST—The Anatomy Program in the De-partment of Cell Biology has two faculty positions available at the assistant professorial level. Duties associated with each position include teaching in the human gross anatomy course for freshmen medical students and developing a competitive research pro-gram in some aspect of biological structure. Prefergram in some aspect of biological structure. Prefer-ence will be given to candidates with 2 years of post-doctoral training, experience teaching human anato-my, and exhibited research potential in the area of functional/evolutionary morphology, developmental biology, or reproductive biology. Applicants should submit curriculum vitae and names of references to:

Dr. W. J. Gonyea Faculty Search Committee Department of Cell Biology The University of Texas Health Science Center at Dallas Southwestern Medical School 5323 Harry Hines Boulevard Dallas, Texas 75235

The University of Texas is an Equal Opportunity/Af-firmative Action Employer.

ANATOMIST-MAMMALOGIST

Tenure-track position. August 1979. Ph.D. required, with strong research interests, vertebrate museum curatorial and field station administrative experience. Will teach human anatomy, mammalogy, field biology, and other courses as required. Send cur-riculum vitae, transcripts, and three letters of recommendation by 15 November 1978 to: Dr. Donald M. Wootton, Chairman, Department of Biological Sciences, California State University, Chico, Calif. 95929. An Equal Opportunity/Affirmative Action Employer.

DEPARTMENT OF ANATOMY DALHOUSIE UNIVERSITY HALIFAX, NOVA SCOTIA

Position open: PROFESSOR or ASSOCIATE PRO-FESSOR.

PESON. Applications are invited from persons with an M.D. or Ph.D. degree for the above position which will be available 1 July 1979. Experience in teaching medi-cal gross anatomy and an established research pro-gram are required. Duties may also include the teaching of anatomy to medical, dental, health pro-fessional, and/or science students and an ability to teach neuroanatomy or histology would be an ad-vantage. Salary and rank commensurate with qualifi-cations and experience. Applications, together with cations and experience. Applications, together with curriculum vitae and the names of two referees, should be addressed to: Dr. D. G. Gwyn, Head, De-partment of Anatomy, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4H7.

ANIMAL ECOLOGIST

Job Description

Animal ecologist. Assistant/associate professor, Ph.D. Physiology back-ground and at least 2 years of college teaching experience are desirable. Position involves teaching undergraduate courses such as ecological principles, wildlife management, soil science, aquatic environments, abiotic systems, addore measurements, ecological and/or courses in an area of specialization, and guiding undergraduate laboratory research. May also involve a graduate course in area of specialization and guiding laboratory research of master's and doctoral candidates. Successful applicant will be a member of a department whose research interests are chiefly cellular.

Oualifications

Ph.D. animal ecology; research and teaching, publications and professional references, and 3 to 5 years of full time teaching experience. Send résumé to:

Dr. Richard Stalter, Director Environmental Studies Program St. John's University Jamaica, New York 11439 An Equal Opportunity Employer, M/F

POSITIONS OPEN

POTENTIAL OPENING FOR AN ANATOMIST AT THE WEST VIRGINIA SCHOOL OF OSTEOPATHIC MEDICINE

Potential position title: ANATOMIST. Institution: West Virginia School of Osteopathic Medicine.

Effective date: 1 July 1979. Position description: teaching of gross anatomy and

neuroanatomy

neuroanatomy. Qualifications: Ph.D., with 3 to 6 years of experience teaching in medical or dental school preferred. Pay schedule: rank and salary negotiable. Apply to: Dr. Frances H. Higginbotham, Chairman, Department of Anatomy, West Virginia School of Osteopathic Medicine, 400 North Lee Street, Lewis-burg, West Virginia 24901.

DEPARTMENT OF ANATOMY—New faculty opening. Rank and salary according to experience. Teaching experience and lecturing ability in human gross anatomy desired. Research area open; excellent facilities. Women and minority candidates Send letter of application referring to this announce-

ment, curriculum vitae, and three letters of recom-mendation to:

Dr. Terence H. Williams, Head Department of Anatomy University of Iowa College of Medicine Iowa City, Iowa 52242

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

ANIMAL BIOLOGIST. The Center of Environmen-tal Science of Unity College seeks a biologist to teach in the animal component of our innovative un-dergraduate program. Strong preference will be giv-en to candidates with a demonstrated capability to utilize extant field resources in undergraduate edu-cation. Applicants should send full curriculum vitae by 1 January 1979 and arrange for three letters of reference to be sent to: Dr. Louis V. Wilcox, Jr., Chairman, Center of Environmental Science, Unity College, Unity. Maine 04988. College, Unity, Maine 04988. An Affirmative Action/Equal Opportunity Employer

AQUATIC ECOLOGISTS

Two positions at the University of Oklahoma Bio-logical Station for January 1979. Requires a Ph.D. degree and demonstrated research ability. Principal duties include development of research programs in reservoir foodweb ecology and teaching summer reservoir foodweb ecology and teaching summer session (June-July) classes. Salary and fringe bene-fits commensurate with qualifications. Send curricu-lum vitae, reprints, a full description of research in-terests, and four references to: University of Oklaho-res British Content of the Neurophysical Content of Content of States and States States States and States and States and States States and States States States and ma, Biological Station, Norman, Oklahoma 73019, Attention: Loren G. Hill.

An Affirmative Action/Equal Opportunity Employer

AQUATIC ENTOMOLOGIST CORNELL UNIVERSITY

Applications invited for position which carries re-sponsibility for teaching senior/graduate course and research on basic biology and ecology of aquatic in-sects. Prefer to fill at assistant professor level; others will be considered. Send curriculum vitae and names of five references to: **Professor E. H. Smith, Depart-**ment of Entomology, Cornell University, Ithaca, N.Y. **14853.** Deadline for receipt of applications is 1 Janu-ary 1979. Cornell University is an Equal Opportu-vita for the provided and the provided of the second sec nity/Affirmative Action Employer.

The Department of Psychobiology, University of California, Irvine, is seeking candidates for the position of ASSISTANT PROFESSOR IN RESIDENCE for September 1979. Candidates must have a Ph.D. in biochemistry with postgraduate research experi-ence in neurochemistry and current strong interest in neurochemical mechanisms of synaptic plasticity. Duties include supervision of a common-use departmental facility for neurochemical/biochemical re-search and responsibility for the instruction of an insearch and responsibility for the instruction of an in-troductory course including laboratory in neuro-chemistry to graduate students. The initial duration of this appointment is 2 years, subject to annual re-view. By 1 November 1978 candidates should send curriculum vitae and summary of research experi-ence and have three letters of recommendation sent to: Gary S. Lynch, Chair, Department of Psycho-biology, University of California, Irvine, Irvine, Cali-fornia 92717. fornia 92717.

The University of California is an Equal Opportu-nity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PATHOLOGIST for primate research ASSISTANT PATHOLOGIST for primate research facility: D.V.M. and/or Ph.D. experienced in gross and histopathology. Will assist in directing activities of pathology department. Primary responsibility in service; time available for research. Disciplines in the department include electron microscopy, cyto-genetics, clinical pathology, and gross and microgenetics, clinical pathology, and gross and micro-scopic pathology. Salary negotiable. Send résumé and three letters of reference to: Dr. Harold M. McClure, Chair, Pathology Search Committee, Yerkes Primate Research Center, Emory University, Atlanta, Ga. 30322. Affirmative Action/Equal Oppor-turion Emologyee tunity Émployer.

ASSISTANT PROFESSORSHIPS (Ph.D.) available ASSISTANT PROFESSORSHIPS (Ph.D.) available August 1979: (i) to teach undergraduate and graduate courses and supervise M.S. candidates in animal, bacterial viruses, and cell culture; (ii) major teaching emphasis in general mycology, undergraduate and graduate, with supervision of M.S. candidates. Also to participate in undergraduate microbiology pro-gram. Submit curriculum vita by 1. December to: gram. Submit curriculum vitae by 1 December to: Chairman, Microbiology Department, California State University, Long Beach, Calif. 90840. An Equal Opportunity/Affirmative Action/Title IX Employer.

ASSISTANT PROFESSOR. Ph.D. carbohydrate chemist experienced at sequencing oligosaccharides from microorganisms, and carbohydrate portions of glycoproteins from eukaryotic cells. Salary com-mensurate with experience. Send curriculum vitae, bibliography, and references to: Dr. George Kenny, Department of Pathobiology, SC-38, University of Washington, Seattle, Wash. 98195.

ASSISTANT PROFESSOR OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

The Department of Biochemistry is seeking appli-cants for a tenure-track appointment at the assistant professor level to begin August 1979. Applicants should be qualified to teach biochemistry courses at the undergraduate and graduate levels. Only can-didates who have demonstrated excellence in re-search and who are prepared to establish an active research program will be considered. Preference will be given to those who received graduate and post-doctoral training in strong research environments. doctoral training in strong research environments. The starting salary ranges to about \$21,000 for a 12-month appointment. For full consideration, curricumonth appointment. For full consideration, curricu-lum vitae, list of publications, a brief description of research interests, and three letters of reference should be sent by 1 January 1979 to: Professor Lowell P. Hager, Head, Department of Biochemistry, 29B Roger Adams Laboratory, University of Illinois, Ur-bana, Illinois 61801. Telephone: 217-333-3945.

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

ASSISTANT PROFESSOR IN MICROBIOLOGY AND IMMUNOLOGY. Medical school full-time fac-ulty to participate in the existing medical micro-biology course and in advanced courses for graduate biology course and in advanced courses for graduate students. An active research program, preferably in immunology and/or virology, is highly desired. Sal-ary negotiable, depending on qualifications and ex-perience; starting 1 January 1979. Send résumé and three letters of recommendation to: Dr. P. G. Iat-ridis, Director, Northwest Center for Medical Educa-tion, Indiana University School of Medicale, 3400 Broadway, Gary, Indiana 46408. Indiana University is an Equal Opportunity/Affirmative Action Employ-er. er.

POSTDOCTORAL POSITION IN PHYSIOLOGY. Medical school full-time research associate for col-laborative biomedical research in blood coagulation in relation to diabetes. Salary negotiable, depending In relation to diabetes. Salary negotiable, depending on qualifications and experience; available immedi-ately. Send résumé and three letters of recommen-dation to: Dr. P. G. Iatridis, Director, Northwest Center for Medicale Aducation, Indiana University School of Medicine, 3400 Broadway, Gary, Indiana 46408. Indiana University is an Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITION IN ANATOMY. POSTDOCTORAL POSITION IN ANATOMY. Medical school full-time research associate to partic-ipate in biomedical research project concerning neu-roendocrinology of the genetically obese rat. Salary negotiable, depending on qualifications and experi-ence; available immediately. Send résumé and three letters of recommendation to: Dr. P. G. Iatridis, Di-rector, Northwest Center for Medical Education, In-diana University School of Medicine, 3400 Broadway, Gary, Indiana 46408. Indiana University is an Equal Opportunity/Affirmative Action Employer.

1) ASSISTANT OR ASSOCIATE PROFESSOR, IN-RESIDENCI

ASSOCIATE OR FULL PROFESSOR, IN-RESI-DENCE 2)

University of California, Irvine, Department of University of California, Irvine, Department of Pathology, is recruiting for two faculty positions, one at the assistant or associate professor level and one at the associate or full professor level. Required: M.D., clinical Board-eligible or -qualified, service experience in microbiology, and demonstrated inter-est in independent research. Duties: teach medical students and house staff, limited administrative re-propublify in area of microbiology. All qualified sponsibility in area of microbiology. All qualified candidates welcome; minorities and women encour-aged to apply. Send curriculum vitae and references to: H. Simpkins, M.D., Ph.D., Department of Pathol-ogy, University of California, Irvine, Irvine, Califor-nia 92717 by 4 December 1978.

NOTICE OF POSITION AVAILABLE

Proposed title: ASSISTANT PROFESSOR OF BIO-CHEMISTRY.

- of Missouri-Columbia, School of Medicine, Mis-souri Institute of Psychiatry, 5400 Arsenal Street, St. Louis, Missouri 63139.
- Qualifications: Applicants must have the Ph.D. de-gree or equivalent, and postdoctoral experience is expected. Candidates with promise of exceptional research abilities are being sought for a tenuretrack position.
- Information and application: curriculum vitae, sum-mary of research plans, and three letters of recom-mendation should be sent to:

Dr. Warren A. Thompson Missouri Institute of Psychiatry School of Medicine University of Missouri-Columbia 5400 Arsenal Street St. Louis, Missouri 63139

An Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR OF BIOCHEMISTRY

Tenure-track position beginning September 1979. Candidates should have Ph.D. and postdoctoral ex-perience in biochemistry or closely related field and should show unusual promise in research and in graduate and undergraduate teaching. Send résumé, bibliography, an account of research plans, and the names of three references to: David J. Cox, Head, Department of Biochemistry, Kansas State Universi-ty, Manhattan, Kansas 66506. Applications should be complete by 31 December 1978. Kansas State University is an Affirmative Action/Equal Opportu-nity Employer. nity Employer.

BIOCHEMISTRY FACULTY POSITION RICE UNIVERSITY

Applications are invited for a new faculty position in the Department of Biochemistry of Rice Universi-ty. Clear distinction in creative research and education essential. Preference will be shown to can-didates in the area of molecular biochemistry of nucleic acids. However, applications are encouraged from outstanding candidates irrespective of field of interest.

interest. Rice University is an Equal Opportunity/Affir-mative Action Employer. Send résumé, brief outline of future research plans, and the names of three references to: G. J. Schroepfer, Jr., Chairman, Department of Biochem-istry, Rice University, Houston, Texas 77001.

The Department of Biochemistry, Rice Universi-ty, announces the availability of **POSTDOCTORAL RESEARCH POSITIONS** for a program of research on inhibitors of cholesterol biosynthesis. Applicants should have strong experience in bio-organic chemthesis (metabolism, enzymology, cell culture stud-ies, and so forth). The availability of additional positions in the areas of sterol metabolism, sphingolipid chemistry and metabolism, and stereochemistry of enzymatic reaction are also anticipated.

Interested candidates should send résumé, transcripts, and names of three references to:

Dr. G. J. Schroepfer, Jr. Department of Biochemistry Rice University Houston, Texas 77001

Rice University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR

The Department of Biochemistry, Case Western Reserve School of Medicine, is seeking a molecular biologist preferably with experience in messenger RNA processing or recombinant DNA techniques. The position also involves medical and graduate stu-dent teaching. Candidates should send a one-page description of present and future research interests, the names of three people who may be contacted for experience, and curriculum vitae, including pertinent experience and list of publications, to:

Chairman of Search Committee Charman of Search Committy Department of Biochemistry Case Western Reserve University School of Medicine Cleveland, Ohio 44106

An Equal Opportunity/Affirmative Action Employer

Position available: ASSISTANT PROFESSOR IN OBSTETRICS AND GYNECOLOGY. Require-ments: Ph.D. in physiology or biochemistry; mini-mum of 2 years of postdoctoral experience in fetal growth and development; prefer experience with fe-tal sheep model. Must be able to originate indepen-dent research as well as collaborate with other investigators. Send curriculum vitae to:

Berel Held, M.D. Breel Held, M.D. The University of Texas Medical School at Houston 6431 Fannin Street, Suite 3270 Houston, Texas 77030

An Equal Opportunity Employer

UNIVERSITY OF VERMONT

Applications invited for ASSISTANT PROFESSOR OF PHYSICS (tenure-track) to begin fall 1979. Pref-erence given to physicist with research interests in biological physics. Ph.D. in physics required. Candidates expected to teach physics courses at all lev-els. Solid state physics background desirable. Qualifield woman and minorities encouraged to apply. Send applications, including curriculum vitae, pub-lication list, and names of three references, to: Chairman, Physics Department, University of Ver-mont, Burlington, Vermont 05405.

An Affirmative Action Employer

Full-time position available with appointment at Jef-ferson Medical College. ASSOCIATE CHIEF OF STAFF FOR RESEARCH in large VA psychiatric and neurological medical center. Affiliated with Jef-ferson Medical College. Rank of faculty appointment dependent upon candidate's qualifications. Ex-cellent VA salary and benefits. Research opportu-nity in clinical and basic sciences. Ongoing research in alcohol and drug abuse, biochemistry, and geriat-rics. Contact: Chief of Staff, VA Medical Center, Coatesville, Pa. 19320. Telephone: 215-384-7711. An Equal Opportunity Employer.

DEPARTMENT OF BOTANY UNIVERSITY OF WISCONSIN, MADISON

Applications are invited for a faculty position in plant morphology beginning fall 1979. This is a ten-ure-track position at the assistant professor level. We are seeking broadly trained candidates in the general field of plant morphology. The duties of this position include teaching a large

introductory botany course, a course in plant mor-phology, and a plant microtechnique course; develphotogy, and a plant inforceming contract, developing a graduate student program in plant morpholo-gy and maintaining an active personal research pro-gram in the field; and participating in departmental administration through service on departmental committees.

Candidates should submit curriculum vitae and Candidates should submit curriculum vitae and appropriate supporting materials, and three letters of reference, all to be sent to: Dr. Graut Cottam, Search Committee, Department of Botany, University of Wisconsin, Madison, Wisconsin 53706. Closing date is 15 November 1978. The University of Wis-consin is an Equal Opportunity/Affirmative Action Fundaves. Employer.

CARDIOVASCULAR PHYSIOLOGIST. Eastern Virginia Medical School invites applications from in-dividuals trained for research and teaching in cardio-vascular physiology. Well-qualified individuals at the assistant or associate professor level will be con-sidered. The applicant will be expected to develop an independent research program and teach cardio-vascular physiology to medical and graduate stu-dents. Please submit résumé to: M. C. Conrad, Ph.D., Chairman, Department of Physiology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Va. 23501. 23501

Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

BIOCHEMIST-MOLECULAR BIOLOGIST

The Department of Biological Sciences, Carnegie-Mellon University, invites applications from molec-ular biologists whose research interests lie in the area of nucleic acid structure and/or function. Canarea of nucleic acid structure and/or function. Can-didates should have postdoctoral experience. The position is at the assistant professor level, although higher appointments will be considered. Duties in-clude teaching at the undergraduate and graduate level as well as maintaining an active research pro-gram. Applicants should forward their curriculum vitae, three or more letters of reference, and a brief forum of research along to Search Committee (1) vitae, three or more letters of reference, and a office résumé of research plans to: Search Committee (1), Department of Biological Sciences, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, Pa. 15213. Carnegie-Mellon University is an Equal Opportu-nity/Affirmative Action Employer.

BIOCHEMISTRY FACULTY MEMBER

Texas A & M University College of Medicine has a faculty opening in the Department of Medical Bio-chemistry which can be filled at the assistant, associate, or full professor level. Candidate should have a Ph.D. or M.D. and postdoctoral or faculty research Ph.D. of M.D. and postdoctoral of faculty research experience. Senior-position candidates should have an ongoing funded research program in a medically relevant area, experience teaching medical students, and exposure to clinical medicine. Duties will in-clude research, course development, and teaching medical students in a new VA-related College of Medicine. Previous applications remain on file and need not be resubmitted. Send complete curriculum without to be resubmitted. Denortheret of Medical vitae to: Search Committee, Department of Medical Biochemistry, College of Medicine, Texas A & M University, 110 Herman Heep Building, College Sta-tion, Texas 77843.

Equal Employment Opportunity through Affirmative . Action

COGNITIVE PSYCHOLOGY—Possible tenure-track position for September 1979 at the assistant professor level. Individuals must have some teach-ing experience, proven research record, and a desire to develop nationally known research program. Salto develop nationally known research program. Sal-ary is competitive and research resources are ex-cellent. Send curriculum vitae, three letters of rec-ommendation, and copies of publications or pre-prints to: Dr. Randall W. Engle, Experimental Search Committee, Department of Psychology, University of South Carolina, Columbia, South Carolina 29208. An Equal Opportunity/Affirmative Action Employer.

Position available for a COMMUNITY ECOLOGIST with a Ph.D. and experience in wetlands research (especially saltmarsh and mangrove) to direct a proj-ect on the effects of mosquito control impoundments and ditched marshes on non-target organisms. This is a permanent, state-funded position; salary range: \$14,208 to \$19,080. Send résumé and names of four references to: Search Committee, Florida Medical Entomology Laboratory, P.O. Box 520, Vero Beach, Fla. 32960.

DEAN, COLLEGE OF SCIENCE UNIVERSITY OF NOTRE DAME

The University of Notre Dame is conducting a search for candidates for the position of dean of the College of Science. The appointment to this position will be effective on 1 September 1979 following the retirement of the present dean. The university has 6800 undergraduates and 1200 graduate students. The College of Science supports seven departments: biology, chemistry, earth science, mathematics, mi-crobiology, physics, and preprofessional studies, and has a faculty of 168 members. In addition, two major institutes are affiliated with the college: the Radiation Laboratory and Lobund Laboratory. The Radiation Laboratory and Lobund Laboratory. The departments of Biology, Chemistry, Mathematics, Microbiology, and Physics have excellent graduate level programs. The dean is responsible to the pro-vost for administration of the college and for its instructional and research programs. Candidates should possess demonstrated leadership ability and a record of high scholarship appropriate to the rank of full professor in one of the college departments. Academic administrative experience is highly desir-Actacement administrative experience is lightly desin-able. Nominations or applications with a résumé and names of three professional references should be sent by 1 December to: Dr. John Derwent or Dr. Morris Pollard, Chairmen of the Search Committee, College of Science, University of Notre Dame, Notre Dame, Indiana 46556. Confidentiality of candidates will be strictly observed.

The University of Notre Dame is an Equal Opportu-nity/Affirmative Action Employer.

University of California, Los Angeles (UCLA), School of Medicine, seeks appropriate candidates for the DELLA MARTIN CHAIR IN PSYCHIATRY, newly endowed professorship for distinguished aca-demic psychiatrist (English-speaking, eligible Cali-fornia licensure) committed to research especially on major mental illnesses of adolescents and young adults. Equal Opportunity/Affirmative Action Em-ployer. Send curriculum vitae, letter discussing ca-reer goals, and five references to:

Arnold B. Scheibel, M.D., Chairman Della Martin Search Committee 760 Westwood Plaza Los Angeles, California 90024

The Massachusetts Institute of Technology (MIT) CHEMISTRY DEPARTMENT will welcome appli-cations for faculty positions for 1979-1980 at all lev-els of appointment from individuals who have dem-onstrated ability to do exceptional independent re-search in chemistry. Candidates should submit curriculum vitae, publications list, a description of research interests, and have three letters of recom-mendation sent not later than 1 February 1979 to: mendation sent not later than 1 February 1979 to: Professor J. L. Kinsey, Room 18-399, MIT, Cam-bridge, Mass. 02139. We are an Equal Opportunity/ Affirmative Action Employer.

DEAN, SCHOOL OF MEDICINE. The University of North Carolina at Chapel Hill is searching for qualified candidates for the office of dean of the School of Medicine; position available 1 July 1979. As chief administrator of the school, the dean is re-sponsible for its departments of basic and clinical sciences, its liaison with the North Carolina Memo-rial Hospital, and its participation in the Area Health Education Centers Program. Qualifications include an M.D. or Ph.D. degree, plus a strong record of scholarly activity. The successful candidate shall have demonstrated outstanding leadership capabili-ties in the field of academic medicine. Send résumés to: J. C. Parker, M.D., Chairman, Search Committee, Division of Hematology, Universi-ty of North Carolina, Chapel Hill, School of Medicine, Chapel Hill, N.C. 27514. Affirmative Action/Equal Opportunity Employer. DEAN, SCHOOL OF MEDICINE. The University

DEAN AND PROFESSOR OF NURSING

The Medical College of Ohio is seeking a nurse educator to serve as the dean and professor of nurs-ing in an innovative health consortium. The N.L.N. accredited Baccalaureate Nursing Program accepts accredited Baccalaureate Nursing Program accepts 100 students after their first year in consortium affili-ated programs at Bowling Green State University and the University of Toledo. Located on a new campus in Toledo, with a full-time faculty of 30 members, the School of Nursing has recently added a B.S. degree for R.N.'s, a P.N.P. program, and is planning a graduate program. Candidates for dean must have a doctorate and have baccalaureate edu-cational experience in clinical nursing, teaching, and administration. A graduate educational experience administration. A graduate educational experience and research experience are preferred. Closing date for applications is 30 November 1978, with a desired appointment date in January 1979, with a desired appointment date in January 1979, and a starting date of 1 July 1979. Send curriculum vitae and three names of references to: Joel P. Zrull, M.D., Chairman, Search Committee for Dean and Professor of Nursing, Medical College of Ohio, C.S. #10008, Toledo, Ohio 43699.

The Medical College is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF NEPHROLOGY. The Department **DIRECTOR OF NEPHROLOGY.** The Department of Medicine, University of Alabama Medical Center, is seeking candidates for the position of director for its Division of Nephrology. Qualifications include a substantial background in academic nephrology, with interest and experience in patient care, teach-ing, research, and administration. Interested per-sons should submit their curriculum vitae and letters sons should submit their curriculum vitae and retter's summarizing their qualifications at the earliest pos-sible time to: Thomas N. James, M.D., Department of Medicine, University of Alabama Medical Center, Birmingham, Alabama 35294. An Equal Opportu-nity/Affirmative Action Employer.

The University of Michigan, School of Natural Re-sources, is seeking applicants for **DIRECTOR** of Of-fice of Outreach, Student Services, and Minority Af-fairs as a faculty member. Qualifications: Ph.D. or equivalent preparation in teaching a scientific or pro-fessional area of natural resources, counseling and/ or general administration. Apply to: **Dean Will J. Johnson, School of Natural Resources, The University** of Michigan, 3516 Dana Building, Ann Arbor, Mich. **48109**. A nondiscriminatory, Affirmative Action Em-ployer. plover.

20 OCTOBER 1978

POSITIONS OPEN

The Hellenic Anticancer Institute invites applications for the position of **DIRECTOR** of the Depart-ment of Medical Oncology in its hospital. Work in this newly created department will be focused on the study and treatment of hemopoietic malignancies and advanced disseminated solid tumors.

Applicants must have proven experience in these areas and administrative abilities. Send applications to:

Hellenic Anticancer Institute St. Savas Hospital 171, Alexandras Avenue Athens 603, Greece not later than 10 November 1978.

> DIRECTOR DIVISION OF MICROBIOLOGY DEPARTMENT OF PATHOLOGY UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE

Applications are invited for the post of director of microbiology in the Department of Pathology at the University of Virginia School of Medicine. Can-didates should have considerable experience in the supervision and organization of a clinical service laboratory together with experience in teaching and research. It is anticipated that the successful candidate would be eligible for a senior faculty appoint-ment. Applicants should send a curriculum vitae to: Dr. Michael R. Wills, Director of Clinical Laborato-ries, University of Virginia, Charlottesville, Va. 22901.

An Equal Opportunity/Affirmative Action Employer

ELECTRON MICROSCOPE TECHNICIAN, \$1336 per month. An experienced technician is needed to supervise the daily operation of a core microscopy laboratory involved in pulmonary research in the Cardiovascular Research Institute beginning 1 Janu-ary 1979. The job requires sufficient experience in light fluorescence and electron microscopic tech-niques to work independently and to instruct others in the use of the equipment involved. An M.S. de-gree in biology or related field, courses in histology and cell biology and a working knowledge of statis-tics and BASIC or FORTRAN computer language is considered important. At least 4 years of experience as an electron microscope technician and some su-pervisory experience are required. Send résumé to Room U-12, with reference to job #B8EO4880 or telephone Delmar Booker at 415-666-606 by 1 No-vember 1978. University of California, San Francisco Campus, Third and Parnassus Avenue, San Fran-cisco, Calif. 94143. Equal Opportunity/Affirmative Action Employer, M/F/H. **ELECTRON MICROSCOPE TECHNICIAN**, \$1336

ENDOCRINOLOGIST

Senior level appointments are being considered at the Worcester Foundation for Experimental Biol-ogy. Candidates with an established reputation and the proved ability to obtain grant support in the field of endocrinology are encouraged to apply. Special consideration will be given to applicants in the following areas:

1) Hormone receptors and mode of hormone ac-

tion. Neuroendocrinology.

3) Endocrinology of pregnancy and parturition. Send two copies of curriculum vitae, together with Send two copies of curriculum vitae, together with the names of three referees, to: Endocrine-Repro-ductive Biology Search Committee, c/o Personnel Of-fice, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Massachusetts 01545.

An Equal Opportunity/Affirmative Action Employer

FACULTY APPOINTMENT, BIOENGINEERING. FACULTY APPOINTMENT, BIOENGINEERING. The Department of Orthopaedic Surgery of Louisi-ana State University (LSU) Medical Center, School of Medicine in Shreveport, is seeking a qualified can-didate to develop and coordinate bioengineering ac-tivities. Duties will include participation in resident training, medical student education, and research at the LSU Medical Center, the Veterans Administra-tion Hospital, and the Shrine Crippled Children's Hospital, all in Shreveport, Louisiana. Qualifica-tions should include teaching experience and dem-onstrated research accomplishments, and at least 5 years of postdoctoral research and academic experiyears of postdoctoral research and academic experi-ence. Send curriculum vitae and bibliography to: Dr. James A. Albright, Head, Department of Ortho-paedics, LSU School of Medicine, P.O. Box 33932, Shreveport, La. 71130.

An Equal Opportunity Employer

POSITIONS OPEN

ENDOCRINOLOGY. Applications are invited from ENDOCRINOLOGY. Applications are invited from individuals interested in a position as assistant or as-sociate professor at Ohio University in the College of Osteopathic Medicine and the College of Arts and Sciences. This teaching-research position involves the instruction of osteopathic medical students in human endocrinology and graduate students at the M.S. and Ph.D. levels in the area of the candidate's speciality. The successful candidate will be expected to develop a strong independent research program. Minimum qualifications include a Ph.D. degree or equivalent; prior medical or dental school teaching is highly desirable. highly desirable.

Interested individuals should submit curriculum vitae and a summary of research plans by 15 November 1978 to:

Biomedical Science Search Committee Ohio University College of Osteopathic Medicine Grosvenor Hall Athens, Ohio 45701

Ohio University is an Affirmative Action/Equal Opportunity Empĺoyer.

GROSS ANATOMY. Applications are invited from of OSS ANATOMI. Application as assistant or as-sociate professor at Ohio University in the College of Osteopathic Medicine and the Department of Zo-ology and Microbiology. This teaching-research po-sition involves the instruction of osteopathic medical sition involves the instruction of osteopathic medical students in gross anatomy and graduate students at the M.S. and Ph.D. levels in the area of the can-didate's speciality. The successful candidate will be expected to develop a strong independent research program. Research area is open but preference will be given to candidates with a background in bone structure and biomechanics. Minimum qualifications include a Ph.D. develop a strong independent reiser medical include a Ph.D. degree or equivalent; prior medical or dental school teaching is highly desirable.

Interested individuals should submit curriculum vitae and a summary of research plans by 15 November 1978 to:

> **Biomedical Science Search Committee** Ohio University College of Osteopathic Medicine Grosvenor Hall Athens, Ohio 45701

Ohio University is an Affirmative Action/Equal Opportunity Employer.

INDUSTRIAL TOXICOLOGIST

CIBA-GEIGY Corporation, a worldwide leader in crop protection chemicals, as well as other specialty chemicals, dyestuffs, and pharmaceuticals, has a new career opportunity in its Agricultural Division headquartered in Greensboro, N.C.

This position assures that contract mammalian toxicology research programs are conducted for the successful registration, safe production, and use of successful registration, safe production, and use of agrochemicals. Specific responsibilities include au-diting, evaluating, and approving research data re-sults and reports; presenting data to regulatory agencies and providing technical defense to product safety challenges; and writing and maintaining study protocols. Applicants must have a Ph.D. in tox-icology or pharmacology or other related science that provides substantial training in animal tox-icology such as pathology/animal physiology, or D.V.M.

Academic or industrial experience should include designing, conducting, and evaluating physiology/ toxicology studies in light of EPA or FDA require-ments. Experience in regulatory submissions is de-sirable. Applicants must have strong communicative and interpersonal skills.

Please send current résumé with salary requirement to: Charles F. LaBella, Site Personnel, CIBA-GEIGY Corporation, P.O. Box 11422, Greensboro, N.C. 27409.

An Equal Opportunity Employer, M/F

LABORATORY SCIENTIST with initiative wanted for evolving clinical research laboratory work in col-laboration with M.D. studying biogenic amine and anti-depressant drug methods. Prefer Ph.D. in bio-chemistry or pharmacology with background in neu-rochemical research, method development, and gas chromatigraphic techniques. Appropriate academic appointment available. Open 1 January 1979. Send curriculum vitae and references to: Jan Fawcett, M.D., Department of Psychiatry, Rush-Presbyterian-St. Luke's Medical Center, 1753 West Congress Park-way, Chicago, III. 60612. Rush is an Equal Opportu-nity/Affirmative Action Employer. LABORATORY SCIENTIST with initiative wanted

ENERGY RESEARCH SCIENTIST to prepare proposals; participate in projects; conduct analytical studies and computer simulation; and fabricate and studies and computer simulation; and fabricate and evaluate prototype hardware. Ph.D. or equivalent experience in engineering or physical science. Expe-rience in energy related R & D programs and com-puter simulation desirable. Salary dependent upon qualifications; \$18,000 minimum. Send résumé post-marked by 30 November to: Jerry Bradley, Energy Systems Center, Personnel Office, Desert Research In-titute University of Novedo System P.O. Box 60220 stitute, University of Nevada System, P.O. Box 60220, Reno, Nevada 89506. Affirmative Action/Equal Op-portunity Employer.

The Department of Biological Sciences at State University of New York at Binghamton has two FACULTY OPENINGS to begin September 1979. Rank and salary are open and will be commensurate with credentials. Since 1973 the department has oc-cupied a modern, well-equipped building on a scenic campus and has hired a dozen new faculty.

ANIMAL ECOLOGY—Including emphasis on populations, communities, or animal/plant inter-actions.

ANIMAL PHYSIOLOGY-Including reproductive, environmental, or behavioral physiology.

Teaching responsibilities for each position include each year a one-semester course at the introductory level (general zoology, introductory biology, or ani-mal or human physiology) plus a one-semester advanced/graduate course in specialty areas.

Applicants should send curriculum vitae, reprints, succinct summary of projected research program, statement of teaching interests, and home and busi-ness telephone numbers. Applications will be expe-dited if prospective applicants arrange to have their references sent to us directly. Deadline for receipt of applications is 1 December 1978. Send all correspon-dence to: Ceares Suburgebre, Chairman, Ecology applications is 1 December 1978. Send all correspon-dence to: George Schumacher, Chairman, Ecology Search Committee, or August Mueller, Chairman, Physiology Search Committee, Department of Biologi-cal Sciences, State University of New York at Bing-hamton, Binghamton, New York 13901. An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION, CERAMIC ENGINEERING UNIVERSITY OF FLORIDA

The Department of Materials Science and Engi-The Department of Materials Science and Engi-neering is inviting applications for a tenure-track po-sition at the assistant or associate professor level. Candidates should be interested in teaching under-graduate and graduate courses and in developing re-search programs. A Ph.D. in ceramics or related dis-cipline is required. Curriculum vitae, list of pub-lications, three letters of recommendation, and a statement of research interests should be submitted by the program and the statement of the statement of research interests should be submitted by 1 December 1978 to:

Professor E. Dow Whitney Department of Materials Science and Engineering University of Florida Gainesville, Florida 32611 Telephone: 904-392-1451

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

FACULTY POSITION IN GEOPHYSICS

The Department of Geological Sciences at The The Department of Geological Sciences at The University of Texas at Austin is seeking candidates for a faculty position in geophysics. Applicants for this position should have a strong interest in teach-ing at the undergraduate and graduate level, and be capable of supervising graduate research. Appli-cants should demonstrate the ability to develop their oure precept program and to public the result of own research program and to publish the results of that research in recognized journals in the field of geophysics.

Preference will be given to a candidate whose re-search interests are related to the inference of earth structure from seismic wave observations, as ap-plied either to petroleum exploration or crustal and upper mantle problems. However, those with expe-rience involving non-seismic geophysical studies will also be considered.

Interested persons should submit their résumé, names of references, and a description of research interests to:

Dr. Robert E. Boyer, Chairman Department of Geological Sciences The University of Texas at Austin P.O. Box 7909 Austin, Texas 78712 Equal Opportunity/Affirmative Action Employer, M/F

POSITIONS OPEN

FACULTY POSITION MOLECULAR VIROLOGY

The University of Alabama in Birmingham invites applications to fill a faculty position in the Depart-ment of Microbiology. The appointee will be ex-pected to develop an active research program and participate in departmental teaching activities. Candidates should have postdoctoral experience in mo-lecular virology. It is anticipated that an appoint-ment will be made at the level of assistant professor, although an appointment at other levels may be con-sidered. Send curriculum vitae and names of three references to: Dr. Kenneth J. Roozen, Vice Chair-man, Department of Microbiology, University of Ala-bama in Birmingham, Birmingham, Ala. 35294.

An Affirmative Action/Equal Opportunity Employer

We invite applications for FACULTY POSITIONS by highly qualified basic cancer researchers in the Cancer Research Center. Applicants should have postdoctoral experience in one of the following

areas:
Cytodifferentiation
Cell Surface and Membrane Molecular Biology
Nucleotide Sequence Synthesis
Molecular Virology
Academic appointments will be in the departments of Anatomy, Bacteriology and Immunology, Biochemistry and Nutrition, Pathology, Pharmacology, and Physiology. Candidates should be citizens of the lates or eligible for a permanent visa Please and Physiology. Candidates should be citizens of the United States or eligible for a permanent visa. Please send your curriculum vitae and a covering letter in which you state your field of interest and references. Three letters of recommendation should be ad-dressed to: Dr. Joseph S. Pagano, Director, Cancer Research Center, Box 30, Burnett-Womack Building, University of North Carolina, Chapel Hill, North Car-olina 27514.

Equal Opportunity/Affirmative Action Employer

FACULTY POSITION IN PSYSIOLOGY NORTHEASTERN OHIO UNIVERSITIES COLLEGE OF MEDICINE

Applications are invited for a position in physiology Applications are invited for a position in physiology in the area of respiration, gastroenterology, or endo-crinology. The level of the position will be at the as-sistant or associate professor depending on qualifi-cations and the appointment will be on a 12-month basis. Applicants should have a Ph.D. in physiology, M.D., or equivalent. Preference will be given to indi-vide the applicant background in physiology. M.D., or equivalent. Preference will be given to indi-viduals with a sound background in physiology and a good record in teaching and research. Successful candidates will be expected to develop productive research programs in the areas of their choice. Addi-tional responsibilities include sharing instructional activities with other faculty members in a medical physiology course. Opportunities exist for participa-tion in graduate education and for collaborative basico ni graduate education and for collaborative bas-ic or clinical research within the Northeastern Ohio Universities College of Medicine, its consortium universities (The University of Akron, Kent State University, and Youngstown State University), and teaching hospitals (Akron, Canton, Youngstown, and Kent-Ravenna).

Interested individuals should submit current curricu-Interested individuals should submit current curricu-lum vitae and the names of three references to: Charles V. Blair, Vice Provost for Administration and Public Affairs, Northeastern Ohio Universities College of Medicine, 4209 State Route 44, Rootstown, Ohio 44272. Selected applicants will be invited to be inter-viewed by Dr. George S. Malindzak, Jr., program chief in physiology chief in physiology.

The Northeastern Ohio Universities College of Medicine is an Equal Opportunity Employer

FRESHWATER ECOLOGISTS AND LIMNOLOGISTS

Anticipated faculty position at the University of California, Santa Barbara, Department of Biological Sciences, effective 1 July 1979. Applications are in-vited from limnologists or freshwater ecologists. Persons with research interests that include zoo-planter barthic invertebrates for or between plankton, benthic invertebrates, fish, or hetero-trophic microbes are especially encouraged to apply. Teaching is required at the undergraduate and gradu-

Applications with curriculum vitae, list of pub-lications, names of references, and summary of re-search interests, should be sent to: **Chairman, De** seatch interests, should be sent the Chainman, pe-partment of Biological Sciences, University of Califor-nia, Santa Barbara, California 93106. Letters of reference should not be sent until requested. Appli-cations must be postmarked no later than 15 Decem-ber 1978. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

HEALTH STUDIES DEPARTMENT invites applications from biomedical researchers to participate in a program to influence lifestyles to improve health. a program to influence intestyles to improve health. Appointment will be at the assistant or associate professor level and is contingent upon availability of funds. Applicants should have a Ph.D., M.D., or equivalent and substantive interest in the biological mechanisms underlying disease processes as applied to primary/secondary disease prevention. Duties in-clude teaching in both undergraduate and graduate programs. Ability to teach in one or more of the fol-lowing areas is preferred: community health peuprograms. Ability to teach in one or more of the fol-lowing areas is preferred: community health, psy-chosomatics, and environmental health. Appoint-ment to start 1 September 1979 or sooner. Apply to: J. Allan Best, Ph.D., Chairman, Department of Health Studies, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.

The Department of Pharmacology is currently seeking to fill a JUNIOR FACULTY POSITION. Ap-plicants with an interest in toxicology or cancer re-search and a demonstrated ability for research should send complete curriculum vitae to:

Chairman Department of Pharmacology University of Connecticut Health Center Farmington, Connecticut 06032

THE UNIVERSITY OF WOLLONGONG LECTURER IN BIOLOGY (LIMITED TERM) PLANT PHYSIOLOGIST

The Biology Department offers a broadly based first year course followed in second and third years by a coherent series of subjects dealing with functional biology at cellular, physiological, and community levels. The appointee will be primarily responsible for a course in plant physiology with emphasis on regulatory mechanisms and environmental inter-actions, and will also be expected to contribute to other subjects offered by the department. High aca-demic qualifications and significant nostdoctoral exdemic qualifications and significant postdoctoral experience are desired

Further information may be obtained from Professor A. D. Brown.

Closing date: 6 November 1978.

Salary range: A\$15,179 to A\$19,940 per annum. The term of appointment for a limited-term lecture-ship would be for a period not exceeding 4 years.

For details of appointment write to: Bursar, The University of Wollongong, Box 1144, P.O., Wollongong, New South Wales 2500, Australia or telephone: 042-297311 or 282885.

MANAGER, MICROBIAL RESEARCH

Fortune 200 corporation seeks an individual with a Ph.D. in microbiology. Knowledge of microbial ge-netics, soil screening methodology, and fermenta-tion technology essential. Supervisory experience and effective interface skills also essential. Salary range in low \$40,000's with full benefits package, including profit sharing. Send a letter or résumé in confidence to:

Box 319, SCIENCE

Affirmative Action Employer

PETROLOGIST

The Department of Geological Sciences of Colum-bia University is seeking an igneous petrologist with an interest in terrestrial and/or extraterrestrial prob-lems. A tenure-track position is available and the po-sition is to be filled by fall 1979. Duties will include teaching of undergraduate and graduate courses and participation in other programs of the department. It is anticipated that the appointee will carry out re-search at the Lamont-Doherty Geological Observa-tory. Qualified candidates should submit curriculum vitae and have three letters of reference on their be-half sent to: Dr. Wallace Broecker, Lamont-Doherty Geological Observatory, Palisades, New York 10964 by 15 January 1979. Columbia University is an Equal Opportunity Employer. The Department of Geological Sciences of Colum-Opportunity Employer.

POSTDOCTORAL POSITION—Biochemist (or equivalent training) to study the biochemical effects of halogenated compounds on mammalian systems (particularly membranes). Background in biochemical toxicology desirable. Salary: \$11,500 to \$14,500. Send curriculum vitae and names of three references before 27 October 1978 to: Dr. Terry L. Miller, Department of Agricultural Chemistry and Environmental Health Sciences Center, Oregon State University. Corvallis, Oregon 97331. An Affirmative Action/ Equal Opportunity Employer, in compliance with Section 504 of the Rehabilitation Act of 1973. POSTDOCTORAL POSITION-Biochemist (or

CHIEF, LABORATORY OF EPIDEMIOLOGY AND POPULATION STUDIES

The National Institute of Alcohol Abuse and Alcoholism, Public Health Service, has a career Civil Service position for a Chief of the Laboratory of Epidemiology and Population Studies, to conduct a broad program of research elucidating medical and psychosocial epidemiologic patterns relative to alcohol use and misuse. The position may also be filled through the Commissioned Corps of the U.S. PHS.

The position requires (1) a M.D. with 5 years of related research experience or appropriate combination of residency, post graduate education, and research experience; or (2) a Ph.D. or equivalent in a relevant discipline with 3 years of related research experience. Starting salary depends on qualifications but ranges from \$36,171 to \$40,995 per annum for Civil Service positions or from \$30,000 to \$45,000 per annum for Commissioned Corps candidates. Personal Qualifications Statement (SF-171), curriculum vitae, bibliography and two references should be sent by December 15, 1978 to:

Mrs. Rebecca Tran NIAAA Personnel Office Bldg. 36, Room 1B-10 9000 Rockville Pike Bethesda, Maryland 20014

Equal Opportunity Employer

DIRECTOR TOXICOLOGY LABORATORY

The Chemical Hygiene Fellowship of the Carnegie-Mellon Institute of Research is seeking a director with recognized expertise in toxicology or a related field. Continued growth of our multidisciplinary research program will require a decision maker who is people oriented, and who has professional administrative experience and a record of attracting research funds.

This University-associated laboratory, located 20 miles east of Pittsburgh, has developed an excellent reputation in the field of toxicology over the past 40 years. The professional staff of 88 including 25 with advanced degrees is engaged in both basic and applied research programs.

Competitive salary and benefits, modern facilities and challenging opportunities for growth make this an exceptional opportunity for a dynamic and qualified leader.

Please submit resumé and references, in confidence to:

Dr. G. A. Webb, Chairman, Search Committee Chemical Hygiene Fellowship Carnegie-Mellon Institute of Research 4400 Fifth Avenue Pittsburgh, PA 15213

A DIVISION OF CARNEGIE-MELLON UNIVERSITY AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

FACULTY POSITIONS AT **KUWAIT INTERSTITUTE**

FOR THE 79/80 ACADEMIC YEAR

Applications now being accepted for teaching posts at Kuwait University for the coming academic year. Contracts to begin September 1979 for a two year period, renewable if agreeable to both parties.

Candidates are being sought in the following field(s) of specialization:

DEPARTMENT OF CHEMISTRY:

Organic Chemistry, Physical Chemistry, Inorganic & Analytic Chemistry.

DEPARTMENT OF BIOCHEMISTRY: Immuno Biochemistry, General Biochemistry.

DEPARTMENT OF GEOLOGY:

Structural Geology, Geochemistry, Recent Sedimentology.

REQUIREMENTS:

- 1. Applicant must hold Ph.D. in specialized area.
- 2. Applicant must currently hold an academic post in an accredited University or research center. Language of Instruction: English

If you meet the qualifications, and wish to obtain an application form, please send a self-addressed envelope to the Cultural Division at the following address:

EMBASSY OF



Cultural Division 4340 Connecticut Avenue, N.W. Suite 500 Washington, D.C. 20008

You will receive an instruction sheet indicating what materials to send to Kuwait along with your application. Please do not inquire by phone.

20 OCTOBER 1978

HEART METABOLISM

POSTDOCTORAL POSITION available immediate POSTDOCTORAL POSITION available immediate-ly in the areas of cardiac metabolism, creatine ki-nase, and mitochondrial bioenergetics. Position open to Ph.D. in biochemistry. Background in en-zymology, metabolism, or oxidative phosphoryla-tion is desirable. Salary: \$12,000. Send résumé and three letters of reference to: Dr. William E. Jacobus, Division of Cardiology, 509 Blalock Building, The Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, Md. 21205. An Equal Opportunity/Affirmative Action Employer.

METABOLISM—Postdoctoral position in xenobiotic metabolism devoted to prediction of metabolites us-ing computer-assisted methods. Available immedi-ately. Training and experience in metabolism re-quired. Computer experience desirable but not re-quired. Send résumé to: Professor W. T. Wipke, Board of Studies in Chemistry, University of Califor-nia, Santa Cruz, Santa Cruz, Calif. 95064. An Affir-mative Action/Equal Opportunity Employer. mative Action/Equal Opportunity Employer.

DEPARTMENT OF PATHOLOGY: a limited number of stipend supported positions are available for Ph.D. candidates in pathobiology. Potential research Ph.D. candidates in pathobiology. Potential research areas include the use of morphological, biochemical, cytochemical, immunological, and cell biology methodology in the study of disease processes. Ap-plicants with advanced training in biology, chemis-try, or physics are especially encouraged. Contact: Dr. Harvey Bank, Department of Pathology, Medical University of South Carolina, Charleston, S.C. 29403.

PHARMACOLOGIST

Position available in the Department of Basic Sci-ences, Peoria School of Medicine, one of the four clinical schools within the University of Illinois Col-lege of Medicine. Applicants must have a Ph.D. in pharmacology and experience beyond the doctor's degree. Duties will include instructing medical and conducting associated health sciences students, and conducting an independent research program. Must have deman independent research program. Must note cert mensurate with experience and qualifications, with academic rank of assistant professor. Starting date as soon as possible. Send application and names of three individuals for references before 15 November 1978 to: Dr. F. J. Grundbacher, Department of Basic Sciences, Peoria School of Medicine, 123 SW Glendale Avenue, Peoria, Illinois 61605. The University of Illi-nois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Position available 1 July 1979. Prefer Board-certified **PHYSIATRIST** with 3 to 5 years of experience with the severely disabled. Level from instructor to associate professor. Code 100G0. Reply to: Box 321, SCIENCE. A nondiscriminatory, Affirmative Action Employer.

PHYSIOLOGICAL PSYCHOLOGY. Psychology Department, Indiana University, Bloomington, will appoint assistant professor (tenure-track) in physio-logical psychiatry for fall 1979 to do research, teach regraduate and undergraduate courses, and supervise student research. We seek minority and women can-didates. Send curriculum vitae, future research plans, and three reference letters by 15 December 1978 to: Dr. I. J. Saltzman, Department of Psychology, Indiana University, Bloomington, Ind. 47401. An Affirmative Action/Equal Opportunity Employer

PLASMA PROTEIN ISOLATION SPECIALIST

An individual with experience in purifying plasma proteins is being sought to begin new program. Ap-plicant should call and/or write to: Foundation for Blood Research, P.O. Box 426, Scarborough Maine 04074; telephone: 207-883-4362.

RADIOIMMUNOCHEMIST **RIA TECHNOLOGIST**

Applications for these new positions are being re-Applications for these new positions are being re-viewed. Familiarity with the development of new, nonkit assays, operation of high technology in-struments, and conjugation of materials for animal immunization desirable. Individuals should be self-starters, not afraid of hard work, and interested in taking advantage of the benefits of northern New England. Write and/or call: Foundation for Blood Re-search. P.O. Box 426. Scarborauch. Maine 44074: search, P.O. Box 426, Scarborough, Maine 04074; telephone: 207-883-4362.

POSTDOCTORAL: BIOCHEMIST OR ORGANIC CHEMIST. Available immediately to participate in research program on lipid metabolism and wax bio-synthesis. Salary range: \$10,000 to 11,000 per year. Renewable up to 2 years. Send résumé, transcripts, and three letters of reference to: Dr. Gary J. Blomquist, Biochemistry Department, University of Nevada, Reno, Nevada 89557. Application deadline: 30 days from this notice. An Equal Opportunity/Af-firmative Action Employer.

POSTDOCTORAL APPOINTMENTS

The Ames Laboratory of the U.S. Department of Energy has a number of vacancies for postdoctoral fellows in the fields of chemistry, physics, metallur-gy, and engineering. The appointments would be for 1 year, renewable for a second year if mutually I year, renewable for a second year if mutually agreeable. In some instances there may be a possi-bility for continued employment beyond the 2-year postdoctoral appointment if circumstances warrant. Interested persons should submit a complete ré-sumé, along with the names and addresses of three professional references, to:

Ames Laboratory Personnel Office 127 Spedding Hall Iowa State University Ames, Iowa 50011 An Equal Opportunity Employer

POSTDOCTORAL ASSOCIATE. Tissue residue studies of antibiotics and other xenobiotics in chick-ens and cattle by enzyme-linked immunospecific asens and cattle by enzyme-linked immunospecific as-say (ELISA). Research includes development of re-agents, assay methods, and pharmacokinetic analy-sis of data. Send résumé and three references to: Dr. W. L. Ragland, Department of Avian Medicine, Uni-tion of the second secon versity of Georgia, Athens, Georgia 30605.

rOSTDOCTORAL FELLOW in avian immunology to investigate immunological parameters and func-tional aspects of a biochemically defined thymus-specific antigen of chickens. Training in cellular im-munology desirable. Send application including cur-riculum vitae and names of three references to: Dr. W. L. Ragland, Department of Avian Medicine, Uni-versity of Georgia, 953 College Station Road, Athens, Georgia 30605. POSTDOCTORAL FELLOW in avian immunology

POSTDOCTORAL POSITION available (2 years) in the area of molecular cloning of spore genes in *Ba-cillus subtilis*. Applicants should have extensive ex-perience in microbiology, microbial genetics and/or biochemistry. Salary commensurate with the posi-tion and experience. Send curriculum vitae and the names and phone numbers of three individuals who will serve as references to: will serve as references to:

Dr. Paul S. Lovett Department of Biological Sciences University of Maryland Baltimore County Catonsville, Maryland 21228

The University of Maryland is an Affirmative Action/

Equal Opportunity Employer.

ORAL ROBERTS UNIVERSITY MEDICAL SCHOOL

POSTDOCTORAL POSITION in neural control of the circulation available fall 1978. Candidates must have experience in whole animal peripheral nerve recording techniques or cardiovascular recording techniques. Applicant's life style should be compat-ible with a Christian environment. Send curriculum vitae and names of three references to: Dr. D. Fred Peterson

Department of Physiology Oral Roberts University Medical School Tulsa, Oklahoma 74171

Oral Roberts University is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION IN RENEWABLE POSTDOCTORAL POSITION IN RENEWABLE RESOURCES available immediately to study the fungal metabolism of lignin and the delignification of wood. Strong background in biochemistry neces-sary; experience in genetics desirable. Salary range: \$10,000 to \$12,000 per year, depending upon experi-ence. Submit curriculum vitae, including names of references, to:

Dr. M. H. Gold Department of Chemistry and Biochemical Sciences Oregon Graduate Center 19600 N.W. Walker Road Beaverton, Oregon 97005 An Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITION-Available immediately for 2 years. Research is on the biochemical and molecular basis of antidiuretic hormone action. Experiments involve identification of relevant cellular protein components; and selective monitoring of membrane transport proteins. Send curriculum vitae and three recommendation letters to: Dr. Murray J. Ettinger, Department of Biochemistry, State Universi-ty of New York at Buffalo, Cary 102, Buffalo, New York 14212. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Ph.D. in chemistry or biochemistry for research on proton transfer pro-cesses in catalysis by enzymes, especially carbonic anhydrase. Experience with enzyme kinetics of fast reaction techniques useful. Please send curriculum vitae and names of three references to: Dr. D. N. Silverman, University of Florida College of Medicine, Box J-267 JHMHC, Gainesville, Fla. 32610.

Two **POSTDOCTORAL POSITIONS**: inter-disciplinary project on new methodology for hor-mone analysis involving bio-organic chemists/ chromatographers at Northeastern University and endocrinologists/physicians at Harvard Medical School. Training in such areas as biochemistry, or-School. Iraining in such areas as biochemistry, or ganic chemistry, or analytical chemistry (empha-sizing chromatography) may be appropriate. Send curriculum vitae to: Roger W. Giese, Institute of Chemical Analysis, Northeastern University, 360 Huntington Avenue, Boston, Mass. 02115. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study peptide hormone-receptor interactions and cellular desensitization mechanisms in target cells. Send cur-riculum vitae and names of three references to: Dr. David B. Donner, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, New York 10021. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS (two) available im-mediately for research on the pathways, enzymolomediately for research on the pathways, enzymolo-gy, and regulation of membrane lipid biosynthesis in bacilli. Salary, dependent on experience, starting at \$12,000. Ph.D. degree in biochemistry or closely re-lated field required. Experience in lipid enzymology and/or synthetic and analytical organic chemistry desirable. Send curriculum vitae and names of three references to: Dr. Armand Fulco, Laboratory of Nu-clear Medicine and Radiation Biology, University of California, Los Angeles, 900 Veteran Avenue, Los Angeles, Calif. 90024. An Equal Opportunity/Affir-mative Action Employer.

POSTDOCTORAL POSITION. Available now for Ph.D. or M.D. with biochemistry background to car-ry out research in areas related to artherosclerosis and endocrinology. Send curriculum vitae to: Dr. G. B. Phillips, Columbia University College of Physicians and Surgeons, The Roosevelt Hospital, 428 West 59 Street, New York, New York 10019. An Equal Oppor-unitivid firmating Action Fundavar tunity/Affirmative Action Employer

POSTDOCTORAL POSITION available for studies ros idea transplantation. Training in cell culture essential. Prefer additional qualification in endocri-nology or pathology with experience in diabetes. Send résumé to: Dr. J. Fortner, GM Surgical Re-search Laboratory, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, New York 10021. An Equal Opportunity Employer, M/F.

Applications for POSTDOCTORAL POSITIONS are being accepted through September 1979 in the De-partment of Physiology in the fields of endocrinology, biophysics, and exercise physiology. *Appli-*cations from all qualified candidates are welcome; minorities and women are encouraged to apply. Send curriculum vitae, copies of publications, and the names of three referees to: **Dr. Stephen H.** White, Chairman, Department of Physiology, College of Modifiem University of Collifornia Luving Luving of Medicine, University of California, Irvine, Irvine, California 92717.

POSTDOCTORAL POSITIONS available immediately in the following areas: (i) Effect of synthetic oligonucleotides on initiation of protein synthesis. Requires background in ribosome biochemistry. Ex-Requires background in ribosome biochemistry. Ex-perience or interest in enzymatic oligonucleotide synthesis desirable. (ii) RNA primers in bacterial DNA synthesis. Experience in nucleic acid bio-chemistry required. Send résumé and names of three references to: Personnel Office, Boston Biomed-ical Research Institute, 20 Staniford Street, Boston, Mass. 02114. An Equal Opportunity/Affirmative Ac-tion Fundager tion Employer.

Cardiac Research

A Senior appointment with ICI in England.

The Pharmaceuticals Division of Imperial Chemical Industries is one of the leading researchers and manufacturers of medicinal compounds.

Cardiac research is one of the most important aspects of our work and has resulted in an extensive range of successful drugs, in particular, beta-blockers and lipid lowering agents.

We are now actively extending our cardiac research facilities to cover survival after heart attack-the survival of the myocardial cell under ischemic conditions

Consequently we are looking for a person to head up this project which has the full support of the Company's extensive resources. It is envisaged that the right candidate will have considerable experience in cardiac research.

You will be free to determine the approaches to be used and will lead a multi-disciplinary team of experienced researchers. You should be qualified in medicine, physiology or pharmacology and have the ambition to further your career in research.

Remuneration and other benefits, including relocation expenses, are designed to attract candidates of high calibre. The post is based at our modern research establishment located in beautiful parkland in the county of Cheshire, England. Residential, recreational and school facilities in the area are excellent.

Please reply, by airmail, enclosing your curriculum vitae to:



Dr. J. Conway, Head of Biological Research, ICI Limited. Pharmaceuticals Division, Mereside, Alderley Park, Macclesfield, Cheshire, SK10 4TG. U.K.

Manager Sensory **Evaluation**

We are seeking an experimental psychologist to head up a group of four psychologists, in the R & D Department, working on sensory evaluation of consumer products. The work involves experimentation with new products and extensive contact with other company departments. It encompasses all aspects of psychological research including exploratory qualitative studies, large scale product test-ing, clinical testing and multi-dimension perceptual analysis.

The position requires a Ph.D. in experimental psychology, 3 years of industrial experience and a strong background in experimentation, statistics and scaling.

If you are interested in learning more about this opportunity, please send resume and salary history in confidence to Employ-ment Manager

Personal Products Div. WARNER-LAMBERT CO. 10 Webster Rd., Milford, CT 06460 An equal opportunity employer. M/F.

PROVOST **DIVISION OF MATHEMATICAL** AND PHYSICAL SCIENCES AND ENGINEERING University of Maryland, College Park

Applications and nominations are invited for the position of Provost, Di-vision of Mathematical and Physical Sciences and Engineering, University of Maryland, College Park Campus. The Division includes the College of Engineering, Departments of Computer Science, Mathematics, Physics and Astronomy, and the Institute of Physical Science and Technology. The MPSE division includes about 500 faculty, 4,000 undergraduates, and 1,300 graduate students. The Provost provides leadership and di-rection for the Division in instructional and research programs and in gen-eral is the chief administrative and ac-ademic officer of the Division.

Desired qualifications include an earned doctorate, proven scholarly and professional competence, extensive academic and administrative experience at the university level, and the ability to provide creative and in novative leadership.

Applications and nominations with resumés should be sent by 1 December 1978:

Dr. John O. Corliss, Chairperson MPSE Provost Search Committee Department of Zoology University of Maryland College Park, Maryland 20742

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

POSITION ANNOUNCEMENT

<section-header><section-header><text><text><text><text><text><text>

AN FOUAL OPPORTUNITY EMPLOYER

20 OCTOBER 1978

POSTDOCTORAL POSITION for Ph.D. or M.D. with background in immunology and/ or biochemistry who would be interested in research on the chemistry and/or the biology of the complement system. Send reply and curriculum vitae to: Box 318, SCIENCE

A POSTDOCTORAL POSITION is available for a period of 1 to 3 years to study mechanisms of action of peptides (substance P, somatostatin, endorphins) of peptides (substance P, somatostatin, endorphins) in mammalian spinal pain pathways using pre-dominantly electrophysiological techniques. Send curriculum vitae and three references by 1 January 1979 to: M. Randic, Department of Veterinary Anato-my, Pharmacology, and Physiology, Iowa State Uni-versity of Science and Technology, Ames, Iowa 50011. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION. To study the inter-POSTDOCTORAL POSITION. To study the inter-action of the killer toxin protein with cell surface re-ceptors in yeast. Experience in protein chemistry and/or yeast genetics. Appointment for 1 year initial-ly, with renewal for an additional 2 years. Salary: C\$12,100 per annum. Applications and two letters of recommendation should be sent to: Dr. H. Bussey, Department of Biology, McGill University, 1205 McGregor Avenue, Montreal, Quebec, Canada H3A 181. 1R1.

POSTDOCTORAL POSITION in materials re-search, starting November 1978. Experience in surface physics or chemistry, especially in Auger or xray photoelectron spectroscopy is desirable. Start-ing salary: \$12,000 per annum. Before 1 November, send résumé and three letters of recommendation to: L. L. Levenson, Materials Research Center, Uni-versity of Missouri–Rolla, Rolla, Mo. 65401.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION for study of cholesterol esterase. Emphasis on role of lipid-lipid and lip-id-protein interactions in catalysis as studied using model systems which mimic atherosclerotic lipid demodel systems which mimic atherosclerotic lipid de-posits. Background in enzymology and/or surface chemistry desirable. Base stipend: \$13,008. Send curriculum vitae and three letters of reference to: Dr. Howard Brockman, Biophysics Section, The Hor-mel Institute, University of Minnesota, Austin, Minn. 55912. An Equal Employment Opportunity/Affir-mative Action Institution.

POSTDOCTORAL POSITION available immediately. Individual must have strong biochemical or bio-physical background with interest in membrane excitability. Research involves isolation and study of proteins responsible for membrane excitability. Iniproteins responsible for membrane excitability. Ini-tial appointment is for 1 year, renewable for 2 years. The position is currently funded by NIH grant. Sal-ary: \$10,020, plus fringe benefits of \$3,206 per year. Send curriculum vitae with two letters of reference to: Dr. Josef Bukovsky, Department of Molecular Bi-ology, Eastern Pennsylvania Psychiatric Institute, Henry Avenue, Philadelphia, Pa. 19129.

POSTDOCTORAL POSITION IN THE PHYSICAL ASPECTS OF HYPERTHERMIA FOR CANCER THERAPY

The position involves research relating to electro-magnetic heating and thermal dosimetry in the treat-ment of tumors with localized hyperthermia. Efforts will be divided approximately equally between clini-cal trials at present capabilities and longer term efcal trials at present capabilities and longer term ef-forts to improve the state of knowledge and instru-mentation. Skills in electromagnetics, thermal prop-erties, or physiology are most desirable but general research ability will be weighted more than specific experience. Please contact: Dr. T. C. Cetas, Division of Radiation Oncology, University of Arizona Health Sciences Center, Tucson, Arizona 85724; telephone: 602-626-6722. Equal Opportunity/Affirmative Action/ Title IX/Section 504 Employer.

RESEARCH ASSISTANT. Immediate opening for individual with extensive experience in the general techniques and instrumentation of biochemistry, cell and molecular biology employing yeast, *Drosophila* and *Volvox* as experimental organisms. Candidate must be able to work independently and be capable of laboratory management. B.S. or M.S. in biochem-istry or equivalent. Send curriculum vitae and names of three references to: Dr. S. F. Cottrell, Biology De partment, Brooklyn College, Brooklyn, N.Y. 11210. An Equal Opportunity/Affirmative Action Employer, M/F. **RESEARCH ASSISTANT.** Immediate opening for

POSITIONS OPEN

Three POSTDOCTORAL POSITIONS are available immediately in the following areas:

- 1) Synthesis and utilization of nucleotide analogs in Synthesis and utilization of nucleotide analogs in investigation of the mechanism of action of the membrane ATPase responsible for ATP-driven transport and ATP synthesis in bacteria and mitochondria—Dr. Alan Senior.
- Divalent cation involvement in the membrane ATPase of bacteria and mitochondria; role of the very tightly bound nucleotides in this enzyme— Dr. Alan Senior.
- Transport and metabolism of sugars and amino acids in mammary tumor cells. Influence of hor-mones, and studies of hormone receptor regula-tion-Dr. Russell Hilf.

Salaries \$12,000 to \$14,000, plus 8 percent benefits. Send curriculum vitae to:

Dr. Alan E. Senior or Dr. Russell Hilf Department of Biochemistry

Box 607 University of Rochester Medical Center Rochester, New York 14642

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available immediateto physiologist with background in neuroendo crinology and tryptophan neurochemistry, and with experience in neurotransmitter, nutritional restric-tion, and neuropharmacologic techniques as applied tion, and neuropharmacologic techniques as applied to experimental gerontology. Two-year appoint-ment, renewable for 1 year. Salary range: \$11,800 to \$13,032, based on experience. Send résumé and names of two references by 1 November 1978 to: Search Committee, Department of Physiology-Anato-my, 2519 Life Sciences Building, University of Cali-fornia, Berkeley, California 94720. The University is an Affirmative Action Employer.

POSTDOCTORAL POSITION available immediate-It to conduct metabolic and permeability studies on maturing reticulocytes and red cells. Send résumé and names of three references to: Dr. H. D. Kim, Department of Physiology, College of Medicine, Room 4122, University of Arizona, Tucson, Ariz, 85724, An 4122, University of Arizona, Tucson, Ariz, 85724, An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Study of pulmonary artery intermediate (100A) fila-ments. Background in protein chemistry and/or amino acid sequencing required. Three-year posi-tion, available immediately. Starting salary: \$12,000 per annum. Send résumé and three letters of refer-nere on some se possible tet. **D. P.** Lubreen Demert ence as soon as possible to: Dr. P. Johnson, Depart-ment of Chemistry, Ohio University, Athens, Ohio 45701. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL **RESEARCH ASSOCIATE**

Position available immediately for recent Ph.D. in biology, biochemistry, physiolo-gy, pharmacology, or related discipline. Candidate will carry out investigations in experimental animals of the pharmakinetics of bio-active molecules labeled with shortlived isotopes. These studies may involve experimental modeling, bio-distribution and metabolism, structure-activity rela-tionships, and so forth. Some experience with animals is required.

Applicants should send résumé and transcripts and request that three letters of rec-ommendation be sent to:

The Chairman Ine Chairman Department of Chemistry Brookhaven National Laboratory Associated Universities, Inc. Upton, Long Island, New York 11973 An Equal Opportunity Employer, M/F

POSTDOCTORAL RESEARCH ASSOCIATE-POSTDOCTORAL RESEARCH ASSOCIATE— To study insulin receptors in human tissues, mainly blood. Prior experience with peptide hormone re-ceptors and tissue culture preferred. Position (1 to 2 years) available immediately. Only U.S. citizens or permanent residents need apply. Salary not less than \$13,000. Please send résumé and names of three ref-erences to: Dr. John C. M. Tsibris, University of Florida College of Medicine, Box J-294, Gainesville, Florida 32610.

POSITIONS OPEN

The Division of Nuclear Medicine, Department of Internal Medicine, at the University of Michigan, has a **POSTDOCTORAL POSITION** available for an individual with a Ph.D. in biochemistry or pharmahas a POSIDOCIORATION POSITION available for an individual with a Ph.D. in biochemistry or pharma-cology. Applicants with experience in protein chem-istry and enzymology are preferred. The post-doctoral scholarship, sponsored by NIH, is part of an ongoing program in cancer research training in nuclear medicine. The individual will have an oppor-tunity to interact with biochemists, nuclear pharma-cists, organic chemists, and physicians. The re-search involves the development of tissue-specific enzyme inhibitors as potential imaging agents. The position is available immediately and the appoint-ment is up to 3 years. Candidates should send cur-riculum vitae, a summary of pertinent experience, and names of three individuals who may be con-tacted for references to: Dr. Michael C. Tobes, W5614 University of Michigan Hospital, Division of Nuclear Medicine, Ann Arbor, Michigan 48109. A nondiscriminatory, Affirmative Action Employer.

POSTDOCTORAL RESEARCH POSITION available immediately to utilize microtechniques in studying cyclic AMP regulation in human breast tu-mors. Experience with biochemical methods re-quired. Send curriculum vitae and three letters of reference to: Dr. C. L. Rutherford, Biology Depart-Network (J. D. C. L. Rutnerrord, Biology Depart-ment, Derring Hall, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. Tele-phone: 703-961-5349.

PROFESSOR OF PATHOLOGY

Applications are sought for the position of profes-sor of pathology in the Eastern Virginia Medical School. We seek a candidate with M.D. degree and experience in anatomical pathology both at the aca-demic- and hospital-practice level to participate in an active educational program for the teaching of medical students and residents. Excellent depart-ment research facilities available, including electron microscopy. Applications should include curriculum vitae, bibliography, and letters of recommendation. Please send to: Robert J. Faulconer, M.D., Chair-man, Department of Pathology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Virginia 23501. An Equal Opportunity/Affirmative Action Employer. Employer.

NATIONAL SCIENCE FOUNDATION (NSF) PROGRAM DIRECTOR ANNOUNCEMENT NUMBER 78-38

The National Science Foundation's Division of Earth Sciences is seeking qualified applicants for program director, Geochemistry Program. This posiprogram director, Geochemistry Program. This posi-tion is excepted from the competitive civil service, is equivalent to a GS-14/15 position (\$30,750 to \$47,025), and will be filled on a permanent or rotator basis. A Ph.D. in geology/geochemistry or a closely related field is desirable. Equivalent research and experience in the administration of large, multi-dis-ciplinary research programs may be substituted for the degree. A broad general knowledge of geologic research and familiarity with the U.S. scientific com-munity are also required. Applicants should submit a statement of interest and résumé or Standard Form 171, Personal Qualifications Statement, to: **Division** Statement of interest and resume of standard Form 171, Personal Qualifications Statement, to: Division of Personnel and Management, Attention: Section B, Room 212, 1800 G Street NW, Washington D.C. 20550; telephone: 202-632-4106. Closing date: 31 De-cember 1978. NSF is an Equal Opportunity Employer.

PROTEIN CHEMIST

Individual interested and experienced in the isola-tion and characterization of human serum proteins, particularly apolipoproteins. Please reply to: Dr. Frederick Aladjem, Department of Microbiology, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles, Calif. 90033. An Equal Opportunity Employer.

STAFF TOXICOLOGIST

A growing, independent testing laboratory is seek-ing a Ph.D. in toxicology or a biologically related field with extensive biostatistical training or experi-ence. The position will involve design and analysis of data from safety studies in laboratory animals, as well as bioavailability studies in humans. An ability to present results in written form will be important. Send résumé to:

Dr. Kent R. Stevens Food and Drug Research Laboratories, Inc. P.O. Box 107 Waverly, N.Y. 14892

PRE- AND POSTDOCTORAL POSITIONS are available for studies on the protein synthesizing system with special emphasis on ribosomes—topogra-phy, biogenesis, and function—under various condi-tions of growth and development. Teaching opportu-nities available. Reply with résumé to:

Professor Bruce H. Sells Laboratories of Molecular Biology Faculty of Medicine Health Sciences Complex Memorial University of Newfoundland St. John's, Newfoundland, Canada A1B 3V6

RESEARCH ASSISTANT PROFESSOR

Recent Ph.D. in biochemistry or related area to con-Recent Ph.D. in biochemistry or related area to con-duct research on xenobiotic transformations in in-vertebrate and microbial marine organisms. The suc-cessful candidate will be expected to eventually de-velop an independent and funded research program in an area of marine biochemistry of his/her interest. Send résumé, names of three references, and a gen-eral statement of future research interests to: Dr. M. D. Corbett, Rosenstiel School of Marine and Atmo-spheric Science, University of Miami, 4600 Ricken-backer Causeway, Miami, Florida 33149. Application deadline: 15 November 1978. The University of Mi-ami is an Equal Opportunity/Affirmative Action Em-ployer. ployer

RESEARCH ASSOCIATE IN ENTOMOLOGY. Opening for systems biologist for modeling of or-chard ecosystems. Part of multidisciplinary effort di-rected at integrated pest management. Work in col-laboration with faculty of Statistics Department and Biomathematics. Program Involves exploratory. Biomathematics Program. Involves exploratory analysis of multivariate data as well as system mod-eling and simulation. Ph.D. with major-minor combi-nation including quantitative field and relevant field of biology. of biology. Appointment for 2 years with possibility of reappointment contingent on performance. Send résumé, three sources of references, thesis sum-mary, reprints, and transcripts to: K. L. Knight, De-partment of Entomology, North Carolina State Uni-versity, Raleigh, N.C. 27650. Applications received until 15 December 1978. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE POSITIONS (two) available immediately to study the soil physical and chemical parameters that affect solute transport in chemical parameters that affect solute transport in soil. One position will be primarily concerned with radionuclide transport in porous material. The other position will concentrate on the effects that sewage sludge has on heavy metal transport in soils. Can-didates should have a Ph.D. in soil chemistry or closely related area, with experience in solute trans-port phenomena and in the handling of radioiso-topes. Salary will be commensurate with experi-ence. Send résumé and three letters of recommenda-tion to: Dr. George A. O'Connor. Denartment of tion to: Dr. George A. O'Connor, Department of Agronomy, Box 30, New Mexico State University, Las Cruces, New Mexico 88003. Deadline for appli-cations: 15 November 1978. An Equal Opportunity/ Affirmative Action Employer.

RESEARCH ASSOCIATES. Ph.D. position, Insti-tute of Biological Sciences, Syntex Research, avail-able immediately to study the role of prostaglandins in kidney function, the relationship of prostaglandin structure to renal function and antihypertensive ef-fects, and to develop model systems to screen di-uretic agents. Strong background in renal physiology essential; some knowledge of pharmacology of pros-taglandins and antihypertensive drugs desirable. Ap-pointment is for 1 or 2 years. Good benefits program. Syntex, a pioneer in the field of steroid chemistry and medicine, is an international pharmaceutical Syntex, a pioneer in the field of steroid chemistry and medicine, is an international pharmaceutical company whose continued growth requires a staff in-crease. For the highly motivated person this is an ideal opportunity for personal growth and advance-ment. Send résumé and names of three references to: Dr. John J. Bruno, Institute of Biological Sciences, Syntex Research, 3401 Hillview Avenue, Palo Alto, Calif. 94304. Syntex is an Equal Opportunity Em-ployer, M/F/H. ployer, M/F/H.

Two RESEARCH POSITIONS available: (one assistant research geneticist and one assistant research chemist) immediately at Ph.D. level; one in cyto-genetics of woody species and one in biochemistry with emphasis on factores and only in ordernality with emphasis on factores and amino acid analysis. Annual stipend (NSF grant) up to \$18,200, depending on experience. Send curriculum vitae, transcripts, and references to: Dr. D. M. Yermanos, Department of Botany and Plant Sciences, University of California, Riverside, Calif. 92521.

20 OCTOBER 1978

POSITIONS OPEN

RESEARCH POSITION: available immediately. Re-search on determination of best analytical methodologies for organic moieties in biological materials. University connected, opportunity to fulfill Ph.D. research requirements. Good incentives for research and study. M.S. in organic chemistry desired. Send résumé and three letters of recommendation to: J. W. Brown, Personnel Officer, Comparative Animal Research Laboratory, 1299 Bethel Valley Road, Oak Ridge, Tennessee 37830.

An Equal Opportunity Employer

RESEARCH FELLOW OR ASSOCIATE—CAR-DIAC ELECTROPHYSIOLOGY. Positions available for M.D. or Ph.D. (physiology or pharmacology) to conduct animal experiments. Experience in electrophysiology research desirable. Send curricu-lum vitae and two references to: Jaok Han, M.D., Professor of Medicine, Albany Medical College, Albany, N.Y. 12208.

Small developing company requires a **RESEARCH HEMATOLOGIST**. M.D. and 1 year of laboratory experience required. Will perform basic and applied research in field of porphyrins and bile pigments. Some quality control work; 40-hour week. \$18,200 per computer when medical bacefore per annum, plus medical benefits. Reply to: Box 320, SCIENCE.

SENIOR RADIATION ONCOLOGIST-Joint Cen-SENIOR RADIATION ONCOLOGIST — Joint Cen-ter for Radiation Therapy. A senior position as a staff radiation oncologist in the Joint Center for Ra-diation Therapy is available. The Joint Center is a collaborative venture of the Beth Israel Hospital, Boston Hospital for Women, Children's Hospital, Medical Center, New England Deaconess Hospital, Peter Bent Brigham Hospital, and the Sidney Farber Cancer Institute under the auspices of Harvard Med-ical School. The position includes anonistment to Cancer Institute under the auspices of Harvard Med-ical School. The position includes appointment to the Department of Radiation Therapy at Harvard Medical School. Applicants are expected to be expe-rienced radiation oncologists who have given sub-stantial evidence of academic performance. Inter-ested applicants should write to: Dr. Samuel Hell-man, Joint Center for Radiation Therapy, 50 Binney Street, Boston, Massachusetts 02115. An Affirmative Action/Equal Opportunity Employer.

STAFF RADIATION ONCOLOGIST-Joint Center for Radiation Therapy. A position as a staff radiation oncologist in the Joint Center for Radiation Therapy is available. The Joint Center for Kadiation Therapy is available. The Joint Center is a collaborative ven-ture of the Beth Israel Hospital, Boston Hospital for Women, Children's Hospital Medical Center, New England Deaconess Hospital, Peter Bent Brigham Hospital, and the Sidney Farber Cancer Institute under the auspices of Harvard Medical School. The po-sition includes appointment to the Department of Radiation Therapy at Harvard Medical School. Ap-plicants are expected to have some evidence of ex-perience in clinical and/or laboratory investigation. Interested applicants should write to: Dr. Samuel Hellman, Joint Center for Radiation Therapy, 50 Binney Street, Boston, Massachusetts 02115. An Affir-mative Action/Equal Opportunity Employer.

SENIOR TOXICOLOGIST. We are a private diversified contract research laboratory seeking a tox-icologist with relevant industrial experience to direct our toxicology research efforts. The successful candidate will have complete responsibility for all as-pects of the department: development of protocols, monitoring of studies, interpretation of data, formu-lation of reports, and supervision of technical personnel.

If you seek the challenge of contributing to a growing organization, can interface with other pro-fessionals, and desire the amenities of Colorado living, send your curriculum vitae relating professional experience and salary history to: Elars Bioresearch Laboratories, Inc., 225 Commerce Drive, Fort Col-lins, Colorado 80524, Attention: Personnel Director. An Equal Opportunity Employer, M/F.

SOIL MICROBIOLOGIST; Ph.D. with strong back-ground in both soils and microbiology required; tenured, 12-month appointment; salary and rank depen-dent on qualifications. To develop a research pro-gram in biological processes in tropical soils in one or more of the following areas: nutrient recycling, biochemical transformation of synthetic and natural organics, and biological nitrogen fixation. Teaching and direction of graduate students required. Send ré-sumés and three letters of reference to: Dr. P. P. Rotar, Department of Agronomy and Soil Science, University of Hawaii, Manoa, Honolulu, Hawaii 96822. An Equal Opportunity/Affirmative Action Employer. Employer

DEAN OF THE COLLEGE OF ARTS AND SCIENCES UNIVERSITY OF LOUISVILLE

CONTRACTOR CONTRACTOR

Applications and nominations are invited for the position of dean of the College of Arts and Sciences. We seek an individual who will provide vigorous and innovative leadership for the continued growth and development of the college. Applicants must be effective in dealing with enrollment increases, expanis on of programs, and curriculum change. They must be able to relate the resources of the college to the needs of a metropolitan community and utilize the social and cultural resources of the community to meet the educational needs of the future. Applications must include information demonstrating the following qualifications:

- 1) An earned terminal degree or its equivalent in a An earned terminal degree or its equivalent in a discipline appropriate to a tenured professorial appointment in arts and sciences,
 A record of substantive accomplishments in re-search or creative activity,
 Teaching experience at the undergraduate and graduate level.
 Administrative experience in a comprehensive university.

- university.

Located in a city with an attractive cultural life, the University of Louisville is a state-supported institution with a current enrollment of over 18,000, of which 5,000 are in the College of Arts and Sciences.

Send nominations or applications, the latter with full curriculum vitae and the names of at least three professional references, to:

Professor David Hershberg Search Committee Chairman Department of Modern Languages University of Louisville Louisville, Kentucky 40208

Applications and nominations will be accepted through 27 November 1978.

An Equal Opportunity/Affirmative Action Employer

RESEARCH POSITIONS

Battelle, one of the world's leaders in contract research and development, has the fol-lowing needs:

PLANT PHYSIOLOGIST/ ECOLOGIST-Ph.D. with strong background in plant physiology/pathology, biochemistry, statistics, and organic chemis-try. One or two years of experience beyond Ph.D. preferred. Seeking a dynamic individ-Ph.D. preferred. Seeking a dynamic individ-ual interested in a broad range of research problems and able to work in an inter-disciplinary atmosphere. Research opportu-nities include: developing crops for fuel and fiber, tissue cultures, agricultural procedure development, and effects of toxic materials.

FISHERIES BIOLOGIST/

ECOLOGIST-Ph.D. backwith ground in fish population dynamics, field sampling, biostatistics and environmental sampling, biostatistics and environmental assessment. One or two years of experience beyond Ph.D. preferred. Seeking an individ-ual with a wide range of interests and one who can work with an interdisciplinary team. Areas of potential research include: entrainment studies, reservoir population dynamics, and environmental toxicology.

FISH CULTURIST TECHNI-CIAN-B.S. and/or experience in culturing freshwater fish.

Excellent opportunities in career develop-ment, professional atmosphere, excellent salaries, and generous benefits. Send résumé in confidence to: Leslie G. Hill, Manager, Employment,

Battelle Columbus Laboratories 505 King Avenue Columbus, Ohio 43201 An Equal Opportunity Employer

PLANT PHYSIOLOGIST

An opening for an ASSISTANT PROFESSOR in An opening for an ASSISTANT PROFESSOR in the field of plant physiology will become available at Brown University on 1 September 1979. A Ph.D. is required and at least 2 years of postdoctoral experi-ence are preferred. Teaching responsibilities will be ence are preferred. Teaching responsibilities will be in the area of higher plant physiology and develop-ment at the graduate and undergraduate levels. The appointee will be expected to obtain support and conduct an active research program in a major area of organismal plant biology. Candidates should for-ward curriculum vitae and statements of teaching experience and research interests, plus three letters of reference, by 30 November 1978, to: Dr. John Biggins, Division of Biology and Medicine, Brown University, Providence, Rhode Island 02912.

Equal Opportunity/Affirmative Action Employer

TOXICOLOGIST/PATHOLOGY. Ph.D. position, TOXICOLOGIST/PATHOLOGY. Ph.D. position, Syntex Research; available immediately; to be re-sponsible for implementation, monitoring and data collection for assigned preclinical toxicity studies re-quired for U.S. and ex-U.S. regulatory filings. You will serve as a consultant to department as part of a team to provide expertise for specific classes of com-pounds; you will also represent the department on project teams. Familiarity with EDP useful; 2 to 5 years of experience plus familiarity with regulatory requirements; willing to accept responsibility; ability to get along with others; detail-oriented. Syntex, a pioneer in the field of steroid chemistry and medi-cine, is an international pharmaceutical company whose continued growth requires a staff increase. Whose continued growth requires a staff increase. For the highly motivated person this is an ideal op-portunity for personal growth and advancement. Send résumé to: Dr. Duane Hallesy, Syntex Re-search, 3401 Hillview Avenue, Palo Alto, Calif. 94304. Syntex is an Equal Opportunity Employer, M/F/H.

TUMOR IMMUNOLOGIST

The Division of Surgical Oncology, Tufts Univer-sity, is seeking a candidate holding a Ph.D. degree in immunology with experience and interest in experi-mental and clinical tumor immunology. Field of in-terest can include immunotherapy, cell-mediated, humoral immunity, and chemically induced experi-mental tumors. Opportunities are available for par-ticipation in collaborative clinical research pro-tocols. tocols.

Please send complete curriculum vitae, including publications and the names and addresses of three references to:

Decio M. Rangel, M.D. Chief, Division of Surgical Oncology Tufts University 171 Harrison Avenue Boston, Mass. 02111

VETERINARY PATHOLOGISTS

The Collaborative Radiological Health Laboratory (CRHL) and the Department of Pathology, Colorado State University, have two positions for veterinary pathologists interested in research in an academic setting within a college of veterinary medicine. The CRHL is a multidisciplinary research group studying the long-term effects of low level radiation in beagle dogs. Primary duties involve evaluation of a variety of diseases in a large canine population and include involvement in graduate education in nabology. Anof diseases in a large canine population and include involvement in graduate education in pathology. Ap-plicants for a position as head of the CRHL Patholo gy Section should have a D.V.M. with advanced training in pathology, preferably a Ph.D. and/or ACVP eligibility or certification. Applicants for a second pathology position should have a D.V.M. with advanced training in pathology with ACVP eli-gibility. Application deadline: 15 December 1978 or until positions are filled. Salaries and starting date are negotiable. Colorado State University is an Equal Opportunity/Title IX Employer; Equal Oppor-tunity Office: 314 Student Services Building. Con-tact: Stephen A. Benjamin, Director, CRHL, Depart-ment of Pathology, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, Colorado 80523. Fort Collins, Colorado 80523.

VIROLOGY FACULTY POSITION AVAILABLE

Candidates should be qualified to carry out inde-pendent research and participate in graduate training program. Well-equipped laboratory facilities avail-able. Rank dependent upon experience and qualifi-cations. Send curriculum vitae and names of three references to: Dr. Janet Butel, Search Committee Chairperson, Department of Virology, Baylor College of Medicine, Houston, Texas 77030.

POSITIONS OPEN

PHARMACOLOGY SCHOOL OF MEDICINE UNIVERSITY OF WASHINGTON

Applications are invited for a tenure-tract faculty position at the ASSISTANT PROFESSOR level. A Ph.D. or M.D. degree and two or more years of post-Ph.D. or M.D. degree and two or more years of post-doctoral research experience are required. Can-didates should be qualified to establish an out-standing independent research program in basic pharmacology and to actively participate in the teaching program of the department. Applicants should send their curriculum vitae, an informative statement of research plans, and the names and ad-dresses of three references to: Pharmacology Search Committee, Department of Pharmacology, SJ-30, University of Washington, Seattle, Wash. 98195.

The University of Washington is an Equal Oppor-tunity/Affirmative Action Employer.

CONFERENCE

STANFORD CONFERENCE ON MOLECULAR STRUCTURAL METHODS IN BIOLOGICAL RESEARCH

The Stanford Magnetic Resonance Laboratory announces the fourth annual Stanford Conference on Molecular Structural Methods in Biological Re-search, 10 and 11 November 1978, at Stanford Uni-versity. The conference will be devoted to recent ad-vances in the solution of biological structural problems by spectroscopic and crystallographic tech-niques with a special emphasis on protein structure and dynamics. It is sponsored by the Biotechnology Resources Branch of the National Institutes of Health. For further information and registration forms, write to: Alice Walker, Stanford Magnetic Resonance Laboratory, Stanford University, Stan-ford, Calif. 94305; telephone: 415-497-6270.

TRAINING PRORAMS

PREDOCTORAL AND POSTDOCTORAL TRAINING IN REPRODUCTIVE BIOLOGY **Department of Biological Sciences**

Northwestern University

The department offers training in a diverse number of fields related to reproductive biology including: neuroendocrinology, behavioral endocrinology, photo-periodism, immunoreproduction, neuroreceptors, and immunocytochemistry. NIH training funds are available for qualified applicants. Send inquiries to to:

Dr. Neena B. Schwartz, Program Director Reproductive Biology Training Program Department of Biological Sciences Northwestern University Evanston, Illinois 60201

DOCTORAL PROGRAM—PHARMACOLOGY Medical University of South Carolina, Department of Pharmacology, seeks qualified candidates for Ph.D. program. Interdisciplinary environment with research capabilities ranging from gas chromatography-mass spectrometry through cell cultures and animal studies to clinical studies of patients with dis-ease. Research training is available in biochemical pharmacology, cardiovascular pharmacology, drug metabolism, molecular toxicology, analytical chem-istry, and clinical pharmacology. Stipends available. Contact: Graduate Training Director, Department of Pharmacology, Medical University of South Carolina, Charleston, S.C. 29401.

GRADUATE STUDY

GRADUATE STUDY IN ENVIRONMENTAL HEALTH SCIENCES AND ENGINEERING School of Public Health Harvard University

Trainceships and fellowships available for graduate studies in industrial hygiene and occupational health environmental health management, radiation pro-tection, medical radiological physics, and air pollu-tion control. Deadline for completed applications: 1 February 1979. For details contact: Dr. Dade W. Moeller, Harvard School of Public Health, 665 Hun-tington Avenue, Boston, Massachusetts 02115. Appli-cations from women and members of minority groups are encouraged.

FELLOWSHIPS

POSTDOCTORAL RESEARCH FELLOWSHIP **POSTDOCTORAL RESEARCH FELLOWSHIP** in experimental ophthalmic pathology available im-mediately at Jules Stein Eye Institute, University of California, Los Angeles (UCLA). This 2-year fel-lowship is sponsored by NIH. Applicant must have prior training in immunology. Must be U.S. citizen. Send résumé and three references to: Alan L. Shabo, M.D., Jules Stein Eye Institute, UCLA School of Med-icine, Los Angeles, Calif. 90024. An Equal Opportu-nity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS in large univer-POSTDOCTORAL FELLOWSHIPS in large univer-sity medical center in one of several areas pertaining to blood, including porphyrin biosynthesis in normal and disease states, the regulation of granulocyte pro-liferation, the metabolism of superoxide anion and its products in blood cells, the molecular pathology of myeloperoxidase deficiency in man, and the mi-crobicidel mechanisme of phenocytes Doctoral decrobicidal mechanisms of phagocytes. Doctoral de-grees in biological or chemical sciences required. Contact: Robert E. Lynch, University of Utah Medi-cal Center, 50 North Medical Drive, Salt Lake City, Utah 84132. Telephone: 801-581-7417.

COURSES

MARINE BIOLOGICAL LABORATORY Woods Hole, Massachusetts

announces JANUARY COURSES, 1979

Five intensive 4-week courses for graduate and ad-vanced undergraduate students to be offered (con-

currently) 1 to 26 January. BEHAVIOR (Jelle Atema, Boston University, in-

- structor-in-chief); COMPARATIVE PATHOLOGY OF MARINE IN-VERTEBRATES (Frederik B. Bang, The Johns
- Hopkins University); DEVELOPMENTAL BIOLOGY (Walter S. Vin-cent, University of Delaware); ECOLOGY (George M. Woodwell, Marine Bio-
- logical Laboratory); NEUROBIOLOGY (Fred Lang, Boston Universi-ty, and Alan Fein, Marine Biological Laborato-



ry). For application materials, write to: Admissions Of-fice, Marine Biological Laborato-ry, Woods Hole, Mass. 02543, or telephone: 617-548-3705. Com-pleted applications must be re-ceived by 10 November 1978. An Equal Opportunity/Affir-mative Action Institution

MARKET PLACE

If you have developed an AUDIOVISUAL PRO-GRAM(S) in any field of science on the college level or higher (preferably a slide/tape format), Science-Thru-Media Co. is interested in possibly manufac-turing and marketing your program both nationally and internationally. You will get a royalty on the gross sales. Please write or telephone: Terry Hill-man, Science-Thru-Media Co., 295 Fifth Avenue, Room 819, New York, N.Y. 10016; telephone: 212-684-5366.



The convenient, superstable Photo-Invertoscope: IM-35

A new generation of inverted microscopes.

The IM-35 does for inverted photomicrography what the Zeiss Photomicroscope does for upright. It takes the trouble out of highest quality photomicrography.

For stability and easy access to stage and specimen, the integrated automatic 35mm camera is at the base of the instrument, not added on the top.

Notice how the lamp swings away to clear the entire stage area. This simplifies exchange of specimens and makes it easy to lift off the rigidly supported stage for ready access to the objectives. And the image is upright and side-correct to make manipulation easier.

Ideal for fluorescence

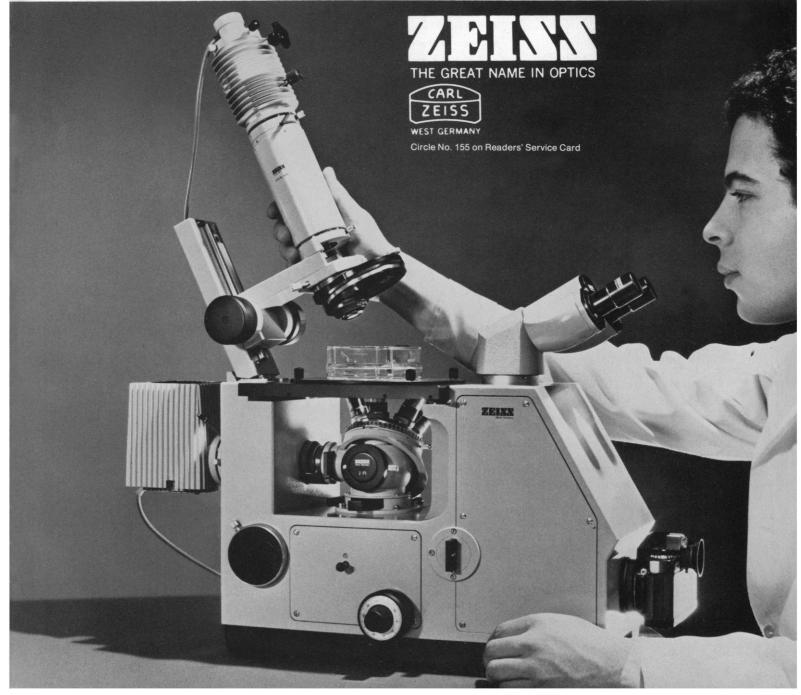
The Photo-Invertoscope IM-35 is designed to perform a maximum of tasks at minimum cost. For example, no expensive accessories are needed to do fluorescence microscopy-just a lamp, lamp mount, and reflector.

With the full line of interchangeable Zeiss optics and accessories available, the IM-35 is the ideal combination of quality, convenience, and economy in an inverted microscope.

Write or call for complete details today.

Nationwide service

Carl Zeiss, Inc., 444 5th Avenue, New York, N.Y. 10018 (212) 730-4400. Branches: Atlanta, Boston, Chicago, Houston, Los Angeles, San Francisco, Washington, D.C. In Canada: 45 Valleybrook Drive, Don Mills, Ontario, M3B 2S6. Or call (416) 449-4660.



The Second Translation Kit

From the people who brought you new convenience and reproducibility with the first.



Our first translation kit saved you the difficulty of preparing your own lysate for cell-free translation studies, gave you a system free of endogenous mRNA and high in protein synthesis activity, and assured you of components tested for compatibility and reproducible results. All told, it was an excellent excuse to stop cultivating rabbits.

Our second kit does all of the above, too. But, instead of Methionine, L-[³⁵S], the tracer is Leucine, L-[3,4,5-³H]—specially optimized for use with this system. Here's what our Leucine Translation Kit contains:

Rabbit reticulocyte lysate Treated with micrococcal nuclease to inactivate endogenous mRNA and tested to guarantee high protein synthesis activity.

Nov

or clinical diagnosis.

High activity ³H tracer NET-460T, Leucine, L-[3,4,5-³H], >110Ci/mmol. Special lots are prepared and tested for incorporation into protein using this cell-free translation system.

Translation cocktail All the necessary components for proper translation conditions, including buffer, biogenic polyamine, and energizer.

Control mRNA Purified mRNA to check the biological activity of the system.

Salts and sterile deionized water Selected and prepared to minimize potential ionic or enzymatic inhibition of the system.

Instructions for use The protocol is straightforward and includes suggested assay procedures.

So now there are two, and <u>only</u> two, translation kits. Call us toll-free for details on either or both.

NEN New England Nuclear

549 Albany Street. Boston. Mass. 02118 Call toll-free: 800-225-1572 (In Massachusetts and International: 617-482-9595) NEN Chemicals GmbH: D-6072 Dreieich. W. Germany Daimlerstrasse 23. Postfach 401240. Telephone (06103) 85034. Telex 4-17993 NEN D NEN Canada Ltd., 2453 46th Avenue. Lachine. Que HBT 3C9. Telephone 514-636-4971. Telex 05-821808

Circle No. 184 on Readers' Service Card