

AAAS NEWS

(Continued from page 508)

tists who can share their experience, both as scientists and as handicapped persons, with government agencies, Congress, scientific societies, educational institutions, and organizations of and for handicapped individuals. Compilation of the *Directory* was supported by a grant from the National Science Foundation.

The *Directory* includes a geographical index, a discipline index, an index of handicapping conditions, and an index of handicapped women scientists. A guide for use, prepared by the AAAS, accompanies the *Directory*. Copies are available from the Office of Opportunities in Science at the AAAS address at \$3 per copy.

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Science for Handicapped Students in Higher Education. Identifies and analyzes the barriers which prevent many handicapped students from obtaining science education at or beyond the college level, and develops strategies and recommendations for overcoming those barriers. Work was done under a grant from the National Science Foundation. Barriers of attitude, information, communication, environment, academics, and finance are discussed. The report includes a bibliography. Limited copies are available, free, from the Office of Opportunities in Science at the AAAS address.

Guide to Scientific Instruments Delayed by Strike

The AAAS *Guide to Scientific Instruments*, which was scheduled to be printed in September, has been delayed by a strike at the paper manufacturer's plant in Ohio. Printing and mailing will be re-scheduled as soon as the strike is over or other paper can be obtained.

For more information about the activities and publications described in "AAAS News," write to the appropriate office, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036, unless otherwise indicated.

BOOKS RECEIVED

(Continued from page 512)

Minorities in Science. The Challenge for Change in Biomedicine. Proceedings of a AAAS conference, Boston, Feb. 1976. Vijaya L. Melnick and Franklin D. Hamilton. Eds. Plenum, New York, 1978. xxiv, 296 pp. \$19.50.

Mitochondria 1977. Genetics and Biogenesis of Mitochondria. Proceedings of a colloquium, Schliersee, Germany, Aug. 1977. W. Bandlow, R. J. Schweyen, K. Wolf, and F. Kaudewitz, Eds. Walter de Gruyter, Berlin, 1977. xx, 672 pp., illus. DM 190.

Monitoring in Anesthesia. Lawrence J. Saidman and N. Ty Smith. Wiley, New York, 1978. xx, 356 pp., illus. \$25. Wiley Series in Anesthesiology.

The Net and the Quest. Patterns of Community and How They Can Survive Progress. Pica Press, New York, 1978 (distributor, Universe Books, New York). 264 pp. \$15.

The Neurobiology of Behavior. An Introduction. Gordon J. Mogenson. Erlbaum, Hillsdale, N.J., 1977 (distributor, Halsted [Wiley], New York). xii, 334 pp., illus. \$14.95.

Neuroleptics and Schizophrenia. Leslie L. Iversen, Susan D. Iversen, and Solomon H. Snyder, Eds. Plenum, New York, 1978. xii, 250 pp., illus. \$25. Handbook of Psychopharmacology, vol. 10.

Origins of Human Cancer. Papers from a conference, Cold Spring Harbor, N.Y., Sept. 1976. H. H. Hiatt, J. D. Watson, and J. A. Winsten, Eds. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., 1977. Three books. Book A, Incidence of Cancer in Humans. xxviii, 602 pp., illus. Book B, Mechanisms of Carcinogenesis. xvi + pp. 603-1304, illus. Book C, Human Risk Assessment. xvi + 1305-1890, illus. The set, \$45. Cold Spring Harbor Conferences on Cell Proliferation, vol. 4.

Oxalic Acid in Biology and Medicine. A. Hodgkinson. Academic Press, New York, 1977. xiv, 326 pp., illus. \$30.25.

Palynology. Marjorie D. Muir and William A. A. Sarjeant, Eds. Dowden, Hutchinson and Ross, Stroudsburg, Pa., 1977 (distributor, Academic Press, New York). Two volumes. Part 1, Spores and Pollen. xvi, 384 pp., illus. \$24.50. Part 2, Dinoflagellates, Acritarchs, and Other Microfossils. xvi, 416 pp., illus. \$24.50. Benchmark Papers in Geology, vols. 46 and 47.

Pattern Recognition. Ideas in Practice. Bruce G. Batchelor, Ed. Plenum, New York, 1978. xvi, 486 pp., illus. \$39.50.

Pediatric Nephrology. Vol. 4, Renal Failure: Current Concepts in Diagnosis and Management. Proceedings of a seminar, Miami, Jan. 1977. José Strauss, Ed. Garland STPM Press, New York, 1978. xiv, 272 pp., illus. \$29.50.

Permanent Magnets in Theory and Practice. Malcolm McCaig. Halsted (Wiley), New York, 1977. x, 374 pp., illus. \$30.

Perspectives in Ethology. Vol. 3, Social Behavior. P. P. G. Bateson and Peter H. Klopfer, Eds. Plenum, New York, 1978. xiv, 264 pp., illus. \$22.50.

Pest Control Strategies. Papers from a symposium, Ithaca, N.Y., June 1977. Academic Press, New York, 1978. xvi, 334 pp., illus. \$16.

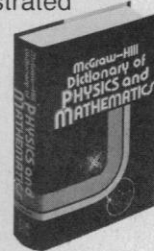
Vibrations and Waves in Physics. Ian G. Main. Cambridge University Press, New York, 1978. xiv, 336 pp., illus. Cloth, \$37.50; paper, \$8.95.

Announcing . . . two major new science resources from McGraw-Hill.

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Daniel N. Lapedes, Editor-in-Chief
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More than 20,000 terms from every branch of physics and mathematics—plus related fields such as statistics, astronomy, and electronics—are fully explained in this landmark resource. For each term the Dictionary not only defines its uses but also identifies the field in which the term principally occurs. Synonyms, acronyms, formulae, and abbreviations are also included, and more than 700 detailed graphs, drawings, and photographs provide additional information.



GERMAN-ENGLISH SCIENCE DICTIONARY, Fourth Edition

Louis DeVries and Leon Jacolev
638 pages

This compact, easy-to-use dictionary is the most accessible and helpful aid available to understanding scientific German. Now with more than 60,000 entries, the new edition covers such diverse disciplines as chemistry, physics, biology, bacteriology, nuclear science, optics, medicine, geology, computer science, agriculture, genetics, geophysics, astronomy, entomology, and mechanics. There's a quick-reference section of grammatical and synthetic guidelines, and a listing of both common and scientific abbreviations.



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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
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Telephone: 202-467-4456

Send copy for display ads, 1/6 page and larger, to:

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Blind ad replies should be addressed as follows:

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POSITIONS WANTED

Biochemist/Immunochemist. Ph.D. Experience: plasma protein, tumor antigen, steroid metabolism, protein purification, RIA, EMIT, ELISA, method development, radiochemical analysis, affinity techniques, and analytical instrumentation. Publications. Desires position in industry, hospital, government, or academia. Box 338, SCIENCE. X

Electron Microscopy Laboratory Technologist. M.Sc. Morphology, biophysics. Broad life sciences background. Research and teaching experience. Publications. Presently working in cell biology, embryology laboratory in Canada. Skilled in EM laboratory techniques. Desires to relocate. Box 335, SCIENCE. X

Endocrinologist/Biochemist. Ph.D. (1976). Research interests in mode of action of steroid hormones and steroid receptors in cancer. Teaching experience (endocrinology, physiology). Postdoctoral experience at NCI. Seeking research/teaching position. Box 337, SCIENCE. X

Women's studies; labor, medical history; ethics and values in science and technology. Published **Social Scientist** seeks administration, research, consulting, teaching. No ax to grind. Box 336, SCIENCE. X

Technical Writer and Editor. Two years of full and part-time experience writing and editing proposals, reports, and journal articles in biological and physical sciences. Will graduate from Penn State on 20 November. D. Frey, 478 East Beaver Avenue, No. 315, State College, Pa. 16801; telephone: 814-234-0665. X

POSITIONS OPEN

ASSISTANT PROFESSOR. Bacterial physiologist beginning 1 January or 1 September 1979. Ph.D. in microbiology required. Responsibilities include teaching courses in bacterial physiology and introductory microbiology and developing an active research program with the potential of directing thesis and dissertation research. Send curriculum vitae and four letters of reference by 1 December 1978 to: **Dr. Carl Dee Brown, Chairman, Department of Biology, Memphis State University, Memphis, Tenn. 38152.**
An Equal Opportunity University, M/F

POSITIONS OPEN

ANALYTICAL CHEMIST/CLINICAL TOXICOLOGIST. University of Louisville School of Medicine. A position for an analytical chemist/clinical toxicologist at the rank of research associate is available. Primary responsibility concerns the development and performance of quantitative analyses of drugs and other organic substances in various biological media. Minimum requirement is a B.S. in chemistry or allied field and 1 year of experience. Advanced degree and training in computer science or electronics are desirable. Inquiries from all qualified applicants welcome. Send inquiry and curriculum vitae to: **George E. Webb, M.D., Chairman, Department of Anesthesiology, P.O. Box 35260, Louisville, Kentucky 40322.** *An Equal Opportunity/Affirmative Action Employer.*

ANATOMIST. The Anatomy Program in the Department 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 program in some aspect of biological structure. Preference will be given to candidates with 2 years of postdoctoral training, experience teaching human anatomy, 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/Affirmative Action Employer.

ASSISTANT DIRECTOR SEA GRANT PROGRAM

Sea Grant Program assistant director; full-time appointment. Qualifications are a Ph.D. in a marine science discipline or equivalent in experience, and demonstrated ability to administer academic interdisciplinary programs, to coordinate public relations effort, and to provide communication among principal investigators in a multi-project research program. The assistant director will be responsible for assisting the director of the Sea Grant Program in the management and coordination of a multidisciplinary university system Sea Grant Program. Apply by 1 December 1978. Send résumé, references, and supporting material to: **Chairperson, Search Committee, University of Maryland Sea Grant Program, H. J. Patterson Hall, Room 1228, University of Maryland, College Park, Maryland 20742.** *Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSORSHIP

The Department of Nutrition and Food Science at Massachusetts Institute of Technology (MIT) has an opening at the assistant professor level beginning July 1979 for an individual with a background in **CHEMISTRY or BIOCHEMISTRY.** The position will be associated with an established faculty in food chemistry, and the individual would be expected to develop an independent teaching and research program. A doctoral degree and demonstrated ability to conduct independent research are required.

Send résumé, statement of professional interests, and names of at least three references to: **Dr. Steven R. Tannenbaum, Department of Nutrition and Food Science, MIT, Cambridge, Mass. 02139.** *MIT is an Equal Opportunity/Affirmative Action Employer.*

1) **ASSISTANT OR ASSOCIATE PROFESSOR, IN-RESIDENCE**

2) **ASSOCIATE OR FULL PROFESSOR, IN-RESIDENCE**

The University of California, Irvine, Department of Pathology, is recruiting for two faculty positions, one at the assistant or associate level and one at the associate or full professor level. Required: M.D., Board-eligibility in clinical pathology. Duties: service and administrative responsibilities in blood banking and cellular immunology, teach medical students and house staff, and research. *All qualified candidates welcome; minorities and women encouraged to apply.* Send curriculum vitae and references to: **Dr. H. C. Pirkle, University of California, Irvine, Department of Pathology, 101 City Drive South, Orange, California 92668,** by 11 December 1978.

POSITIONS OPEN

TWO ASSISTANT PROFESSOR VACANCIES

Candidates will be considered for appointment at the level of assistant professor in the tenure-track. The fields: molecular genetics (physical anatomy of genomes, molecular bases of gene expression); and cell biology and physiology (metabolic and/or morphological dynamics of cell function in cyto-differentiation and morphogenesis, hormonal and other signal reception, metabolite transport, motion). Selection will be based on demonstrated potential for establishing a research program of exceptional quality plus the capacity to teach undergraduate and graduate courses competently and responsibly. Please submit curriculum vitae, including a list of publications, names of at least three references, and a brief (one- or two-page) description of your research plans for the immediate future for which external funding is being or will be solicited, to: **Dr. Maurice Sussman, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, Pa. 15260.** *The University of Pittsburgh, acting in the spirit and the letter of Affirmative Action regulations, actively encourages applications from women, minority members, and other individuals covered by the mandates of Title IX.*

1) **ASSISTANT OR ASSOCIATE PROFESSOR, IN-RESIDENCE**

2) **ASSOCIATE OR FULL PROFESSOR, IN-RESIDENCE**

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 interest in independent research. Duties: teach medical students and house staff, limited administrative responsibility in area of microbiology. *All qualified candidates welcome; minorities and women encouraged to apply.* Send curriculum vitae and references to: **H. Simpkins, M.D., Ph.D., Department of Pathology, University of California, Irvine, Irvine, California 92717** by 4 December 1978.

ASSISTANT/ASSOCIATE PROFESSOR. Primarily research positions with minimal teaching responsibilities. The candidate should have experience in cell biology/genetics. This candidate should be familiar with chromosome banding techniques and human genetics. Apply to: **Dr. I. Brodsky, Professor and Chairman, Department of Medical Oncology and Hematology, Hahnemann Medical College and Hospital, 230 North Broad Street, Philadelphia, Pa. 19102.**

ASSISTANT PROFESSOR OF BIOCHEMISTRY

Tenure-track position beginning September 1979. Candidates should have Ph.D. and postdoctoral experience 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 University, Manhattan, Kansas 66506.** Applications should be complete by 31 December 1978. *Kansas State University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR—PLANT ECOLOGY.

Liberal arts college for women has tenure-track position available effective 20 August 1979. This person will teach general ecology, a field course in vascular plant systematics, and coordinate laboratories in one semester of a freshman course for science majors. Establishment of a research program is expected. Ph.D. required by June 1979. Send letter of intent and curriculum vitae by 4 December to: **Dr. David M. Sever, Search Committee, Department of Biology, Saint Mary's College, Notre Dame, Indiana 46556.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT OR ASSOCIATE PROFESSOR OF PSYCHOLOGY. Ph.D.; tenure-track; graduate and undergraduate teaching; must have major interest in developmental psychology with a record of productive research and scholarly work in the study of perception (or related areas) at particular life stages or throughout the life-span; renewable 2-year contract; salary negotiable depending on experience. Contact: **Morton Wiener, Department of Psychology, Clark University, Worcester, Mass. 01610.** *Clark University is an Equal Opportunity/Affirmative Action Employer. Applications from women and members of minority groups are encouraged.*

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOLOGY with primary responsibilities for teaching courses in human anatomy and physiology and pathophysiology for students in health-related areas (that is, nursing and physical therapy). Begins August 1979. Ph.D. required. Send curriculum vitae and statement of teaching and research goals by 15 December 1978 to: **Dr. James R. Nichols, Acting Chairman, Department of Biology, University of Central Arkansas, Conway, Arkansas 72032. An Equal Opportunity/Affirmative Action Employer.**

THE JOHNS HOPKINS UNIVERSITY

The Department of Biology and McCollum Pratt Institute invite applications for two tenure-track **ASSISTANT PROFESSORSHIPS** for September 1979. One position is in the general area of biochemistry, while another is in the general area of cell and developmental biology. Within this framework, the search committee is taking a very broad view as to the specific areas of research interest among candidates who will be considered. We are especially interested, however, in adding strength to the department in one or more of the following areas: enzymology with particular interest in membranes or in regulation, membrane biogenesis (with emphasis on lipids), biochemistry of the nitrogen cycle, eucaryotic chemotaxis, gametogenesis, and structure and function of cellular organelles. Applicants should have postdoctoral experience and demonstrated outstanding potential for independent research. Applications, including curriculum vitae, reprints, a statement of research plans, and names of three references, should be sent to:

Dr. Gary K. Ackers
Chairman, Search Committee
Department of Biology
The Johns Hopkins University
Baltimore, Maryland 21218

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

University of Hawaii—Hilo College. **VISITING ASSISTANT PROFESSOR OF BIOLOGY.** One-year appointment. Appointment period: 21 August 1979 to 19 May 1980. Minimum qualifications: Ph.D. in a field appropriate to the duties and responsibilities of the position, and college teaching experience. Duties and responsibilities: teach undergraduate courses in general zoology each semester, in addition to biochemistry and cell biology in the fall and spring semesters respectively. Salary: \$13,188 to \$16,764 depending on qualifications and experience. Send letter of application, transcripts, and three letters of reference to: **Professor K. Noda, Chairperson, Biology, Hilo College, P.O. Box 1357, Hilo, Hawaii 96720.** Deadline for receipt of applications: 15 December 1978. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. The Department of Chemistry, University of Virginia, invites applications for two full-time, tenure-track appointments to begin September 1979. Candidates with research interests in any area of organic or biologically oriented organic chemistry are invited to apply. The department particularly encourages applications in the areas of synthetic organic or nucleic acid chemistry. Applicants should submit curriculum vitae, an outline of proposed research, and at least two letters of recommendation to: **Dr. Francis A. Carey, Department of Chemistry, University of Virginia, Charlottesville, Virginia 22901. An Equal Opportunity Employer.**

UNIVERSITY OF WISCONSIN-MADISON CENTER FOR HEALTH SCIENCES DEPARTMENT OF PHYSIOLOGY

A faculty position at the assistant professor level is currently available. Applications are invited from persons with postdoctoral experience and a demonstrated interest in physiological processes at the cellular or subcellular level or in mammalian respiratory physiology. Participation is expected in the teaching programs of the department which includes courses in cell and organ systems physiology to undergraduate, graduate, and medical students. Interested candidates should submit curriculum vitae, complete bibliography, and letters of reference from three individuals to: **Dr. Richard C. Wolf, Department of Physiology, University of Wisconsin-Madison, 470 North Charter Street, Madison, Wis. 53706.** To receive full consideration applications should be received by 1 December 1978. *The University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

THE DEPARTMENT OF ZOOLOGY of the University of California, Davis announces the vacancy of an ASSISTANT PROFESSORSHIP in the area of DEVELOPMENTAL BIOLOGY

The Department of Zoology invites applications from persons with primary interests and experience in research and teaching in any area of developmental biology. The appointee is expected to establish a productive research program and to participate in the department's program of graduate instruction. Teaching responsibilities include a one-quarter introductory course in embryology, a one-quarter advanced course in developmental biology, and participation in a graduate seminar in developmental biology. Candidates must have a Ph.D. degree. Salary will depend upon qualifications and experience.

Applicants should forward curriculum vitae, a description of their research experience and future research plans, reprints of all publications, a summary of teaching capabilities, and three letters of recommendation to: **Dr. R. D. Grey, Chairperson of the Search Committee, Department of Zoology, University of California, Davis, Calif. 95616. The University of California is an Equal Opportunity/Affirmative Action Employer.** Closing date for receipt of applications is 30 November 1978.

ASSISTANT PROFESSOR NEUROPHYSIOLOGY

The Department of Physiology and Biophysics at the University of Iowa College of Medicine invites applications from individuals with well-defined interests in cellular aspects of integrative CNS neurophysiology for tenure-track appointment at the assistant professor level. Applicants must have the Ph.D. and/or M.D. degree and two or more years of postdoctoral training, with a record of productivity in original research. Candidates should be prepared to conduct a strong independent research program in developmental, regulatory, or endocrine vertebrate neurobiology, and to take an active role in the medical and graduate teaching activities of the department. Please send curriculum vitae and a brief description of research interests, teaching experience, and career objectives, with names of at least three references, to: **Dr. Robert E. Fellows, Department of Physiology and Biophysics, University of Iowa College of Medicine, Iowa City, Iowa 52242.**

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

EARTH AND PLANETARY SCIENCE teaching position available at **ASSOCIATE PROFESSOR** level, January 1979. Duties include teaching at both the graduate and undergraduate levels. Ph.D. in earth science, or one of the earth sciences with strong background in related areas. Salary negotiable. Send résumé to: **Dr. Esther J. Ridley, Chairman, Department of Comprehensive Science and Science Education, Morgan State University, Baltimore, Maryland 21239. Morgan State University is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR OF PHYSIOLOGY UNIVERSITY OF CALIFORNIA SAN FRANCISCO Position Available: 1 July 1979

We are looking for a **neurophysiologist** conducting cellular studies of the central or peripheral nervous system who will develop an active research program and teach professional and graduate students. Those interested should send curriculum vitae, bibliography, and names of three references to: **William F. Ganong, M.D., Chairman, Department of Physiology, University of California, San Francisco, California 94143. An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

CHAIRMAN, Division of Natural Sciences. Earned doctorate in chemistry, preferably analytical/organic, or in biology, preferably anatomy and physiology or microbiology, with administrative experience and substantial college teaching experience. Identifiable research contributions are desirable. Salary: \$16,000 to \$19,000; 12 months. Starting date: June 1979. Send résumé no later than 15 December 1978 to: **Sister Catalina Fresquez, Chairman, Division of Natural Sciences, Incarnate Word College, 4301 Broadway, San Antonio, Texas 78209. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

ASSOCIATE PROFESSOR/PROFESSOR, BIOCHEMISTRY. Applications are invited for an established investigator in the area of protein primary structure analysis and/or enzyme regulation in mammalian cells. Highly qualified candidates in other areas of biochemistry will also be considered. The candidate should be an effective teacher as well as a recognized authority in his/her field. This Department of Biochemistry has grown significantly during the past year. Established fields of investigation relate to developmental biology, nucleic acids and protein synthesis, x-ray crystallography, membrane biochemistry, and structure and cloning of immunoglobulin genes. The department is well-equipped for most areas of modern biochemistry, and a P3 facility for recombinant DNA research is presently under construction. Send curriculum vitae, bibliography, and three references by 22 December 1978, to: **Dr. A. J. Wahba, Chairman, Department of Biochemistry, University of Mississippi Medical Center, 2500 North State Street, Jackson, Miss. 39216. An Equal Opportunity Employer, M/F.**

FACULTY POSITION ASSISTANT PROFESSOR IN PHARMACOLOGY AND TOXICOLOGY

This position requires a Ph.D. in CNS pharmacology, or toxicology; postdoctoral training desirable. Candidate will be expected to participate in teaching at the professional and the graduate levels and to develop his or her research project.

Qualified applicants should send their curriculum vitae to:

Naim Khazan, Ph.D.
Department of Pharmacology and Toxicology
University of Maryland School of Pharmacy
636 West Lombard Street
Baltimore, Maryland 21201

The University of Maryland is an Equal Opportunity Employer.

BIOCHEMIST—MOLECULAR BIOLOGIST

The Department of Biological Sciences, Carnegie-Mellon University, invites applications from molecular biologists whose research interests lie in the area of nucleic acid structure and/or function. Candidates should have postdoctoral experience. The position is at the assistant professor level, although higher appointments will be considered. Duties include teaching at the undergraduate and graduate level as well as maintaining an active research program. Applicants should forward their curriculum vitae, three or more letters of reference, and a brief 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 Opportunity/Affirmative Action Employer.**

BIOCHEMISTRY FACULTY POSITION RICE UNIVERSITY

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

Rice University is an Equal Opportunity/Affirmative Action Employer.

Send résumé, brief outline of future research plans, and the names of three references to: **G. J. Schroepfer, Jr., Chairman, Department of Biochemistry, Rice University, Houston, Texas 77001.**

The Department of Biochemistry, Rice University, 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 chemistry and/or biochemistry related to sterol biosynthesis (metabolism, enzymology, cell culture studies, 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

Medical Center in New York has opening in **BIO-CHEMISTRY AND/OR MICROBIOLOGY**. Recent Ph.D. or M.S. with 1 or 2 years of experience in protein-glycoprotein biochemistry to work in cancer immunology laboratory. Experience with plasma membrane isolation, equilibrium centrifugation, column chromatography, electrophoretic and radioisotopic techniques essential. Background in immunology and tissue culture techniques desirable. Salary commensurate with experience. Send résumé and names of three references to Box 333, SCIENCE.

POSITIONS IN BOTANY AND MICROBIOLOGY

Two openings at the assistant professor level are anticipated for 1979-1980. One appointment is for a botanist with teaching emphasis in plant physiology and anatomy and the second is for a microbiologist with primary responsibilities in general microbiology. Additional duties for both positions include general biology and other courses consistent with the individual's expertise. Research in the primary discipline is required. Send three letters of reference, undergraduate and graduate transcripts, curriculum vitae, and a statement of research interests to: Dr. G. L. Bintz, Department of Biology, Eastern Montana College, Billings, Montana 59101. Application deadline is 15 January 1979. *Eastern Montana College is an Equal Opportunity/Affirmative Action Employer.*

CELL PHYSIOLOGIST. A tenure-track position, available July 1979 at the assistant professor level. We seek an individual with demonstrated research ability and at least 2 years of postdoctoral experience, whose interests lie in molecular mechanisms of cellular function. Teaching responsibilities include alternating between introductory and advanced courses. Please send curriculum vitae, publications, transcripts, and three letters of reference to: Dr. W. Stafford, Chairman, Cell Physiology Search Committee, Department of Zoology 046A, University of North Carolina, Chapel Hill, N.C. 27514, by 1 January 1979. *An Affirmative Action/Equal Opportunity Employer.*

CHAIRPERSON IN BIOLOGY

Rank open, tenure-track, to begin 1 July or 1 September 1979. Chairperson will be expected to lead the department toward increased emphasis in molecular, cellular, and developmental biology. Teaching competence in animal physiology and one of the following: developmental biology, cell biology, or genetics. In addition, the chairperson will be expected to develop an active program of research involving students. Established record of quality in teaching and research and potential for administrative leadership essential. Send résumé, transcripts, and three letters of recommendation by 1 February 1979 to: Henry Woodard, Chairman, Search Committee, Beloit College, Beloit, Wisconsin 53511. *Beloit College is an Equal Opportunity/Title IX Employer, M/F.*

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

CLINICAL PHARMACOLOGY PROFESSORSHIP: Texas A & M University, College of Medicine, Department of Medical Pharmacology, is searching for an outstanding clinical pharmacologist to occupy a faculty position at the associate or full professor level. Candidates must hold the M.D. degree. In addition to the salary, this position will be provided with an endowed Joseph H. Shelton professorship of \$10,000 per year for expenses. The position is available immediately. Duties include teaching clinical pharmacology to third year medical students, conducting independent clinical research, training postgraduate trainees, and building a Clinical Pharmacology Program. Applicants should submit, no later than 15 December 1978, curriculum vitae, bibliography, and three references to: Dr. George C. Y. Chiou, Professor and Head, Department of Medical Pharmacology, Texas A & M University, College of Medicine, College Station, Texas 77843. *Texas A & M University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

COGNITIVE PSYCHOLOGY—Possible tenure-track position for September 1979 at the assistant professor level. Individuals must have some teaching experience, proven research record, and a desire to develop nationally known research program. Salary is competitive and research resources are excellent. Send curriculum vitae, three letters of recommendation, and copies of publications or preprints 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.*

CURATOR OF MAMMALS

The Smithsonian Institution seeks applications and nominations for a curatorial position in mammalogy. Candidates should be mammalogists with curatorial experience, active research programs in systematic mammalogy utilizing collections, and a good publication record. Position level (tenure-track) and salary will be established by the director, Natural History Museum, on recommendation of peer review of candidate's qualifications and in accordance with Civil Service guidelines. Send curriculum vitae, bibliography, and names of three references before 31 December 1978 to: Chairman, Search Committee, Division of Mammals, National Museum of Natural History, Washington, D.C. 20560. *The Smithsonian is an Equal Opportunity Employer.*

DEAN AND PROFESSOR OF NURSING

The Medical College of Ohio is seeking a nurse educator to serve as the dean and professor of nursing in an innovative health consortium. The N.L.N. accredited Baccalaureate Nursing Program accepts 100 students after their first year in consortium affiliated 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 educational experience in clinical nursing, teaching, and 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, 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.

DEAN OF LIBERAL ARTS AND SCIENCES NORTHERN ILLINOIS UNIVERSITY

Applications and nominations are invited for the position of dean of the College of Liberal Arts and Sciences. The dean provides academic and administrative leadership for 17 departments, six of which offer the doctoral degree, and several interdisciplinary and professional programs. Northern Illinois University is a state-supported institution of higher education located 6 miles west of Chicago. It is composed of five undergraduate colleges, a Graduate School, and a College of Continuing Education. The on-campus enrollment is approximately 21,000 undergraduate and graduate students. Requests for additional information, including selection criteria, should be sent to: Dean, Search Committee, Lowden Hall 307, Northern Illinois University, DeKalb, Illinois 60115. The deadline for applications is 1 December 1978. *An Affirmative Action/Equal Opportunity Employer.*

UNIVERSITY OF CHICAGO

The Department of Anatomy invites applications for **TWO FACULTY POSITIONS** for an expanded program in **evolutionary morphology** and related fields. We are seeking people who will teach gross anatomy and who have research interests in such areas as: experimental functional anatomy, strength and architecture of biological materials, mathematical and analog modeling, and interfaces of morphology and behavior, and development and evolution.

The University of Chicago is an Equal Opportunity Employer; women and members of minority groups are specifically encouraged to apply. Please send résumés, including a statement of research goals, by 30 November, and arrange to have three letters of recommendation sent to: Dr. E. Lombard, Chairperson, Search Committee, Anatomy Department, University of Chicago, 1025 East 57 Street, Chicago, Ill. 60637.

POSITIONS OPEN

ECOLOGIST—Research position to design and conduct estuarine animal ecology as part of a long-term, site-specific ecosystem study. Must have extensive training and experience in aquatic ecology with a strong interest in animal population studies, as well as the ability to conduct physiological and ecosystem research. Three-year position, which could lead to career status. Résumé and statement of research interests should be sent to: Associate Director for Science Programs, Smithsonian Institution, Chesapeake Bay Center for Environmental Studies, P.O. Box 28, Edgewater, Md. 21037.

Equal Opportunity Employer.

FACULTY POSITION

The University of California, Irvine, College of Medicine, Department of Physiology, is seeking an assistant or associate professor. We intend to fill the position by autumn 1979.

Candidates should have research interests at the molecular or cellular level in problems of physiological importance. Candidates should hold a doctoral degree (M.D. or Ph.D.), have postdoctoral training, and have shown the excellence and originality in research expected of a potential leader in his or her field. Duties include teaching physiology to medical students and biophysics and physiology to graduate students.

Applications from qualified candidates are welcome; minorities and women are encouraged to apply. Send names of four references and curriculum vitae to: Dr. Stephen H. White, Chairman, Department of Physiology, University of California, Irvine, California 92717.

FACULTY POSITIONS

Candidates with Ph.D. and/or M.D. and 2 to 5 years of postdoctoral experience (or their equivalent) for two tenure-track assistant professorships. Advanced rank for qualified persons. Especially seek those in cell biology, genetics, or molecular biology who wish both to establish an independent research program and to interact in existing research efforts, for example, bacterial pathogenicity, lymphocyte biology, membrane biology, and molecular virology (animal viruses). Teaching in professional and graduate programs. Send, by 1 January 1979, curriculum vitae, three letters of recommendation, and a description of research plans to: William D. Sawyer, M.D., Chairman, Department of Microbiology and Immunology, Indiana University School of Medicine, 1100 West Michigan Street, Indianapolis, Indiana 46202.

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

Applications are invited for a **FACULTY POSITION IN ZOOLOGY** beginning 1 September 1979. Candidates are sought at, but not restricted to, the assistant professor level. Applicants should have a research background in structural-functional relationships at analytical ultrastructural, physiological, and biochemical levels, with emphasis on such areas as cell-cell interactions, cell motility, cell surface phenomena and/or membranes. Applicants should have sufficient breadth to be able to contribute to undergraduate teaching at the organismal level, as well as in their specialty.

Send application letter, statement of research plans, and curriculum vitae, including teaching and funding experience, sample reprints, and names of five referees to: Dr. A. G. Jacobson, Department of Zoology, University of Texas at Austin, Austin, Texas 78712.

Application deadline: 15 December 1978. *An Equal Opportunity/Affirmative Action Employer*

FACULTY POSITION

The Department of Zoology at the University of Rhode Island has open a full-time, tenure-track position in physiology to begin 1 September 1979 at the assistant professor level. Responsibilities include teaching introductory human physiology and graduate courses in the area of specialization, productive research, and service. Research in regulatory physiology preferred. Ph.D. and previous teaching experience are minimum requirements. Postdoctoral experience and evidence of research accomplishments preferred. Send application with three letters of reference by 15 December 1978 to: Dr. Charles E. Wilde, Jr., Physiology Search Committee, Department of Zoology, UNIVERSITY OF RHODE ISLAND, Kingston, Rhode Island 02881. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITIONS, Environmental Health Sciences, Department of Public Health, The Medical Center, University of Alabama in Birmingham.

A new Division of Environmental Health solicits applicants for two positions. Qualifications include commitment to excellence in teaching medical and public health graduate students, dedication to research, and terminal degree, preferably Ph.D. or Sc.D. Salaries and fringe benefits highly competitive.

ASSOCIATE OR ASSISTANT PROFESSOR—Specializing in water quality management, water or analytical trace organic and metals chemistry. Collaborative research in aquatic bioaccumulation and/or opportunities for independent research. Teaching: development of course work in chemistry and water treatment for students in environmental health.

ASSOCIATE PROFESSOR—Specializing in industrial hygiene or effects of air pollutants on health. Collaborative research in accumulation of gases and vapors with respect to short-term or extended work schedules and/or opportunities for independent research, especially in particulate behavior. Teaching: development of course work in evaluation and analysis of air pollution and industrial exposure, noise control and/or ionizing radiation.

Application closing date: 31 January 1979.

Send curriculum vitae, manuscripts or reprints of major work and three letters of recommendation to: **Dr. William F. Bridgers, Professor and Chairman, Department of Public Health, SOM/SPAH, University of Alabama in Birmingham, University Station, Birmingham, Alabama 35294. An Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION at rank of assistant or associate professor. Ph.D. and/or M.D. with postdoctoral experience. Candidate expected to have plans for research work. Instruction work in medical, paramedical, and graduate curriculums. Special interests in cellular, sensory, exercise, or hemostasis physiology preferred. Salary negotiated. Résumé and references may be sent to: **Chairman, Department of Physiology, Wayne State University, School of Medicine, 540 East Canfield Avenue, Detroit, Mich. 48201. An Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITIONS—Organic and inorganic chemistry. The Department of Chemistry, Washington University, St. Louis, seeks applicants for tenure-track positions in organic and in inorganic chemistry. Strong preference will be given to applicants at the assistant professor level, but appointment at a higher level is not precluded. The candidates of interest are those who have potential for outstanding research accomplishment as well as excellence in teaching. Applicants are requested to submit curriculum vitae and a statement of research interests and to arrange to have three or more letters of recommendation sent to: **Professor William D. Phillips, Chairman, Department of Chemistry, Washington University, St. Louis, Mo. 63130. Washington University is an Equal Opportunity/Affirmative Action Employer.**

GEOLOGIST (Paleontology, Sedimentology). An assistant professor position (tenure-track), appointment effective 1 September 1979, is anticipated contingent on administrative approval. Ph.D. required; some teaching experience helpful. The successful applicant will participate in a growing undergraduate program by teaching historical geology, invertebrate paleontology, sedimentology, field geology, and related courses, as well as carrying on active research. Preference will be given to field-oriented applicants with a strong interest in developing an undergraduate program. Applicants should submit by 1 February 1979 a résumé, the names of three references, and a statement concerning research activities to: **Dr. Douglas Mose, Department of Chemistry, George Mason University, Fairfax, Virginia 22030. Affirmative Action/Equal Opportunity Employer.**

HEMATOLOGY—R & D South Florida

International diagnostics firm. Excellent benefit package. M.S. degree with several years of experience in an industrial or academic environment. Ability to carry out independent research and provide a high level of technical support to laboratory personnel. Please send résumé with salary requirements to: **Box 334, SCIENCE.**

POSITIONS OPEN

**HEAD, DEPARTMENT OF BIOLOGY
WESTERN KENTUCKY UNIVERSITY
Bowling Green, Kentucky 42101**

Candidate must have an earned doctorate in a biological discipline, experience in teaching and research, and a strong commitment to both. Programs include bachelor and master of science degrees in biology. Submit curriculum vitae, statements of teaching and research interests with accomplishments in these fields, administrative experience and goals, grants supporting teaching endeavors, publications, and names of three references to: **Dr. L. D. Brown, Chairman, Biology Search Committee, Ogden College of Science and Technology.** Closing date for applications is 10 January 1979. Position available: August 1979. Salary negotiable. *An Affirmative Action/Equal Opportunity Employer.*

HEALTH STUDIES DEPARTMENT invites applications from biomedical researchers to participate in a program to influence lifestyles 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 include teaching in both undergraduate and graduate programs. Ability to teach in one or more of the following areas is preferred: community health, psychosomatics, and environmental health. Appointment 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.**

HEART METABOLISM

POSTDOCTORAL POSITION available immediately in the areas of cardiac metabolism, creatine kinase, and mitochondrial bioenergetics. Position open to Ph.D. in biochemistry. Background in enzymology, metabolism, or oxidative phosphorylation, 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.**

IMMUNOLOGIST—M.D., Ph.D., or equivalent interested in alcohol studies and its influence on the immune system and cancer. Must have university affiliation and be interested in a 1- or 2-year assignment. Individual would retain all university affiliations and benefits. The National Cancer Institute will reimburse the university for salary and benefits through the Intergovernmental Personnel Act. Send résumé to or contact: **Dr. Alfred Hellman, National Cancer Institute, National Institutes of Health, Public Health Service, Building 41, Bethesda, Maryland 20014; telephone: 301-496-6758 (Bethesda) or 301-663-7468 (Frederick). Equal Opportunity Employer.**

JOURNALIST ASSISTANT EDITOR MEDICAL

Nutritionist with experience in journalism wanted to serve as assistant editor, *Nutrition Reviews*. M.S. degree in nutrition and literary experience in an editorial office, a newspaper, or a publishing house essential. Salary commensurate with experience. Complete benefit package. Send résumé and three references to: **Dr. Robert E. Olson, St. Louis University Medical Center, c/o Personnel Services, 3556 Carline Street, St. Louis, Mo. 63104.**

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

MEDICAL TECHNOLOGIST—ASCP

St. Catherine Hospital, located 30 miles southeast of Chicago loop, has an immediate day opening in the Chemistry Department for an individual with experience in instrumentation. We offer an excellent salary and benefit package. Please send résumé to:

**St. Catherine Hospital
4321 Fir Street
East Chicago, Ind. 46312**

Equal Opportunity Employer, M/F

ASSISTANT PROFESSOR OF BIOPHYSICS DIVISION OF MEDICAL PHYSICS UNIVERSITY OF CALIFORNIA, BERKELEY

Pending budgetary approval it is anticipated that an opening at this level will be available beginning 1 July 1979. Applicants should have a strong background in the physical sciences and hold the Ph.D. degree; preference will be given to applicants having some teaching and postdoctoral research experience. This position is a full-time, tenure-track appointment, including teaching at the undergraduate and graduate levels, research within the specialty of the applicant, and supervision of graduate thesis research in that area. Faculty and associates of the division specialize in research involving the determination of structure by physical measurements and the relation of structure to biological function. The research capabilities of the applicant should complement the research activities now present in the division; these include: radiation biology, photosynthesis, transmission and scanning electron microscopy of biological structure, mathematical biology, physical and developmental properties of normal and abnormal cells, genetic recombination, and lipoprotein structure, function, and involvement in disease processes. Preference will be given to those applicants with high professional qualifications in the general field of cell-membrane biophysics; that is, using physical approaches to problems of membrane structure and function.

Applications, including a letter specifying qualifications and research interests, curriculum vitae, a list of publications, reprints, and the names of four persons who may be contacted for letters of evaluation, should be sent to arrive no later than 2 January 1979, to: **Professor Alan Bearden, Chairman, Division of Medical Physics, Donner Laboratory, University of California, Berkeley, California 94720. The University of California is an Affirmative Action Employer.**

THE CHINESE UNIVERSITY OF HONG KONG FACULTY OF MEDICINE

Applications are invited for the following foundation chairs:

ANATOMY PHYSIOLOGY PHARMACOLOGY

tenable at this new medical school with an annual student intake of 100. There will be opportunities for original research but considerable undergraduate teaching experience is essential. Non-medically qualified candidates may apply but preference will be given to those medically qualified. Successful applicants are expected to be in post at the latest by the end of 1980 or early 1981, to take part in compiling the basic medical sciences curriculum and installing departmental facilities. Teaching will begin in the fall term of 1981. The minimum salary for professorships will be HK\$11,735 per month (U.S.\$1 = HK\$4.7). Terms of service also include long leave, superannuation benefits (university, 15 percent; appointee, 5 percent), housing accommodation on campus and air passages. Full particulars of the appointment, together with copies of relevant documents concerning the medical school and the university, may be obtained from: **Secretariat, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong**, to which applications (six copies) giving full details of qualifications and experience and the names and addresses of three persons to whom reference may be made, should be sent not later than 15 December 1978.

POSITIONS OPEN

POSITION IN INVERTEBRATE ZOOLOGY DEPARTMENT OF ZOOLOGY UNIVERSITY OF CALIFORNIA, BERKELEY

The Department of Zoology, University of California, Berkeley, anticipates making an appointment at the assistant professor level beginning fall 1979, pending final budgetary approval. The successful applicant will be expected to participate in teaching a two-quarter, upper-division course in invertebrate zoology and to offer an advanced course in his/her specialty. Preference will be given to individuals with teaching and research specialization in invertebrate morphology, physiology, or endocrinology (excluding neurophysiology and behavior). Applicants should send curriculum vitae, copies of publications, a detailed statement of teaching and research objectives, and names and addresses of at least three references to: **Chairman, Invertebrate Zoology Search Committee, Department of Zoology, University of California, Berkeley, Calif. 94720.** All applications should be received by 1 January 1979.

The University of California is an Affirmative Action Employer.

MANAGER

IMMUNOLOGY PRODUCT RESEARCH & DEVELOPMENT

Calbiochem-Behring Corp., situated in beautiful La Jolla, California, has a challenging opportunity to build and lead a team in the development of new products for the immunology/serology laboratory. The manager we seek will have technical responsibility for a rapidly growing product line of in vitro diagnostic products and immunochemicals. The position provides an opportunity to work closely with researchers in your field at Behringwerke and other units of the Hoechst organization worldwide.

Related industrial supervisory experience should exceed 5 years in the successful development of products for the immunology/serology laboratory. Minimum educational requirement: Ph.D. in immunology, microbiology, or biochemistry.

Excellent salary and fringe benefits. Please send résumé with salary history and requirements, in confidence, to:

Personnel

Calbiochem-Behring Corp.
19033 North Torrey Pines Road
La Jolla, California 92037

An Equal Opportunity Employer

QUEEN'S UNIVERSITY, KINGSTON, CANADA PLANT SCIENTIST

Research and teaching position for a scientist with an established research program, preferably in the area of plant physiology. Rank and salary are negotiable but are expected to be in the middle range. Those interested should send a detailed résumé, together with the names of three referees, to: **H. M. Good, Chairman, Selection Committee, Department of Biology, Queen's University, Kingston, Ontario, Canada K7L 3N6.**

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, metallurgy, and engineering. The appointments would be for 1 year, renewable for a second year if mutually agreeable. In some instances there may be a possibility for continued employment beyond the 2-year postdoctoral appointment if circumstances warrant.

Interested persons should submit a complete résumé, 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

POSITIONS OPEN

MEDICAL MICROBIOLOGIST

The Department of Microbiology at Southwestern Medical School is soliciting applications for a faculty position (tenure-track) in the area of pathogenic mechanisms, for appointment in September 1979. Candidates should have a Ph.D. and postdoctoral training. Appointee will be expected to participate in the teaching programs for medical and graduate students and to establish an active research program. Send curriculum vitae and names of three references to:

**Dr. Eugene D. Rosenblum
Department of Microbiology
The University of Texas Health Science
Center at Dallas
Dallas, Texas 75235**

An Affirmative Action/Equal Opportunity Employer

Teach **MICROBIOLOGY AND GENETICS** plus introductory courses and topical seminars. Skilled instructor with research interest and ability to direct student projects. One- or two-year contract. Apply to: **Dr. Jerome H. Woolpy, Biology Department, Earlham College, Richmond, Indiana 47374.** *Affirmative Action/Equal Opportunity Employer.* Apply before 15 January; begin September 1979.

PLANT MORPHOLOGIST

The Department of Botany, University of Georgia, is seeking qualified applicants for a faculty position in plant morphology and/or anatomy. We expect to fill this position at the assistant professor level, but will consider exceptional candidates at higher levels. Candidates must have a Ph.D. and a strong commitment to research and teaching. Duties include developing an independent research program and teaching at the graduate and undergraduate levels. A job description is available on request. Applicants should forward their curriculum vitae, reprints, and a brief résumé of research plans to:

**Plant Morphology Search Committee
Department of Botany
University of Georgia
Athens, Georgia 30602**

Applicants should also arrange to have four letters of reference sent to the above address. Deadline for applications is 1 January 1979, or until a qualified applicant is found. *An Equal Opportunity/Affirmative Action Employer.*

PLANT POPULATION BIOLOGIST

The Department of Botany of the University of Georgia is seeking qualified applicants for a position in plant population biology. We expect to fill this position at the assistant professor level but will consider exceptional candidates at higher levels. Candidates in any area of plant population biology are invited to apply. Candidates must have a Ph.D. and a strong commitment to research as well as teaching. Duties include developing an independent research program and teaching at the graduate and undergraduate levels. Applicants should forward their curriculum vitae, reprints, a brief résumé of research plans, and arrange to have four letters of reference sent to: **Plant Population Biologist Search Committee, Department of Botany, Plant Sciences Building, University of Georgia, Athens, Georgia 30602.** Deadline for applicants is 1 January 1979, or until a qualified applicant is found. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

PLANT PHYSIOLOGISTS

The Department of Botany of the University of Georgia invites applications and nominations for **two tenure-track positions** in the broad area of plant physiology. Applicants should have a demonstrated potential for teaching and research on **organismal, cellular, or molecular aspects** of basic plant physiology. Successful applicants will be expected to establish an independent research program, to teach an undergraduate course in plant physiology and a graduate course in the applicant's special area, and to train M.S. and Ph.D. students. It is anticipated these positions will be filled at the assistant professor level but appointment at a higher level is possible for outstanding senior applicants. Interested persons should send curriculum vitae, including a statement of research interests, and have four letters of recommendation sent to: **Dr. W. B. Cosgrove, Chairman, Plant Physiology Search Committee, Division of Biological Sciences, Room 400, Biological Sciences Building, University of Georgia, Athens, Georgia 30602.** Applications must be postmarked not later than 15 January 1979. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL FELLOWS interested in **membrane biochemistry** to participate in resolution, characterization, and functional reconstitution of components of hormone-sensitive adenylate cyclase [*Proc. Natl. Acad. Sci. U.S.A.* **75**, 3113 (1978)]. Position open June 1979. Send curriculum vitae and three references to: **Henry R. Bourne, Departments of Medicine and Pharmacology, 1089 M, University of California, San Francisco, California 94143.**

POSTDOCTORAL POSITION available immediately. Individual must have strong biochemical or biophysical background with interest in membrane excitability. Research involves isolation and study of proteins responsible for membrane excitability. Initial appointment is for 1 year, renewable for 2 years. The position is currently funded by NIH grant. Salary: \$10,020, plus fringe benefits of \$3,206 per year. Send curriculum vitae with two letters of reference to: **Dr. Josef Bokovsky, Department of Molecular Biology, Eastern Philadelphia Psychiatric Institute, Henry Avenue, Philadelphia, Pa. 19129.**

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 pharmacology. Applicants with experience in protein chemistry and enzymology are preferred. The postdoctoral scholarship, sponsored by NIH, is part of an ongoing program in cancer research training in nuclear medicine. The individual will have an opportunity to interact with biochemists, nuclear pharmacists, organic chemists, and physicians. The research involves the development of tissue-specific enzyme inhibitors as potential imaging agents. The position is available immediately and the appointment is up to 3 years. Candidates should send curriculum vitae, a summary of pertinent experience, and names of three individuals who may be contacted 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 POSITION IN NUTRITION to study the role of the potato in dietary patterns in selected countries. Additional background required in economics/social science. Send résumé and references to:

**Director General
International Potato Center
Apartado 5969
Lima, Peru**

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 compatible with a Christian environment.

Send curriculum vitae and names of three references to: **Dr. D. Fred Peterson, Associate Professor, Department of Physiology, Oral Roberts University, Tulsa, Oklahoma 74171.**

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

POSTDOCTORAL POSITION available immediately for individual with background in physiology, cell biology, or immunology. Studies involve peptide induced ionic fluxes in tumor cells, change in membrane potential, and induced metabolic changes. Project also requires isolation of serum proteins. Funding according to NIH postdoctoral guidelines. Applicants must be U.S. citizens or have permanent or immigrant visas. Contact: **P. A. Ward, M.D., Professor and Chairman, Department of Pathology, University of Connecticut Health Center, Farmington, Conn. 06032.** *An Equal Opportunity/Affirmative Action Employer, M/F.*

AMBAC SABBATICAL PROFESSORSHIPS IN TAIWAN

Opportunities for teaching and research in the Republic of China on Taiwan are offered by several of its academic institutions.

Well established medical faculties, and newly established schools, offer 3-month, 6-month, and 10-month professorships in basic sciences, medical and surgical specialties, and other health disciplines, including nursing, dentistry, and public health. Inquiries for these positions, 1 to 4 years in advance, are invited. **American Bureau for Medical Advancement in China, Inc., 1790 Broadway, New York, N.Y. 10019.**

POSITIONS OPEN

POSTDOCTORAL POSITION

To study drug-lipid interactions in model membrane systems. Experience with liposomes preferred but not required. Contact:

Dr. Norman D. Weiner
College of Pharmacy
University of Michigan
Ann Arbor, Mich. 48109

POSTDOCTORAL POSITIONS available November 1978. (i) **Neuropharmacology**—Studies on the biochemical and functional effects of CNS stimulant drugs focusing on neurotransmitters. Contact: **Dr. N. Uretsky, College of Pharmacy.** (ii) **Pharmacology**—Biochemical studies on the metabolism and mechanisms of anti-cholesterolemic and anti-aggregatory actions of clofibrate related drugs. Contact: **Dr. D. Feller, College of Pharmacy.** (iii) **Experimental Pathology**—Clofibrate and analogs: effects on lipoprotein distribution and on lipid metabolism with reference to the arterial wall, in vivo. Contact: **Dr. H. A. I. Newman, College of Medicine, Department of Pathology.** Send letters to: **The Ohio State University, Columbus, Ohio 43210.**
An Equal Opportunity Employer

POSTDOCTORAL POSITION available immediately, involving use of animal tissue culture to test chemicals for toxicity, mutagenicity, and carcinogenicity. Experience in cytogenetics, especially sister chromatid exchange, desirable. Send résumé to: **Dr. P. S. Sabharwal, Department of Biological Sciences, 101 T. H. Morgan Building, University of Kentucky, Lexington, Ky. 40506.**
An Equal Opportunity Employer

POSTDOCTORAL POSITIONS: Two postdoctoral appointments are available immediately to study biological nitrogen fixation: (i) legume nodule senescence, and (ii) associative symbiosis. Applicants should have experience in biochemistry, plant physiology, or microbiology. Salary: \$13,000. Send curriculum vitae and names of three references to: **Robert Klucas, Laboratory of Agricultural Biochemistry, University of Nebraska, Lincoln, Nebraska 68583.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION is available for a recent Ph.D. to join an ongoing project on the regulatory aspects of zinc and copper metabolism in primary cultures of hepatocytes. Applicants should have a strong background in biochemistry and experience with tissue culture techniques. Send curriculum vitae and names of three references to: **Dr. Robert J. Cousins, Cook College Campus, Rutgers-The State University of New Jersey, New Brunswick, N.J. 08903.**
An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION IN PHARMACOLOGY

Postdoctoral position available immediately. Research concerning arterial chemoreceptors. Experience in animal surgery essential, and background in laboratory methods of respiratory physiology desirable. Starting salary: \$11,000. Contact: **Dr. Elliott Mills, Department of Pharmacology, Box 3813, Duke University Medical Center, Durham, N.C. 27710.** Telephone: 919-684-4276. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

HARVARD UNIVERSITY DEPARTMENT OF BIOLOGY

A limited number of **POSTDOCTORAL RESEARCH POSITIONS** become available from time to time. Appointments are funded through research grants awarded to faculty members and are usually for 1 year, sometimes renewable. For a list of faculty members who have postdoctoral positions available, write, but do not send applications, to:

Office of the Chairman
16 Divinity Avenue
Cambridge, Mass. 02138

Harvard University is an Equal Opportunity/Affirmative Action Employer.

POSTGRADUATE RESEARCH BIOCHEMIST with experience in nucleic acid biochemistry and immuno- and protein chemistry. Salary range: \$11,880 to \$14,916; to begin late 1978. Apply to: **Ernest Kun, M.D., 101-SURGE Building, University of California, San Francisco, San Francisco, Calif. 94143.** *University of California, San Francisco, is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

A **POSTDOCTORAL POSITION** is open in the Department of Nutrition at the Massachusetts Institute of Technology (MIT). We are setting up an organ perfusion unit in which isolated livers, kidneys, and lungs from small animals will be used for metabolic (control of lipogenesis) and toxicologic (binding of carcinogens to DNA) studies. Candidates should be nonsmokers and U.S. citizens or permanent residents. Surgical skills and some experience in metabolite analysis are required. Contact: **Dr. H. Brunengraber, Room 56-229, MIT, Cambridge, Mass. 02139; telephone: 617-253-6783.**

POSTDOCTORAL POSITIONS IN MAMMALIAN DEVELOPMENTAL BIOLOGY

A position will be available 1 January 1979, to study the regulation of oocyte maturation at the cellular and molecular levels. Send résumé and three letters of reference to:

Dr. Robert W. MaGaughey
Department of Zoology
Arizona State University
Tempe, Arizona 85281

Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH FELLOW UNIVERSITY OF ALBERTA

Applications are invited from newly graduated Ph.D.'s for the position of postdoctoral fellow, effective 1 April 1979. Applicants should have a strong background in biochemistry, biophysics, or a related area and an interest in conducting research on the organization and dynamics of lipids in biological membranes and/or on the lipid modulation of the activity of membranous enzymes. Salary is \$11,600 the first year and \$12,720 the second. Send curriculum vitae and three letters of recommendation to: **Dr. R. N. McElhaney, Department of Biochemistry, University of Alberta, Edmonton, Alberta, Canada T6G 2H7.**

ALEXANDER DUESSEN PROFESSORSHIP IN ENERGY RESOURCES DEPARTMENT OF GEOLOGICAL SCIENCES THE UNIVERSITY OF TEXAS AT AUSTIN

Applications are invited for an endowed position as the Alexander Duessen Professor with tenure to participate in the undergraduate and graduate teaching programs in our department. This person would also be expected to develop a program of research involving graduate students. We especially seek someone with expertise in petroleum geology and with close contact with the energy industries. Applicants should be actively involved in the application of their special research to the finding or developing of energy resources. Applications should be received by 1 January 1979.

The position is available 1 September 1979. Interested applicants should send a complete résumé, including names of references, to:

Robert E. Boyer, Chairman
Department of Geological Sciences
The University of Texas
Austin, Texas 78712

An Affirmative Action/Equal Opportunity Employer, M/F

University of California Irvine, College of Medicine seeks **RESEARCHERS IN GYNECOLOGIC ONCOLOGY AND ENDOCRINOLOGY.** Ph.D. in microbiology, biochemistry, cellular biology, immunology, endocrinology, or an allied field required. *All qualified candidates welcome; minorities and women encouraged to apply.* Send curriculum vitae and five references to: **Philip J. DiSaia, M.D., Obstetrics and Gynecology, University of California, Irvine, Medical Center, 101 City Drive South, Orange, California 92668.**

SENIOR RESEARCH AEROSOL SCIENTIST

Conduct research projects involving aerosol physics and animal inhalation exposure technology. Areas of specific interest are aerosol and/or vapor generation and characterization, delivery systems, and respiratory deposition of materials. Provide technical guidance for the design, testing, and operation of inhalation exposure facilities for inhalation toxicological experiments. Suitable academic background will include some combination of aerosol sciences/engineering, material science, physics, chemistry, or pollution engineering.

Reply in confidence with detailed résumé to: **E. P. Galbraith, BATTELLE-NORTHWEST, P.O. Box 999, Richland, Wash. 99352.**

An Equal Opportunity Employer, M/F

AUSTRALIAN INSTITUTE OF MARINE SCIENCE POSTDOCTORAL AWARDS

The Australian Institute of Marine Science is a statutory authority established in 1972. Its functions are to carry out research in marine science, to assist other persons and institutions engaged in research in this field, and to disseminate information relating to marine science.

The institute is located in modern facilities at Cape Ferguson, 50 kilometers from Townsville.

A number of postdoctoral awards are granted each year by the council of the institute for research by scientists of exceptional promise and proven capacity for original work in the area of marine science.

The awards are tenable at the institute for periods up to 2 years. Tenure of an award is expected to commence within 9 months of the award being made.

In general, awards are restricted to applicants who are not more than 30 years of age on the date when applications close. Applications may also be considered from candidates for the Ph.D. degree if a thesis has been submitted for examination.

Stipend: \$10,059 to \$14,064, per annum.

Allowance: A district allowance of \$340 per annum for married awardees and \$180 for single awardees is payable.

Applications: Persons interested in applying for an award should submit an application and the names and addresses of three professional referees to: **Secretary, Australian Institute of Marine Science, P.M.B. No. 3, M.S.O. Townsville, Queensland 4810, Australia.**

Each application should be accompanied by curriculum vitae and should detail a research proposal with scientific justification, procedures, and objectives. Details of necessary laboratory and/or field support should be documented.

Applications should be submitted before 15 December 1978.

SOLAR MATERIALS RESEARCH

The Department of Energy and Environment at Brookhaven National Laboratory invites applications for two positions now open, to conduct experimental research on amorphous-semiconductor thin films for solar energy conversion, as described below:

1) Thin-film semiconductor devices for photovoltaic conversion, with emphasis on: (i) basic physical and chemical processes that affect conversion efficiencies; (ii) optoelectronic properties of semiconductor surfaces; and (iii) device fabrication techniques. Previous experience in device fabrication is essential.

2) Optical properties of semiconductor thin films with emphasis on (i) the nature of chemical bonding that determines optical properties in the visible and infrared wavelength regime; and (ii) techniques such as transmission and reflection spectroscopy, Raman spectroscopy, and thorough knowledge of data analysis.

Candidate should hold a recent Ph.D. in solid-state physics, solid-state chemistry, materials sciences, and/or electrical engineering.

Arrange for three letters of reference to be sent and include curriculum vitae in applying to:

Dr. Richard W. Griffith
Department of Energy and Environment,
Building 480
Brookhaven National Laboratory
Associated Universities, Inc.
Upton, Long Island, N.Y. 11973
Telephone inquiries are encouraged:
516-345-3544

An Equal Opportunity Employer, M/F

POSITIONS OPEN

WELL-QUALIFIED PSYCHOPHYSIOLOGIST

To assist on interdisciplinary sociopath research project. Expertise in the recording and measurement for both autonomic and electrocortical variables. Experience with a PDP-12 computer, including knowledge of FOCAL-12, is necessary. Immediate employment. Salary dependent on experience. Position is at a community mental health center. Contact: Eugene Ziskind, M.D., Gateways Hospital, 1891 Effie Street, Los Angeles, Calif. 90026; telephone: 213-666-0171; or Irving Maltzman, Ph.D., Department of Psychology, University of California, Los Angeles, Calif. 90024; telephone 213-825-2907 (co-investigators).

RESEARCH ASSISTANT PROFESSOR. Position available immediately for 1 year or longer to direct an interdisciplinary study of the fisheries of the northeast Pacific and conduct specific studies examining social aspects of fisheries management as required by the Fisheries Conservation and Management Act of 1976. Applicant should have a Ph.D. in sociology, anthropology, or economics. Some experience with fisheries and training in quantitative methods is desirable. Salary is negotiable. Send résumé, three letters of recommendation, and a recent sample of writing to: Donald L. McKernan, Director, Institute for Marine Studies, University of Washington, Seattle, Washington 98195. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE, Ph.D. biochemistry position available immediately with established group investigating porphyrin-protein interactions as related to diseases of porphyrin metabolism. Broad experience in separation, identification of proteins essential. Background in TLC, HPLC, fluorometric methods desirable. Columbia University is an Equal Opportunity/Affirmative Action Employer. Send résumé to: Box 26, Columbia University, 630 West 168 Street, New York, N.Y. 10032.

RESEARCH ASSOCIATE (BIOCHEMIST). Purine, pyrimidine biosynthesis and regulation in mammalian tissues. Specific projects determined by the expertise of applicant. Government-university laboratory. Possible academic appointment. Send résumé and interests to: Dr. James Kennedy, Research Service, VA Hospital, Kansas City, Mo. 64128. An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE POSITION available 1 March 1979 for a Ph.D. endocrinologist interested in endocrine rhythms and/or role of hormones in induction and growth of DMBA mammary tumors in rats. Experience in radioimmunoassay techniques required. The position is for 2 years at an annual salary of \$13,000. Send curriculum vitae and three references to: Dr. David M. Lawson, Department of Physiology, Wayne State University, 540 East Canfield Avenue, Detroit, Mich. 48201. An Equal Opportunity Employer.

RESEARCH ASSOCIATE IN SOIL-PLANT NUTRIENT RELATIONS

Postdoctoral position in ongoing ecosystem project, directing field research and working with persons developing process-based models. Competency in plant nutrient relations, soil chemistry, decomposition, and nutrient release required. Available for 2 years. Salary: \$12,000 to \$17,000 for 12 months, depending on experience. Send curriculum vitae, statement of research interests, and three letters of reference to: Dr. Philip C. Miller, Systems Ecology Research Group, San Diego State University, San Diego, California 92182. Closing date is 15 December 1978.

RESEARCH ASSOCIATE with Ph.D. in biochemistry. Original research and supervision of graduate students and postdoctoral fellows. Candidates should have previous experience with phospholipid exchange protein. Send curriculum vitae and names of three references to: Dr. D. B. Zilversmit, Division of Nutritional Sciences, Cornell University, Ithaca, New York 14853. Cornell University is an Equal Opportunity/Affirmative Action Employer.

SENIOR POSITION IN PSYCHOLOGY. The Psychology Department at the University of Pennsylvania seeks a new member at the level of associate or full professor, with tenure. Interested scholars, who have already made an outstanding contribution to the understanding of psychology or related disciplines, should submit their curriculum vitae to: Chairman, Senior Search Committee, Department of Psychology, University of Pennsylvania, 3815 Walnut Street, Philadelphia, Pa. 19104. Deadline: 15 January 1979. We are an Equal Opportunity Employer.

POSITIONS OPEN

Sacramento—University of California, Davis, Department of Psychiatry, has openings for **GENERAL PSYCHIATRY FACULTY**. Department operates three CMHC's as setting for educational and scientific programs for all mental health disciplines. An Affirmative Action/Equal Opportunity Employer. Write: Joe P. Tupin, M.D., Division of Mental Health, Sacramento Medical Center, 2315 Stockton Boulevard, Sacramento, California 95817. Positions available immediately. Applications accepted until 31 December 1978. Salary level negotiable.

MCGILL UNIVERSITY DEPARTMENT OF BIOCHEMISTRY RESEARCH ASSOCIATE

Applications are invited for above post, available immediately, for work on aspects of persistent viral infections in eucaryote cells at the molecular level. Experience in molecular virology and tissue culture an asset. Appointment will be for 1 year with a possible extension for a second year at a salary of about \$15,000 per annum. Applications, with curriculum vitae and names of two referees, should be submitted as soon as possible to: Dr. Stewart Millward, Department of Biochemistry, McGill University, 3655 Drummond Street, Montreal, Quebec, Canada H3G 1Y6.

RESEARCH SCIENTIST

University of Missouri Research Reactor has an opening for a research scientist knowledgeable and interested in the use of radioisotopes, who could lead research programs in radioisotope applications. Will have responsibilities of working with reactor staff to produce radioisotopes and interfacing with faculty to develop research and applications. Candidate should have a Ph.D. or equivalent, be an experimentalist, and have demonstrated ability in the development of new methods, experiments, and research programs. Send résumés to: Personnel Services, University of Missouri, 309 Hitt, Columbia, Mo. 65211; or R. Brugger, Director, or D. Alger, Associate Director, Research Reactor, Columbia, Mo. 65211; telephone: 314-882-4211. An Equal Opportunity Employer.

SANITARY ENGINEERING RESEARCH LABORATORY UNIVERSITY OF CALIFORNIA BERKELEY, CALIFORNIA

The position of **STAFF RESEARCH ENVIRONMENTAL SCIENTIST** of the above laboratory is available. The applicant should be interested in and capable of conducting postdoctoral research in the general area of environmental health science with a special emphasis in environmental toxicology. The applicant would be expected to work with faculty members participating in research at the laboratory and help attract extramural funding in the area of environmental toxicology. The applicant may be called upon in a limited capacity as a lecturer in the area of her/his specialty.

A doctoral degree in an appropriate area of environmental health sciences is required. The applicant is expected to have had educational and research experience in one or more aspects of environmental toxicology. The level of the appointment within the assistant research scientist series will be commensurate with the demonstrated experience and research record of the applicant. Appointment is for a fixed term of 2 to 3 years with the possibility of renewal for a maximum of 4 or 5 years. Applications must be received by 1 December 1978. The position will be available 1 February 1979.

Send résumé to:

Professor David Jenkins, Director
Sanitary Engineering Research Laboratory
47th Street and Hoffman Boulevard
Richmond, Calif. 94804

The university is an Affirmative Action Employer.

WILDLIFE EXTENSION SPECIALIST (ASSISTANT PROFESSOR). A person to: (i) adapt research finding into layman understanding, (ii) work with public and private agencies with a conservation mission, (iii) develop programs for subadults in wildlife ecology, (iv) act as a liaison with sportsmen groups, and (v) produce audio-visual programs in wildlife conservation. Ph.D. in wildlife science, management, or ecology. Salary: \$20,000. Position starting date: 1 January 1979. Application closing date: 1 December 1978. Send personal and professional curriculum vitae to: Robert A. McCabe, Department of Wildlife Ecology, University of Wisconsin, 226 Russell Laboratories, Madison, Wisconsin 53706. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

VIROLOGY FACULTY POSITION AVAILABLE

Candidates should be qualified to carry out independent research and participate in graduate training program. Well-equipped laboratory facilities available. Rank dependent upon experience and qualifications. 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.

CALL FOR PAPERS

A Call For Papers/Participants/Reactors in "Toxic Substances: Decisions and Values." Four national conferences to analyze crucial ethical issues and decision factors in the toxics area. For specifics contact: Thomas Conry, Technical Information Project, Inc., 1346 Connecticut Avenue, NW, Suite 217, Washington, D.C. 20036; telephone: 202-466-2954. Honoraria and travel supplements available. Proceedings published. Abstract and outline deadlines: 15 November (conference 1); 15 December (last three).

PROGRAMS

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 disease. Research training is available in biochemical pharmacology, cardiovascular pharmacology, drug metabolism, molecular toxicology, analytical chemistry, and clinical pharmacology. Stipends available. Contact: Graduate Training Director, Department of Pharmacology, Medical University of South Carolina, Charleston, S.C. 29401.

POSTDOCTORAL TRAINING FELLOW THROMBOSIS HEMOSTASIS

Postdoctoral training positions are available at the Specialized Center for Thrombosis Research, Temple University, Philadelphia, Pa. 19140. Training will be offered in several disciplines related to thrombosis hemostasis research, that is, biochemistry, pharmacology, physiology, clinical research, and so on. Applicant must have fulfilled M.D. or Ph.D. training, be citizen or permanent resident of the United States; it is expected that a trainee continues in academic research or teaching after the training program. Positions are ordinarily for 2 years. Salary: \$10,000 to \$13,000 per year, depending on previous experience. Send application and curriculum vitae to: Dr. Holm Holmsen at the above address. An Equal Opportunity/Affirmative Action Employer.

GRADUATE STUDY

GRADUATE STUDIES. Medical University of South Carolina. Predoctoral traineeships available for study leading to the Ph.D. degree in the Department of Anatomy, Basic and Clinical Immunology and Microbiology, Biochemistry, Biometry, Pathology, Pharmacology, Physiology, or the interdisciplinary program in Molecular and Cellular Biology and Pathobiology. Stipends are \$3900 per year and are awarded on a competitive basis. For application and catalog, write to: Dean, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, South Carolina 29403. The Medical University is an Equal Opportunity/Affirmative Action Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. Three positions are available in the Center for Reproductive Sciences at Columbia University, College of Physicians and Surgeons. Salary: \$10,000 to \$13,200, depending on experience. M.D. or Ph.D. required. Must be U.S. citizen or have permanent visa. Equal Opportunity Employer. Contact: Dr. G. Jagiello, Center for Reproductive Sciences, Columbia University, College of Physicians and Surgeons, 630 West 168 Street, New York, N.Y. 10032.

Senior Scientist

Ph.D. in Basic Medical Sciences

With training in an area
relevant to Rheumatology

Our Pharmaceuticals Division has an excellent senior position now open for an individual with minimum of 1 year post doctoral research experience. Expertise should be in an area relevant to the pathogenesis of arthritis/inflammation, e.g. immunology/biochemistry. The candidate selected will develop new approaches to complement ongoing research in the discovery and development of unique antirheumatic agents.

We offer attractive salary, liberal benefits program, and a pleasant suburban location in Westchester County, New York.

Qualified individuals are requested to submit detailed resume in strict confidence along with salary history and requirements to: Loretta Alaburta, CIBA-GEIGY Corporation, Saw Mill River Road, Ardsley, New York 10502. We are an equal opportunity employer/male and female.

CIBA—GEIGY

PHD's/ PHARMACOLOGISTS

SmithKline Corporation, a diversified multi-national pharmaceutical firm located in Philadelphia, Pennsylvania, is seeking Pharmacologists.

Two doctorate level positions are available as a result of expansion of the Respiratory and Allergic Diseases Research Program. Duties include direct laboratory involvement in basic and applied research and coordination of pharmacology effort with other discipline involvement. Requirements include a Doctorate in Pharmacology, minor in Biochemistry, Immunology or Physiology and up to 2 years post-doctoral experience and a desire to develop in an independent research effort. The successful candidates will have a strong general background in Pharmacology and some working experience in drug-receptor interactions, biochemical pharmacology and/or immunopharmacology.

SmithKline offers an excellent compensation program and opportunity for professional growth. Please send resume with salary history to: Mr. William Groves, SMITH KLINE & FRENCH LABORATORIES, A Division Of SmithKline Corporation, 1510 Spring Garden Street, P.O. Box 7929, Philadelphia, Pennsylvania 19101. An Equal Opportunity Employer, Male/Female/Handicapped/Veteran.

SmithKline

Smith Kline & French Laboratories

STAFF FELLOWSHIP

The National Institutes of Health, Public Health Service, seeks a postdoctoral fellow for a research and development position with the Computer Systems Laboratory, Division of Computer Research and Technology. The position will involve the development of instrumentation, mini-computer and microcomputer systems, and software for application to biomedical research. Candidates should have a Ph.D. or equivalent in electrical or biomedical engineering. Background or experience is desirable in one or more of the following areas: microprocessors, mini-computers, instrumentation, software engineering. Initial appointment will be for two years with potential for one year extensions to a maximum of four years. Candidates must be a citizen or be eligible for naturalization within 4 years.

Contact or send resume to: Mrs. Stella A. Graves, National Institutes of Health, 9000 Rockville Pike, Building 12A, Room 3019, Bethesda, Maryland 20014. An Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH

ENGINEERS, STATISTICIANS, ECONOMISTS FOR ARAB DEVELOPMENT INSTITUTE

Arab Development Institute would welcome the services of industrial engineers, statisticians, and mathematical economists to work on pioneering projects in industrial evaluation, macroplanning, and equipment design as well as feasibility studies within the Industrial Engineering Department.

INDUSTRIAL ENGINEERS: Should have B.S. engineering in mechanical, electrical, or industrial; M.S. in industrial engineering O.R. or statistics; about 10 years of experience, line or staff (both preferred), in production planning, maintenance scheduling, workmen supervisory control methods.

INDUSTRIAL STATISTICIANS: B.S. in mathematics or statistics; M.S. in statistics or O.R.; 10 years industry experience in sampling, analysis, reliability.

RESEARCH STATISTICIANS: B.S. in mathematics or statistics; M.S. in statistics; 10 years of basic research experience in time series, regression, design of experiments, forecasting, supported by publications.

EQUIPMENT FEASIBILITY ENGINEERS: B.S. mechanical, M.S. industrial, 10 years of experience in equipment design and economic feasibility; must be able to translate the ideas of basic scientist into equipment and verify its economic feasibility; solar energy exposure desirable.

INDUSTRIAL ECONOMISTS: B.S. engineering, Ph.D. engineering-economics or industrial-economics; 10 years of experience in macroplanning in areas of manpower, industry, or other sectors of economy with publications, advanced mathematical skills in non-linear programming and solution of dynamic input-output tables through multi-period differential equations.

BUSINESS ANALYSTS: B.S. engineering, economics, statistics, or business with MBA. Five to 10 years of experience in economics of transportation, marketing, industry analysis, costing. Strong mathematical and statistical skills required.

GENERAL REQUIREMENTS: should read, write, and speak Arabic (preferably) but a reading knowledge of Arabic or ability to pick up quickly is very much desired.

TERMS OFFERED: Arab Development Institute is an Equal Opportunity Employer which employs internationally known scientist and engineers, and maintains healthy professional environments. The Jamaheriah enjoys the year-around Mediterranean climate. Competitive salaries and dislocation assistance for self and family are provided.

Please send a detailed résumé containing chronologically arranged education and experience, publications, salary history, a recent photograph, references, and so forth. No need to send actual publications or certificates at this time. To expedite, write directly to:

Industrial Engineering Department
ARAB DEVELOPMENT INSTITUTE
P.O. Box 8004, Tripoli
Socialist People's Libyan Arab Jamaheriah

It's not an easy puzzle!

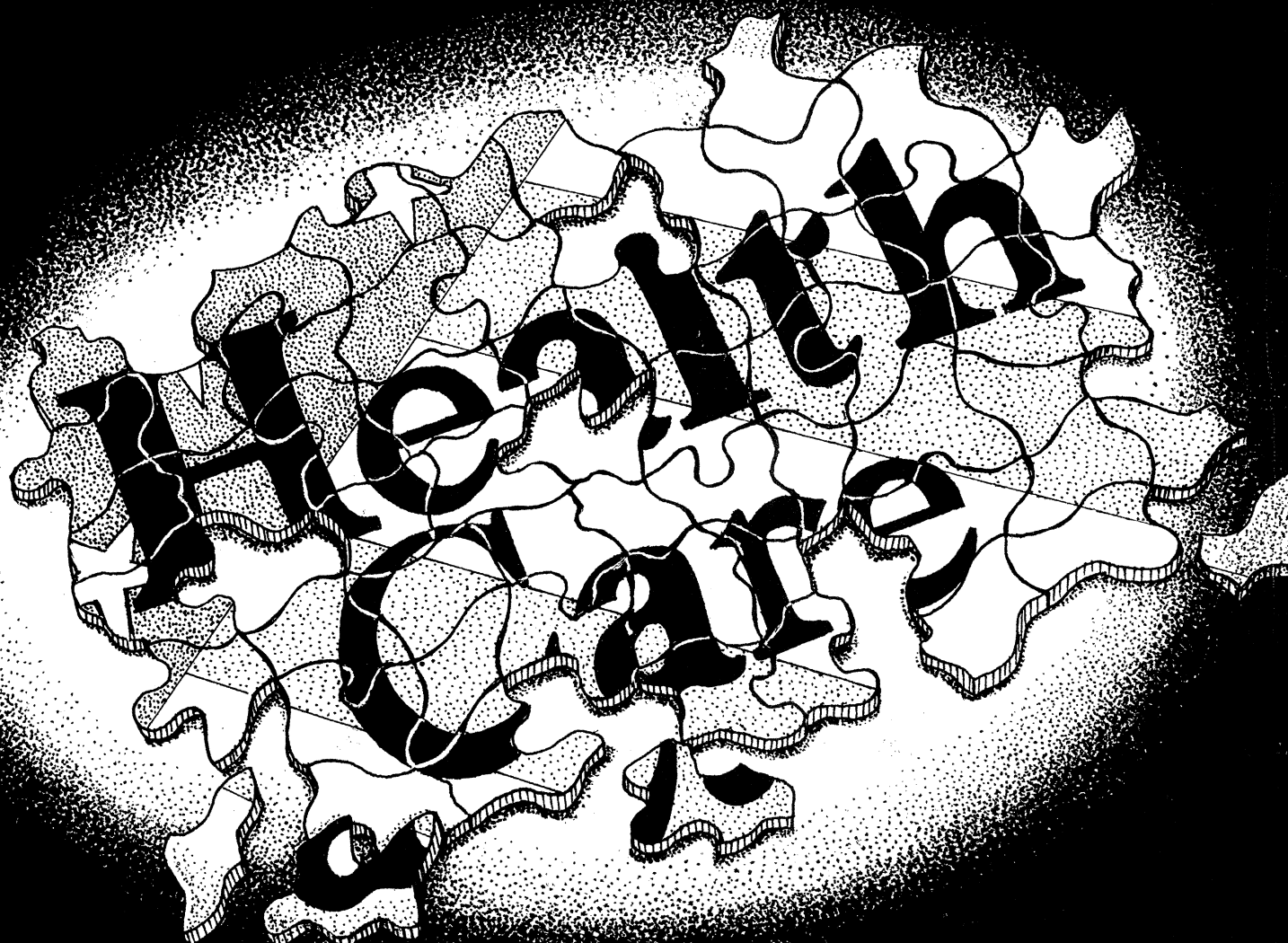
HEALTH CARE: REGULATION, ECONOMICS, ETHICS, PRACTICE

Physicians have at their command a continually improving understanding of many facets of health care. New diagnostic techniques, including powerful instrumentation, have become available. Progress has been especially marked in treatment and research bearing on mental illness. The use of antibiotics, immunization, and detection of genetic defects has become commonplace. But these are just a few of the many pieces that one must fit together to form the complete picture of health care and maintenance in the United States today.

The 39 chapters in **HEALTH CARE: REGULATION, ECONOMICS, ETHICS, PRACTICE**, the seventh publication in the AAAS Science Compendia Series, will help the professional and lay person understand not only recent advances in medical practice, but also the hidden yet vital pieces of our health care system. What is, or should be, the role of government in regulating and funding medical care and research? Can we as a nation afford health care for all? Does public education and preventive medicine lower costs while improving the general level of well-being? What are the problems in evaluating new techniques, new trends? What are the ethical questions involved in medical practice and research?

Each of us—policymaker, physician, technician and lay person—controls a sizable portion of the entire picture. **HEALTH CARE: REGULATION, ECONOMICS, ETHICS, PRACTICE** helps define and clarify the many pieces of the health care puzzle.

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