

CHARLES C THOMAS • PUBLISHER

CLINICAL MICROBIOLOGY: How To Start and When To Stop edited by Albert Balows, *Center for Disease Control, Atlanta, Georgia.* (6 Contributors) Authoritatively written chapters in this book provide guidance on what is considered minimally acceptable in culturing blood, urine, feces, sputum and wound specimens in a small clinical laboratory. The purpose here is to provide generally useful guidance for the processing of specimens. It will be particularly useful in the small to medium sized laboratory that does not have the services of a well trained microbiologist. '75, 104 pp., 5 il., 29 tables, \$10.50

TELEMEDICINE: Explorations in the Use of Telecommunications in Health Care edited by Rashid L. Bashshur, Patricia A. Armstrong and Zakhour I. Youssef, *all of Univ. of Michigan, Ann Arbor, Michigan.* (18 Contributors) This volume reports on the use of telecommunications in the delivery of health services. All available published and unpublished material on the limited experience with telemedicine is reviewed; site visits and data collection have been made from operational telemedicine programs; and a report on a conference-workshop has been included with the presentation of solicited papers. '75, 376 pp., 30 il., 15 tables, cloth-\$21.75, paper-\$18.75

HEALTH PROTECTION OF RADIATION WORKERS by W. Daggett Norwood, *Hanford Environmental Health Foundation, Richland, Washington.* Presented is a summarization of knowledge regarding the hazards to the safety and well-being of persons working with radiation. Discussed are established standards for health, safety and environmental protection along with their implementation, diagnosis and therapy for illness or injury. The medical supervision of radiation workers, radiation accidents, atomic power plants and medicolegal problems is covered. This book is addressed primarily to physicians and nurses, teachers, health physicists, occupational hygienists, safety specialists, biologists and others who are concerned with protecting the health and safety of radiation workers. '75, 468 pp., 16 il., 16 tables, \$27.50

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Personnel Placement

POSITIONS WANTED

Freelance or Permanent—Biochemical/medical editing, literature search, abstracting, coordinating, writing. Have M.S. in biochemistry and 20 years of related experience. Desire New York City location. Box 376, SCIENCE. 8/29; 9/5

Immunochemist-Immunologist-Microbiologist, Ph.D. Publications, extensive postdoctoral training, seeks position as research professor or research associate—medical school and/or university setting. Working knowledge—serology, protein chemistry. Well qualified in immunoassay, mammalian antigens. Can offer clinical service in any of aforementioned areas. Will relocate. No agencies, please. Available 1 September 1975. Box 377, SCIENCE. X

Immunologist/Immunochemist, Ph.D. Four years postdoctoral and 4 years as staff scientist in research institute. Extensive work in the production of antiserum to haptens, and development of RIA. Experience in tumor and cellular immunology. Seeking a position in research (academic, industrial, or government). Available immediately, location open. Box 378, SCIENCE. X

Marine—Aquatic Biologist. Extensive experience in field and laboratory. Seeks a postdoctorate or teaching position. Box 379, SCIENCE. X

Plant Physiologist—Biochemist. Ph.D. Ten years in plant growth regulation, proteins, and nutrition. Administrative experience. Box 380, SCIENCE. 8/29; 9/5, 12

Science Writer—Editor, experienced, biological sciences. Seeks part-time position in Middle Atlantic region. Box 381, SCIENCE. X

Theoretical Physicist, West Germany; Ph.D. 1970; professor 1975; research since 1966; teaching since 1969, 1971 to 1973 in United States; 45 papers (superfluids, phase transitions, nucleation, air pollution, health physics, percolation); editorial board of *Pergamon* journal; seeks permanent position (interdisciplinary?) at U.S. college, university, or research institute. Box 382, SCIENCE. X

Zoologist. Ph.D. Desires teaching position. Interests include invertebrate zoology, limnology, aquatic microbiology, parasitology, embryology, comparative anatomy. Dr. Wilson, Rt. 2, Box 575, Russell Springs, Kentucky 42642. 8/29; 9/5, 12, 19, 26

POSITIONS OPEN

ASSISTANT PROFESSORS. Men and women highly qualified in biochemistry or analytical chemistry are invited to apply for two positions as Assistant Professors in the department. These positions will require ability to organize and present effectively courses at both the graduate and undergraduate levels. Moreover, potential candidates are expected to have a solid record of accomplishment in research and to show promise of developing vigorous independent programs of scholarly investigation. To apply, submit a brief biographical sketch, a publication list, and a short résumé of ideas for the development of teaching and research programs. *Indiana University is an Equal Opportunity Employer and candidates of both sexes, all races, and ethnic backgrounds are encouraged to apply.* Apply to: **Dr. E. H. Cordes, Chairman, Department of Chemistry, Indiana University, Bloomington, Indiana 47401.**

ASSISTANT PROFESSOR, PHARMACOLOGY

A position in pharmacology is anticipated beginning January 1976. Areas of research interests and teaching responsibilities are open. All applicants should have a background from a medical school pharmacology department. Send curriculum vitae and names of references by 1 October 1975 to:

Dr. Lawrence K. Schneider, Director
Division of Biomedical Sciences, AHS
School of Medical Sciences
University of Nevada
Reno, Nevada 89507

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

SCHOOL OF MEDICINE UNIVERSITY OF CALIFORNIA SAN FRANCISCO

ASSOCIATE DEAN for new, primary care oriented, medical education program centered in Fresno, California, which will integrate postgraduate and undergraduate education at the Veterans Administration Hospital, Valley Medical Center, and other clinical facilities in the central San Joaquin Valley. Close liaison will also be maintained with the San Francisco campus. Applicants should have interest and demonstrated ability in initiating major, new medical education activities based on multi-institution support. *The University of California is an Affirmative Action Employer.* Contact: **Fresno Search Committee, Dean's Office, University of California School of Medicine, San Francisco, California 94143.**

BIOLOGICAL SCIENCES CURRICULUM STUDY

Position available immediately: Consultant, with responsibilities for the dissemination of information for the Human Sciences Program, plus the design and writing of individualized activities for pupils ages 11 through 14.

Qualifications: Teaching experience at the middle or junior high school level. Academic specialty in the physical or earth sciences. Ability to communicate and to work as a team member. Knowledge of modern learning and cognitive development theories.

Salary: Open, depending on qualifications and experience.

Application deadline: 19 September 1975.

Affirmative Action/Equal Opportunity Employer

Contact: Dr. William V. Mayer, BSCS, Box 930, Boulder, Colorado 80302.

CELLULAR IMMUNOLOGIST

Position open for M.D. or Ph.D. at the Assistant Professor level. Postdoctoral experience required. Position involves basic research and teaching medical and graduate students. Correspondence to:

Dr. Morton M. Weber
Department of Microbiology
St. Louis University School of Medicine
1402 S. Grand Blvd.
St. Louis, Mo. 63104

An Equal Opportunity/Affirmative Action Employer

UNIVERSITY OF PENNSYLVANIA SCHOOL OF DENTAL MEDICINE CHAIRPERSON—BIOCHEMISTRY

Applications are invited from senior biochemists with research and teaching interests relevant to dental medicine. Preference will be given to candidates whose research interests include the chemistry of connective tissue or mineralization. Send curriculum vitae and names of at least three references to: **Dr. Richard Orskand, Biochemistry Search Committee, University of Pennsylvania School of Dental Medicine, Philadelphia, Pa. 19174.** *An Equal Opportunity Employer.*

DIRECTOR ENVIRONMENTAL RESOURCES TRAINING CENTER SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE

Applications are invited for the position of Director of the Environmental Resources Training Center, Southern Illinois University, Edwardsville. The Environmental Resources Training Center has been established to provide training and upgrading for persons in the area of waste water treatment and management. The Center will serve as a central repository for curriculum materials in the State of Illinois. The Director will be the chief administrative officer of the Center and as such will be responsible for all administrative aspects including development of funding sources and budgeting. The Director will be responsible for maintaining liaison with the appropriate state and federal agencies and with the academic community of the university. The Director will maintain contact with industrial and municipal representatives in order to determine their training needs. Current and proposed environmentally related educational and research activities at Southern Illinois University, Edwardsville, will draw on facilities of the Center, and the Director will be responsible for coordinating the activities of those programs that relate to the Center.

Letters of application and résumés should be sent to **Earl Lazerson, Dean, School of Science and Technology, Southern Illinois University, Edwardsville, Illinois 62025.** Closing date for applications is 15 December 1975. *Southern Illinois University at Edwardsville is an Equal Opportunity and Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSIOLOGY. The Department of Physiology, School of Medicine, SUNY at Buffalo, is seeking an M.D./Ph.D. with post-doctoral training in membrane transport. Strong commitment to teaching is essential. Should be able to develop independent research support. Send curriculum vitae, references, and inquiries to **Dr. Suk Ki Hong, Professor, Department of Physiology, School of Medicine, State University of New York at Buffalo, Buffalo, N.Y. 14214.**

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UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE DEPARTMENT OF PATHOLOGY

In accordance with University principles of fair-practice employment, applications are invited for position of **Director of Clinical Laboratories** at the hospital of the University of Pennsylvania. Applicants must be board-certified in clinical pathology. Board-certification in pathologic anatomy is desirable but not required.

Applications, including curriculum vitae and four references, should be sent to: **Dr. Nicholas K. Gonatas, Chairman, Search Committee, Division of Neuropathology, University of Pennsylvania School of Medicine, 447 Johnson Pavilion/G3, Philadelphia, Pennsylvania 19174.**

ELECTRON MICROSCOPIST

Position open for electron microscopist in the Department of Microbiology. The level of the position and salary are open and depend upon training and experience. Send curriculum vitae to: **Chairman, Department of Microbiology, Vanderbilt University School of Medicine, Nashville, Tenn. 37232. Telephone: 615-322-2087.**

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FACULTY POSITIONS IN MEDICAL PHYSIOLOGY

Two positions available Fall 1975 as associate or assistant professor in medical-graduate education and research programs. Desire strong research interests in metabolic or hormonal regulation of cardiovascular system. Salary negotiable. Send curriculum vitae and names of three references by 15 September 1975 to:

James P. Filkins, Ph.D.
Chairman, Department of Physiology
Stritch School of Medicine
Loyola University of Chicago
2160 South First Avenue
Maywood, Illinois 60153

We are an Equal Opportunity/Affirmative Action Employer. Applications from minorities and women are encouraged.

FACULTY POSITION

The Department of Veterinary Pathology, Pullman, Washington, invites applications for a Ph.D. biochemist at the Assistant Professor level. The candidate must have experience in the area of collagen biochemistry and will be expected to perform research studies on connective tissue diseases of animals, with emphasis on collagen metabolism and cross-link formation.

Applications will be accepted until 1 November 1975.

Send letters of inquiry, transcripts, three references, and curriculum vitae to: **Dr. Gerald A. Hegreberg, Department of Veterinary Pathology, Washington State University, Pullman, Washington 99163.**

Washington State University is an Equal Opportunity/Affirmative Action Employer and women and members of minority groups are encouraged to contact us.

POSTDOCTORAL POSITION

Available immediately. The Department of Veterinary Pathology is seeking an individual, with a recent Ph.D. in biochemistry, to study the molecular defects involved in inherited connective tissue diseases. The selected individual will be expected to have expertise in protein chemistry, especially as related to collagen metabolism and collagen cross-link formation.

Stipend: \$10,000 to \$12,000, depending on experience.

Closing date: 15 November 1975.

Send letter of inquiry, transcripts, three references, and curriculum vitae to: **Dr. Gerald A. Hegreberg, Department of Veterinary Pathology, Washington State University, Pullman, Washington 99163.**

Washington State University is an Equal Opportunity/Affirmative Action Employer and women and members of minority groups are encouraged to contact us.

POSITIONS OPEN

CHAIRMAN, DEPARTMENT OF ATMOSPHERIC SCIENCES OREGON STATE UNIVERSITY

Applications are invited for the tenured professorship from persons qualified to lead this department's developing program of research and instruction in the atmospheric sciences.

Closing date for applications: 15 October 1975. Obtain details from **Dr. Fred W. Decker, Chairman of Search Committee, Department of Atmospheric Sciences, Oregon State University, Corvallis, Oregon 97331.**

Oregon State University is an Equal Opportunity, Affirmative Action Employer and encourages applications from women and minority group members.

EMBRYOLOGIST

Position available as instructor or assistant professor to teach embryology and reproductive biology to medical and dental students. Research interest in developmental biology desirable. **Chairman, Department of Anatomy, Medical University of South Carolina, 80 Barre Street, Charleston, S.C. 29401.**

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FACULTY POSITIONS IN BIOCHEMISTRY

Applications are invited for several positions at the rank of Assistant Professor. Duties include the maintenance of an active research program, the instruction of students at The Health Science Center, and participation in the graduate training program. The department is responsible for course work in the dental, graduate, and medical schools. Evidence of achievement and promise in research and teaching is desired. Applicants should submit a curriculum vitae, a brief description of their proposed research, and the names of three references to **Search Committee, Department of Biochemistry, The University of Texas Health Science Center, San Antonio, Texas 78284.**

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A position is open immediately for a full-time **FACULTY MEMBER** in the area of bioethics in the Department of Medicine, University of California, San Francisco, at the Associate Professor level. The University is seeking candidates with a doctoral degree in philosophical and/or theological studies with a concentration on ethics, teaching experience in a school of medicine as a full-time faculty member, sufficient background in biomedical sciences, and a demonstrated capability for independent and interdisciplinary research with health professionals and social scientists.

Applicants should submit by 10 September 1975 a curriculum vitae, list of publications, and the names of five references to: **Philip R. Lee, M.D., Professor of Social Medicine, Health Policy Program, University of California, San Francisco, California 94143.**

The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

HEALTH SCIENTIST ADMINISTRATOR

GS-601-13/14, \$21,816 to \$25,581. Ph.D.-level scientist with academic and administrative experience. A broad background in cellular and molecular biology with emphasis on the biophysical nature of membrane structure and function is desired. Responsible for scientific development, administration and evaluation of national research grants, research training grants, and research fellowships utilized in the Cellular and Molecular Basis of Disease Program, National Institute of General Medical Sciences. Send curriculum vitae, bibliography to: **Public Health Service, National Institutes of Health, National Institute of General Medical Sciences, Personnel Office, Building 31, Room 4A33, 9000 Rockville Pike, Bethesda, Maryland 20014.** Telephone inquiries may be addressed to: **301-496-7021.**

An Equal Opportunity Employer.

HEAD, DEPARTMENT OF BIOCHEMISTRY

The University of Illinois College of Medicine invites applications and nominations for the position of **Head, Department of Biochemistry**, in the School of Basic Medical Sciences. The Department is presently constituted of 15 faculty with research programs.

Applicants should possess a distinguished record in both research and teaching, as well as administrative ability.

Send nominations and applications to: **Dr. G. di Mayorca, Chairman, Search Committee, Department of Microbiology, 835 South Wolcott Avenue, Chicago, Illinois. Mailing address: P.O. Box 6998, Chicago, Illinois 60680.**

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POSITIONS OPEN

INSTITUTE OF BIOLOGY ODENSE UNIVERSITY DENMARK

A position at the assistant professor level is open for an **Invertebrate Neurobiologist**. The successful candidate should have research experience in morphology and/or physiology as related to behavior. The teaching responsibilities will lie mainly in the area of general physiology at the upper-division level, where English is acceptable. A curriculum vitae, including teaching experience, reprints of recent publications, and the names of referees, should be sent (preferably in triplicate) to: **The Administration, Odense University, Niels Bohrs Alle, DK-5000-Odense, Denmark**, no later than 1 October 1975. Further information can be obtained from **Professor Axel Michelsen, Institute of Biology**.

HEAD, DEPARTMENT OF BIOLOGICAL SCIENCES

The Department of Biological Sciences, University of Idaho, seeks a Head effective 1 July 1976. The department has 19 faculty members and responsibilities in teaching, research, and service appropriate to a publicly supported university. Candidates must have a Ph.D. in biology, botany, or zoology, a strong publication record, a dedication to excellence in teaching and continuing research, and successful administrative experience. Send qualifications including curriculum vitae and three letters of reference to: **Dr. A. W. Rourke, Department of Biological Sciences, University of Idaho, Moscow, Idaho 83843**.

The closing date is 16 October 1975 and may be extended until suitable applicant applies. *The University of Idaho is an EEO/AA Employer.*

HMO in greater Houston, opening Spring 1976, seeks well-qualified internists, pediatricians, obstetrician-gynecologists, and family practitioners. Primary care plus subspecialty capabilities preferred. Personal interview necessary, travel funds available. **The Community Health Association, P.O. Box 35746, Houston, Texas 77035. Telephone: 713-771-4326.**

HEMATOLOGIST OR GENETICIST: A research appointment is available for a hematologist or geneticist to conduct independent research on blood genetics in Kuala Lumpur, Malaysia, for a period of 2 years. Ph.D. or M.D. degree required. Travel and liberal overseas allowances. Send application with curriculum vitae and list of publications to **Dr. L. E. Lie-Injo, Hooper Foundation, University of California, San Francisco, Calif. 94143. An Affirmative Action/Equal Opportunity Employer.**

IMMUNOLOGIST

Full-time staff position for immunologist with Ph.D., or M.D. with postgraduate training or experience in tumor immunology. Excellent opportunity to do basic research in cellular immunity involving children with cancer and immune diseases. Make inquiry to: **Beatrice C. Lampkin, M.D., Director, Hematology-Oncology Division, Children's Hospital Medical Center, Cincinnati, Ohio 45229. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

BIOCHEMISTRY DEPARTMENT HEAD: The University of Mississippi Medical Center invites applications for the position of professor and chairperson of the Department of Biochemistry. The department teaches medical, dental, and graduate students and is involved in extensive research activities. Send a current curriculum vitae and the names of three referees to **Dr. William O. Berndt, Chairperson, Biochemistry Search Advisory Committee, Department of Pharmacology and Toxicology, University of Mississippi Medical Center, 2500 North State Street, Jackson, Miss. 39216**. Application deadline is 20 October 1975. *Equal Opportunity Employer, Male/Female.*

INHALATION TOXICOLOGIST

Position open for inhalation toxicologist to manage a rapidly expanding inhalation facility in the Pharmacology and Toxicology Section, Biological Sciences Division of Midwest Research Institute. Ph.D. or M.S. degree in pharmacology and at least 3 years of experience in the field of inhalation toxicology required.

Midwest Research offers a challenging professional environment based on technical achievement, in addition to competitive salaries plus an excellent benefit package.

Please send résumé detailing education, experience, and salary requirements to **Martin N. Schuler, Manager, Staff Development, Midwest Research Institute, 425 Volker Boulevard, Kansas City, Missouri 64110. An Equal Opportunity Employer, M/F.**

MANAGER, TOXICOLOGY MANAGER, ANALYTICAL BIOCHEMISTRY

Two important positions must be filled in a dynamic and fast-growing contract research organization in New Iberia, Louisiana. Prefer Ph.D. for each position. Toxicologist should have at least 3 years of experience in studies involving metals, pesticides, and other organics. Analytical biochemist must have research experience in pesticides, drugs, or carcinogens. Starting salary commensurate with education and experience. Excellent fringe benefits include 3 weeks of vacation annually, generous sick leave provisions, group life, hospitalization, and major medical insurance, and TIAA-CREF retirement program. Send résumé to **Personnel Manager, Gulf South Research Institute, 8000 GSRI Avenue, Baton Rouge, La. 70808. An Equal Opportunity Employer**

POSITIONS OPEN

MASS SPECTROSCOPIST—to operate and maintain computerized GC/MS system. Principal focus study is identification of hydrocarbons in the marine environment. Successful applicant will have the ability to design and evaluate experiments as well as ability to use instrumentation. Send résumé and three letters of recommendation to **Dr. D. G. Shaw, Institute of Marine Science, University of Alaska, Fairbanks, Alaska 99701. The University of Alaska is an Equal Employment Opportunity Employer.**

THE LABORATORY OF MOLECULAR BIOLOGY of the University of Alabama in Birmingham needs a faculty member. Ph.D. Biochemistry (molecular biology) to do research in molecular details of DNA repair, drug nucleic acid interactions, and mutagenesis and to direct activities of research assistants and graduate students. Minimum of 3 years of postdoctoral experience required with specific expertise related to drug nucleic acid interactions, mutagenesis, and DNA repair. Applicant must also display good communication skills. *An Equal Opportunity/Affirmative Action Employer.*

Dr. K. Lemone Yielding
Laboratory of Molecular Biology
University of Alabama in Birmingham
University Station
Birmingham, Alabama 35294

NEUROBIOLOGISTS

The Anatomy Department of the University of California, Los Angeles 90024, expects to have some postdoctoral research positions available during the next school year in the general area of neurobiology (for example, one for a person experienced in the Wiener technique of Gaussian white noise analysis as applied to neural systems, one to study the action of steroids and catecholamines in cell cultures of neurons and glia). Interested investigators should contact **Dr. Jose P. Segundo** and include curriculum vitae. *The University is an Equal Opportunity, Affirmative Action Employer, so candidates will be judged solely on the basis of their qualifications.*

PHYSIOLOGIST/CELL BIOLOGIST

Research position available for recent Ph.D. to work on physiologic and morphologic problems of epithelial transport. Send curriculum vitae and names of two references to: **Vincent A. DiScala, M.D., Chief, Renal Service, U.S. Public Health Service Hospital, Staten Island, New York 10304.**

MEDICAL MICROBIOLOGIST INDIA

Attractive opportunity for Medical Microbiologist, preferably with hospital diagnostic experience, for Research Centre in India. Research experience in pathogenic bacteriology and chemotherapy/resistance problems desirable; applied medical microbiologist (M.D. or D.V.M.) preferred.

Send résumé to: **Dr. R. Singh Grewal, CIBA-GEIGY Research Centre, Goregaon East, P.O. Bag 9002, Bombay 400063, India. An equal opportunity employer/male and female.**

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New York 11973**

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Department in large midwestern university has several openings in **ONCOLOGY RESEARCH PROGRAM**. Interested in persons with expertise in antigen isolation and characterization, enzymology, and tumor immunology. Appointments will be commensurate with experience at either postdoctoral or faculty level. **Box 374, SCIENCE.**

The Genetics-Cell Biology Group in the Department of Microbiology at the University of Alabama Medical Center has a position available at the assistant professor rank for a **MOLECULAR BIOLOGIST-GENETICIST** interested in prokaryotic or lower eukaryotic systems. Individuals applying should be committed to a productive research career and have aptitude and interest in a moderate amount of teaching of graduate, medical, and dental students in general area of individual's competence and interests. Send letter indicating current and future research interests and curriculum vitae and arrange for three letters of reference to be sent to **Roy Curtiss III, Department of Microbiology, Box 11 DB, University of Alabama Medical Center, Birmingham, Alabama 35294. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS

Available immediately—Positions for NIH-supported postdoctoral training and research in genetic diseases of animals. Individuals seriously desiring training for research careers in the study of the biochemical and pathological mechanisms of genetic disorders are being recruited.

D.V.M., M.D., or Ph.D.

Stipend \$10,000 to \$12,000, depending upon experience. Review will begin 15 September 1975; however, applications are invited throughout the year.

Send letter of inquiry, transcripts, three references, and curriculum vitae to: **Dr. Gerald A. Hegreberg, Department of Veterinary Pathology, Washington State University, Pullman, Washington 99163.**

Washington State University is an Equal Opportunity/Affirmative Action Employer and women and members of minority groups are encouraged to contact us.

POSITIONS OPEN

POSTDOCTORAL RESEARCH

Applications are invited for a position involving studies on immunological aspects of solid cancers. Experience in cellular immunology required. Some biochemical background desirable. Excellent salary. Send curriculum vitae and names and addresses of three persons familiar with your work to **Box 362, SCIENCE.**

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POSTDOCTORAL RESEARCH POSITION

Biochemist, preferably with experience in histone fractionation, to work with group investigating early events in implantation. Position available now. Salary \$12,000. Send curriculum vitae and names of three references to **Dr. B. Baggett, Department of Biochemistry, Medical University of South Carolina, 80 Barre Street, Charleston, South Carolina 29401. Qualified women and minority group members are encouraged to apply.**

POSTDOCTORAL TRAINEESHIPS IN MOLECULAR, CELLULAR, AND MEDICAL GENETICS

Rapidly developing multidisciplinary program in genetics and biochemistry invites applications from highly qualified recent Ph.D.'s, M.D.'s, D.M.D.'s, and D.V.M.'s who are U.S. citizens and interested in postdoctoral training. Major areas of research (and faculty) include: animal viral genetics (Hunter), microbial and molecular genetics (Curtiss, Frazer), cellular differentiation and immune deficiency diseases (Cooper, Johnston, Lawton), connective tissue biochemistry and genetic disorders (Miller, Rodén, Segrest), immunogenetics and cell membranes (Bennett, Acton, Segrest, Stroud), mammalian cell genetics (Roozen), pterin metabolism and disorders (Shiota), and medical genetics including cytogenetics, enzyme defects, and genetic counseling (W. Finley, S. Finley, Thompson). Send curriculum vitae, three letters of recommendation, and a summary of research interests or write for more information to: **Dr. Roy Curtiss III, Department of Microbiology, Box 11 DB, University of Alabama Medical Center, Birmingham, Alabama 35294. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

MICROBIOLOGIST/BIOCHEMIST. Grant-supported position for Ph.D. with experience in microbial genetics—nucleic acid chemistry to participate in a study of regulatory mechanisms in *Bacillus* phage replication. Starting salary \$10,000 to \$13,000 depending on experience. Send curriculum vitae to **Dr. A. Garro, Department of Microbiology, Mount Sinai School of Medicine, 100th Street and Fifth Avenue, New York, N.Y. 10029. An Equal Opportunity/Affirmative Action Employer.**

RUSH-PRESBYTERIAN-ST. LUKE'S MEDICAL CENTER

PHYSICIST—Diagnostic radiology in Presbyterian-St. Luke's Hospital. Teaching of medical staff and residents. Safety control and monitoring. Operational quality control, research and development of diagnostic radiology, including computed body tomography. *Rush University is an Affirmative Action/Equal Opportunity Employer.* **Box 375, SCIENCE.**

POSTDOCTORAL RESEARCH POSITIONS. Applications are invited from recent Ph.D.'s in chemistry, biochemistry, or biology who are interested in starting postdoctoral studies in different areas of biochemistry, biophysical chemistry, and molecular biology during the 1975-76 academic year. Send inquiries to **Head, Department of Biochemistry, University of Minnesota, St. Paul, Minn. 55108. An Equal Opportunity Employer.**

POSTDOCTORAL TRAINING IN DEVELOPMENTAL NEUROSCIENCES at Harvard Medical School and Children's Hospital Medical Center. Basic research in biochemistry, anatomy, pathology, genetics, immunology, pharmacology, and physiology of neural development with a multidisciplinary emphasis. A number of NINDS fellowships are open to U.S. citizens or permanent residents holding doctoral degrees. Descriptive brochure may be obtained from the program director, **M. L. Shelanski, Department of Neurosciences, Children's Hospital, 300 Longwood Ave., Boston, Mass. 02115.**

energy

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Edited by and with an introduction by Philip H. Abelson. AAAS is pleased to announce the availability of a collection of enduring and readable articles, designed to help the individual seeking to understand and cope with the energy problems we face. The articles, which originally appeared in *Science* during 1973-1974, provide a wealth of information on energy problems as they affect and are affected by people and institutions, by existing and potential resources, and by developing technology.

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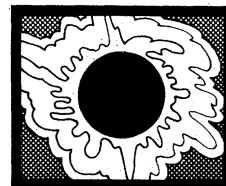
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POSITIONS OPEN

POSITION AVAILABLE IMMEDIATELY: Assistant Director of Erie County Laboratory, Public Health Division, Buffalo, New York (\$20,316 to \$25,288). Faculty appointment in the Department of Microbiology, School of Medicine, State University of New York at Buffalo, at the rank of Assistant or Associate Professor negotiable. M.D., Ph.D., or equivalent with extensive postdoctoral training. Expertise in medical microbiology and serology, experience in public health laboratory problems. Should assist the director in the administration of the Public Health Laboratory, supervise performance of laboratory procedures, participate in teaching, and conduct and encourage research activities. Address inquiries, including curriculum vitae and letters of recommendation, to: **Dr. Felix Milgrom, Professor and Chairman, Department of Microbiology, 203 Sherman Hall, State University of New York at Buffalo, Buffalo, N.Y. 14214.** *Erie County Laboratory is an Equal Opportunity/Affirmative Action Employer.*

CSIRO DIVISION OF COMPUTING RESEARCH CANBERRA, A.C.T. RESEARCH SCIENTIST

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 6500 employees, 2100 of whom are research and professional scientists, located in Divisions and Sections throughout Australia.

Field: Computer Simulation of Biological Systems.

General: A biologist is required to work in the Division's simulation group which is concerned with the modelling of complex systems which may have physical, biological, and socioeconomic components. Projects of biological interest include insect and parasite control, plant and animal growth, and aquatic and terrestrial ecosystems. Such projects are carried out in close collaboration with staff of other Divisions of CSIRO in Canberra and elsewhere. The group aims to build up multidisciplinary capabilities and already has expertise in computing, systems theory, and the physical sciences, together with some experience in biological modelling.

The Division's research staff in Canberra are located in close proximity to several of the major biological divisions of CSIRO and to the Research School of Biological Sciences of the Australian National University. The appointee will have opportunities for close contact with biological scientists and modelling groups throughout Australia.

Other groups in the Division are working in the fields of operating systems, data-base management, picture analysis, and numerical taxonomy. Research interests of the simulation group include programming languages, numerical methods, and the general methodology of modelling.

The Division also provides a consulting service to the other divisions covering all aspects of computer use including data collection, numerical analysis, and simulation techniques. It has branches in all states and a number of its branch consultants also specialize in simulation and cooperate with the simulation group.

The Division has a Control Data Cyber-76 computer with a capacity and expansion potential that provide an unsurpassed tool for research and development projects. A rapidly expanding network of mini-computers and terminals enables scientists in CSIRO laboratories throughout Australia to use the central facilities for either batch or interactive computing. It also functions as a communications network to facilitate sharing of data and cooperative development of programs.

Duties: (i) Computer modelling and simulation of biological systems. (ii) Collaboration with other scientists in modelling complex systems and developing the computing tools for such modelling.

Qualifications: A Ph.D. degree in an appropriate biological field or equivalent qualifications together with demonstrable research ability. Considerable computational skill and ability to develop computer models would be an advantage.

Salary: The appointment will be made within the salary ranges of Research Scientist or Senior Research Scientist: \$A11,653 to \$A17,257 per annum.

Tenure: The position is available for an indefinite period and Australian Government Superannuation benefits are available subject to normal conditions.

Applications stating full personal and professional details, the names of at least two referees, and quoting reference No. 900/276, should reach:

**The Chief
Division of Computing Research, CSIRO
P.O. Box 1800
Canberra City, A.C.T. 2601 Australia**

by 1 September 1975.

POSITIONS OPEN

HEAD OF DEPARTMENT OF OCEANOGRAPHY AND OCEAN ENGINEERING

Starting date as soon as possible. The department offers programs leading to the B.S. degree in oceanography or ocean engineering and the M.S. and Ph.D. degree in bioenvironmental, chemical, and physical oceanography. Candidates should have an established professional background in oceanography or ocean engineering. Send résumé to:

**Dr. Pieter S. Dubbelday, Chairman, Search Committee
Department of Oceanography and Ocean Engineering
Florida Institute of Technology
Melbourne, Florida 32901**

REPRODUCTIVE BIOLOGIST

San Francisco Bay Area

We seek a Ph.D. in Reproductive Biology for a 2-year and 9-month postdoctoral fellowship for a project in ultrasonic irradiation. Candidates should have experience in ultrastructural research and be available in the very near future. Our laboratory is equipped with a Phillips 200 electron microscope and all support equipment. Please send curriculum vitae, transcripts, publication list, and three letters of recommendation to:

**Mrs. H. S. Wherry
Personnel Coordinator
SRI, 333 Ravenswood Ave.
Menlo Park
California 94025**

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INTERNATIONAL WHALING COMMISSION APPOINTMENT OF SECRETARY

A senior biological scientist with administrative ability is required to fill the post of full-time Secretary for the International Whaling Commission. The Commission's office will be at Cambridge, England.

The Secretary will be responsible for the administration of the Commission's work and for the promotion of scientific programs relating to its responsibilities. He will encourage and help to coordinate scientific studies and investigation of cetaceans, particularly the large whales, by member nations and by other nations and agencies. In particular the Secretary will assemble and assist in the assessment of scientific and statistical data and will work closely with the Scientific Committee of the Commission. He will edit scientific reports for publication and will represent the Commission at international meetings.

The administrative duties of the Secretary will include the preparation of the annual budget, the drafting of the annual report and of the regulations made by the Commission under the International Whaling Convention, and arranging all meetings of the Commission and its Committees. He will be assisted by a small staff including an executive officer. Candidates must hold a degree in a biological science and have experience and proven ability in administration. Knowledge and preferably practices in the acquisition, storage, and retrieval of biological data would be an advantage as would experience in other fisheries ecological and wildlife research. A good knowledge of English is essential. Salary will be within the range of £10,000 to £12,000 per annum (about \$25,000), after taxes.

Further information may be obtained from:

**Dr. William Aron
Director, Office of Environment and Ecology
National Oceanic and Atmospheric Administration
Department of Commerce
Washington, D.C. 20230
Telephone: 202-967-5181**

Applications containing full details of qualifications and experience and the names and addresses of two referees should be sent to:

**Mr. R. Stacey
International Whaling Commission
Room 276
Great Westminster House
Horseferry Road
London SW1P 2AE, England**

Applications must arrive not later than 30 September 1975.

POSITIONS OPEN

POSTDOCTORAL—PSYCHOBIOLOGY

Teaching-research position (\$10,000) starting 15 September 1975 for recent Ph.D. in physiological psychology with primary teaching and research interests in the neurochemical analysis of motivational processes or related areas. The position entails teaching several undergraduate courses in experimental psychology and research in the neural basis of motivation or area of interest. Send curriculum vitae and three letters of recommendation to **Dr. Jaak Panksepp, Department of Psychology, Bowling Green State University, Bowling Green, Ohio 43403.**

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PROFESSOR AND DIRECTOR OF SURGERY

The Charleston Division of the West Virginia University Medical Center is accepting applications for the position of Professor and Director of Surgery. Applicants must be interested in medical students, house staff, and other health professional training and education. Qualified and interested applicants should contact: **Hartwell G. Thompson, M.D., Dean, Charleston Division, West Virginia University Medical Center, P.O. Box 2867, Charleston, West Virginia 25330.** *An Equal Opportunity/Affirmative Action Employer.*

SUPERVISORY PHYSICAL SCIENTIST Career Civil Service, GS-16

Manages laboratory group in atmospheric, oceanologic, and hydrologic research and development in satellite activities for observing the earth.

Must have B.S. or higher in physical science or engineering and 3 years of broad professional experience in satellite remote sensing research or technology; proven scientific administrative ability; good knowledge of atmospheric radiative transfer and spectroscopy, instrument development, and data processing.

Salary \$34,607 to \$36,000. Send Standard Form 171 by 30 September 1975 to: **U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Attention: AD412: ws, 3300 Whitehaven Street, NW, Page Building #2, Washington, D.C. 20235.**

Equal Opportunity Employer

FELLOWSHIPS

BIOCHEMISTRY POSTDOCTORAL FELLOWSHIPS: Available immediately. Fields of study: enzymic degradation of polysaccharides; synthesis of carbohydrate-protein conjugates; naturally occurring enzyme inhibitors. Salary about \$9500. Applications with curriculum vitae and references to **Dr. J. J. Marshall, Department of Biochemistry, University of Miami, P.O. Box 520875, Miami, Fla. 33152.**

POSTDOCTORAL FELLOWSHIPS

Two (2) NRSA postdoctoral fellowships available in vision research. Appointments could begin August 1975 to June 1976. Preference given to candidates with a strong background in biochemistry, developmental biology, electron microscopy, or neurobiology. Two-year appointment, \$10,000 per annum. Send statement of background and research interest with three references to:

**Dr. Gunter K. von Noorden
Department of Ophthalmology
Baylor College of Medicine
Houston, Texas 77025**

PROGRAMS

POSTDOCTORAL TRAINING PROGRAM IN TUMOR BIOLOGY at the University of Iowa for those desiring a broadly based training in the following areas of tumor biology: (i) cell transformation and membrane function, (ii) information transfer to the nucleus from extracellular signals, (iii) structure of the replicative chromosome and its loss of replicative control, (iv) inhibition of DNA synthesis and chemotherapy, and (v) studies of tumor cell metabolism. Trainees may work in the area of their choice, however if they wish to gain additional experience or exposure in other areas they will be encouraged to do so.

Fellowships are available immediately, and also beginning 1 July 1976. Candidates who hold an M.D. or Ph.D. degree and are U.S. citizens or permanent residents should address inquiries to: **Roger Chalkley, Department of Biochemistry, University of Iowa, Iowa City, Iowa 52242.**

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UNIVERSITY OF PAPUA

NEW GUINEA (PORT MORESBY)

Applications are invited for 2 posts of SENIOR TECHNICIANS IN HUMAN BIOLOGY. The Department of Human Biology is responsible for teaching medical, dental and some paramedical students. Disciplines taught within this department include Anatomy, Histology, Biochemistry, Physiology, Pharmacology, Genetics and Nutrition. Varied research programmes are being carried out. There are 11 established technical positions responsible to a Chief Technician. All technical positions other than these advertised are already localised. Applicants will be expected to have experience in training more junior staff as this will be a prime part of their duties. While candidates may have their basic training in any of the disciplines forming the Department of Human Biology, preference may be given to those with particular skills in the fields of Physiology, Pharmacology, Histology or Electronics. It is however, hoped that the appointees will have broad technical skills and interests beyond their particular speciality. Salary scale: K8,035-K10,109 p.a. (£1 sterling = K1.65). In addition an allowance of K1,300 p.a. if single is payable. An extra K1,000 Marriage Allowance and K156 per Child Allowance may also be payable. Conditions include provision of housing, study leave, annual leave fares, FSSU type superannuation. In some cases it may be possible to make an appointment on secondment. Applications should be in duplicate and include a curriculum vitae, the names and addresses of three referees, a recent small photograph and an indication of estimated starting date. Further details and the conditions of appointment are available from The Secretary, PO Box 4820, University Papua New Guinea. Applications close on 5th September 1975. Late applications will be accepted from readers of this journal.

Director

Institute of Hearing Research

The Council have resolved to take a major initiative in developing research in hearing. The aim of the Institute is to provide a base for staff and facilities for a major multi-disciplinary research effort in this field and to provide a national centre for the co-ordination and initiation of research in deafness. A major part of the research effort will be in the areas identified by their expert Sub-committees on Deafness, particularly the epidemiology and systematic clinical characterisation of deafness and the rehabilitation of the deaf. It is expected that the field research will need to be conducted on a multi-centre basis and hence there will be outstations as an integral part of the institute. The institute will be funded, at least in part, under the new arrangements for commissioning research by the Health Departments who will also be responsible for providing the necessary Health Service facilities.

The person appointed as Director must have an established reputation as a scientific investigator in his own specialist field, and evident ability to manage a research team, as he would be expected to develop the institute's research programme in addition to his own personal research, for which he would have facilities in the headquarters building of the institute. Initially a major part of the programme would concern the setting up of multi-centre clinical studies and rehabilitation research. He need not necessarily be medically qualified, but will be required to establish collaborative links with clinicians. The location of the director will be a matter for negotiation in the light of the director's research interests and the need to organise studies at several centres. When the director has been appointed and his location agreed, negotiations will be opened with the appropriate university for the establishment of a Chair in Hearing Research. If the director's work makes it possible for him to hold an Honorary Clinical Contract, and this is awarded at Consultant level, he will be paid on the MRC Clinical Scale equivalent to the NHS Consultant Grade (max. at present £10,689 per annum, or \$23,355.46). If the holding of a Clinical Contract is not appropriate, the director will be paid at MRC non-clinical rates at a suitable point in the range of up to £8,121 (\$17,744.38) per annum (which is under active review). Superannuation provision under the MRC Pension Scheme.

Applications should be submitted no later than 30th September 1975 in the form of a statement not exceeding 2000 words outlining in general terms the scientific programme that the applicant would wish to undertake, and indicating the type of staff and facilities he would require, together with a curriculum vitae and list of publications, to the Secretary, Medical Research Council, 20 Park Crescent, London W1N 4AL. Applicants should write for further particulars, including the Report of the Sub-Committee on Deafness, to the same address.

MRC

Medical Research Council

About poisons ...and quick response.

The siren stops and here is the patient. Now what?

Heroic measures may be called for. Maybe the heroic measures are more threatening than the putative poison. Sirens often scream for naught. Young parents often panic.

Aside from the myriads of useful products that can do grave mischief in the living body, the world offers a confusing profusion of red berries, banded snakes, and white-stemmed mushrooms.

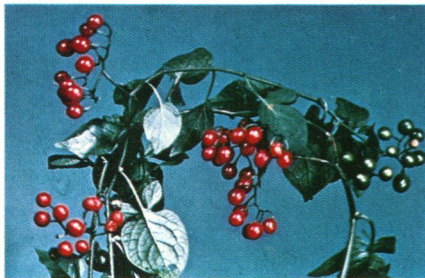
To guide emergency departments and poison control centers, there is now available a huge compendium of toxicological data on some hundred thousand labeled products for home, factory, farm, office, and other environments. It is on microfiche—sheets of film about the size of an index card, each bearing many images for reading on a screen. On paper that much information becomes scarcely practical for quick use, to say nothing of cost. As for the unlabeled perils of nature, photographs in color microfiche of our manufacture lead into words that lead to local consultants with taxonomic knowledge to tell them from non-perils. As can be seen below, it is not always easy for an emergency department medical staff to draw the distinction from photographs alone.

The awesome task of editing this compendium has been taken on at Denver General Hospital and the University of Colorado Medical Center by a team under Dr. Barry Rumack who also lead busy lives as clinicians, as do contributing editors across the country. They need all the help they can get, not only from manufacturers as they reformulate their products but from professional and amateur naturalists and from users of the compendium who want to make it more useful. Quick response to such input is easier when there is no need for cumbersome shuffling of supplements between infrequent book editions. Replacement microfiche—corrected, amplified, updated, improved—can move out to subscribers by first-class mail throughout the year.

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Bad business



Solanum dulcamara

J. Hardin



Micrurus fulvius fulvius

F. Russell



Amanita phalloides

D. Simons

Not so bad



Viburnum opulus

P. Trail



Lampropeltis dolia annulata

R. Cooper



Amanita caesarea

W. Kimbrough

