

Personnel Placement

Only those employers and individuals who do not discriminate on the basis of race, sex, religion, age, color, or national origin should submit Personnel Placement advertising.

POSITIONS WANTED: 40¢ per word; use of Box Number counts as 10 additional words. Minimum charge \$10. Prepayment required. This rate applies to individuals only; personnel agencies, companies, colleges, and universities take display rate for all advertising.

DISPLAY (POSITIONS OPEN, MARKET PLACE, AND SO FORTH): \$130 per inch, minimum, per insertion (1 inch is equivalent to 11 lines of 52 spaces each). Ads over 1 inch billed to nearest quarter inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information must accompany all other advertising.

COPY for ads must reach SCIENCE by Wednesday, 3-½ weeks before issue date (Friday of each week) requested. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207
1515 Massachusetts Ave., NW
Washington, D.C. 20005

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

Scherago Associates, Inc.
11 West 42nd Street
New York, N.Y. 10036

BLIND AD replies should be addressed as follows:

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

POSITIONS WANTED

Analytical Chemist, M.S. 1972. Varied experience in marine science, toxicology, teaching. Familiar with most analytical techniques and procedures aboard an oceanographic vessel. Seeks position in marine science, anywhere. Box 102, SCIENCE. X

Anatomist. Desires visiting position teaching gross anatomy, neuroanatomy, or both, to medical, dental, or graduate students. Sixteen years of experience. Box 103, SCIENCE. X

Biochemist (Ph.D.), enzymology, glycoproteins, carbohydrates, plant enzymes, organic chemistry. Creative, adaptable, publications. Seeks industrial, private research position. Dr. W. Frankart, 13241 Fairmont Way, Santa Ana, California 92705. Telephone: 714-832-5671. X

Bioengineer. B.S.E.E., physiology Ph.D. (1974). Seeks teaching/research position. Teaching and postdoctoral experience. Published. Box 104, SCIENCE. X

Biologist, Ph.D. Purdue 1961, postdoctoral BNL, teaching at NYU and Notre Dame, grants, awards, publications, overseas research experience (Europe/Australia). Expertise in plant sciences, cellular/molecular botany, plant ecology, genetics, breeding, nematology, basic and applied. Returning to United States in June, seeking position in Northeast or East Coast area. Please contact Dr. J. A. M. Brown, c/o W. Shields, 9 Julio Street, Chelmsford, Massachusetts 01824. X

Biologist, M.S. Twelve years of teaching experience, advanced secondary. Five years of experience in forensic toxicology and drug screening. Prefers Pacific Northwest. Box 105, SCIENCE. X

Chemist, Ph.D. Returning from abroad, 25 years of industrial experience in basic and applied research, seeking senior-level bench or administrative research activity. Publications in organic synthesis, detergents, tobacco, carbohydrates, environmental sciences. Languages. Prefers Chicago area. Box 106, SCIENCE. X

POSITIONS WANTED

Chemist, Ph.D. Experienced in carbohydrates, isotopes, glycolipids, glycoproteins, organic synthesis, enzymes, instrumental analysis. Publications. Seeks research or supervisory position. Box 107, SCIENCE. X

Chemist/Biochemist, Ph.D. Experience in inorganic synthesis, high-temperature/high-pressure diffraction, different chemical instruments, protein chemistry, x-ray diffraction methods to biological molecules. Many publications. Seeks development, research, and teaching position in industry, hospital, college, university. Box 108, SCIENCE. X

Electron Microscopist-Toxicologist-Morphologist (Ph.D.): interested in toxicity and safety studies on therapeutic and industrial products. Experience, publications. Box 99, SCIENCE. 3/5, 19

Hospital Scientist, medical technology-research. B.A. Wells 1963. Four years of experience in Australia, biochemistry, microbiology, hematology, serology, modern laboratory. Returning to United States in June, seeking post in Northeast or East Coast area. Please contact C. M. S. Brown, c/o W. Shields, 9 Julio Street, Chelmsford, Massachusetts 01824. X

Immunologist, Ph.D., desires research and/or teaching position. Over 20 years of experience, many publications and honors. Box 109, SCIENCE. 3/5, 12

Invertebrate Ecologist, Ph.D. 1975. Seeks postdoctoral research position studying soil or litter organisms. Experience with mollusks, but interested in any higher invertebrates. Box 110, SCIENCE. X

Limnologist/Aquatic Ecologist, Ph.D., University of Michigan, 1971. Two years of Great Lakes research experience; also teaching, free-lance consulting. Thirteen publications. Federal service eligibility current. Seeks research position with nonprofit organization. Box 111, SCIENCE. X

Physical Chemist, Ph.D., lab manager. Solid background in electron microscopy, x-ray diffraction, analytical chemistry, management, and teaching. Extensive experience in research from materials to life sciences; numerous publications. Seeks challenging position at senior faculty/lab director level in university, research institute, or industry. Box 112, SCIENCE. X

Physiologist/Endocrinologist, certified internist, seeks research/academic position. Extensive teaching, clinical experience; recent research: metabolism in circulatory shock; lipogenesis studies. Box 113, SCIENCE. X

Physiologist, Ph.D. (cardiovascular/pulmonary). Extensive teaching and research experience, established medical physiology course. Cardiac output measurement, blood oxygenation, regulation of respiration, computer programming. Seeks research and/or teaching position. Box 114, SCIENCE. 3/5, 12

Scientific and Technical Translations, German, French, by engineer with ATA accreditation; background in physics, electronics, aerodynamics research. Box 115, SCIENCE. 3/5, 19

POSITIONS OPEN

Two positions in **ANATOMY** with rank possibly to associate professor, open as of 1 July 1976. Ph.D. and/or M.D. required. Applicants should be proficient in teaching both medical gross and microscopic anatomy. Independent and/or collaborative research is expected. Qualified candidates should send curriculum vitae and three letters of recommendation to:

Anthony J. Schmidt, Ph.D.
Chairman, Department of Anatomy
Rush Medical College
1725 West Harrison Street
Chicago, Illinois 60612

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

POSITIONS OPEN

LABORATORIES OF PSYCHOPHYSIOLOGY AND NEUROPHYSIOLOGY Hadassah University Hospital, Jerusalem

The Department of Neurology is looking for competent academic researchers: (i) **human neuropsychologist and/or psychophysiologist** with special emphasis on cognitive and perceptual processes, (ii) **neurophysiologist** experienced in microelectrode techniques and computer analysis. Apply to **Shaul Feldman, M.D., Head, Department of Neurology, Hadassah University Hospital, Jerusalem, Israel.**

ANIMAL BEHAVIOR

A 1-year, nonrenewable, teaching position is available to replace a faculty member on leave. Teaching duties will include a contribution to a year-long introductory biology course and full responsibility for one-semester courses in animal behavior and animal behavior laboratory.

Send curriculum vitae, reprints, and three letters of recommendation by 31 March 1976 to: **Benjamin Dane, Department of Biology, Tufts University, Medford, Mass. 02155.**

Tufts University is an Equal Opportunity/Affirmative Action Employer. Applications from minority group members and women are encouraged.

DEPARTMENT OF ENTOMOLOGY UNIVERSITY OF CALIFORNIA, RIVERSIDE

A full-time position at the level of **assistant entomologist and assistant professor** will be available 1 July 1976. Duties will involve: basic and applied investigations in biology of pest insects and the selective use of insecticides in floriculture, nursery stock, and turf; supervision of graduate students; and some course instruction. Ph.D. required with broad training in applied entomology, botany, ecology, insect toxicology, and statistics. Closing date for applications is 1 May 1976. Send résumé, names of five referees, transcripts of undergraduate and graduate work, and a list of publications and manuscripts in press to: **L. R. Brown, Search Committee Chairman, Department of Entomology, University of California, Riverside, California 92502.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

Applications are invited for three positions as **ASSISTANT PROFESSOR** to begin 1 July 1976, in the Department of Anesthesiology, University of North Carolina. Candidates should be Board-eligible or -certified. Duties involve teaching medical students, residents, and fellows in addition to clinical duties. Facilities and time available for research. Send curriculum vitae to **Kenneth Sugioka, M.D., Chairman, Department of Anesthesiology, School of Medicine, The University of North Carolina, Chapel Hill, North Carolina 27514.** *An Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR—ANATOMY

The University of Wisconsin, Anatomy Department, is seeking qualified anatomists to fill positions in the group responsible for teaching gross human anatomy to allied health and medical students. Necessary qualifications for these positions include a positive long-term commitment to teaching gross human anatomy, a major involvement in research, and interest in training Ph.D. candidates. Interested and qualified persons are invited to correspond directly with: **Professor David B. Slautterback, Anatomy Department, 1255 Linden Drive, University of Wisconsin, Madison, Wisconsin 53706.**

*An Equal Employment Educational Institution
Title IX/Title VI*

Position open for **ASSISTANT PROFESSOR IN GENETICS**, available August 1976. Applicant must have demonstrated excellence in research, at the postdoctoral level, in genetics or molecular biology. Teaching responsibilities: undergraduate genetics lecture course one semester; graduate course the other semester. Submit curriculum vitae, reprints, plans for future independent research program, and the names of three qualified references to:

Dr. David Shub
Chairman, Genetics Search Committee
Department of Biological Sciences
State University of New York at Albany
Albany, New York 12222

An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

ASSISTANT PROFESSOR OF ANATOMY in residence; codirector, Electron Microscope Cooperative Facility, University of California Liver Center. Applicant must hold doctoral degree and have had experience in electron microscope morphometry and liver perfusion techniques. Prior experience in hepatic aging, drug and lipid metabolism essential. Send summary of research experience, list of publications, and names of three referees by 19 March 1976 to **Dr. John A. Long, Department of Anatomy, University of California, San Francisco, California 94143.**

ASSISTANT/ASSOCIATE PROFESSOR OF ENVIRONMENTAL HEALTH. Opportunity for graduate-level teaching and research in industrial hygiene in the Department of Environmental Health, University of Cincinnati. Applicant should have an engineering background and an advanced degree. Industrial Hygiene Board certification is desirable. Send curriculum vitae, bibliography, reference names, and description of experience and research interests to: **Dr. Bernard E. Saltzman, Kettering Laboratory, Cincinnati, Ohio 45267. Telephone: 513-872-5709. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR/HORTICULTURE North Willamette Experiment Station, Oregon State University. Vegetable Research. Salary \$16,000. Twelve-month appointment. *Qualified women and minorities encouraged.* Closing date for applying is 10 April 1976. Write **Lloyd W. Martin, Superintendent, North Willamette Experiment Station, Route 2, Box 600, Aurora, Oregon 97002.**

ASSISTANT PROFESSOR OF MOLECULAR BIOLOGY sought for September 1976. Must teach basic genetics and advanced courses in areas of specialization to undergraduates, direct graduate students, and conduct active research program. Ph.D. required, postdoctoral experience preferred. Apply to **R. F. Nunemacher, Chairman, Department of Biology, Clark University, Worcester, Mass. 01610. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR OF PHARMACOLOGY. An immediate opening is available for a faculty member in an established research-oriented department. Applicant must have a Ph.D. and/or M.D. with postdoctoral experience, and demonstrated research competence. Research interests in biochemical pharmacology, toxicology, or clinical pharmacology preferred. The successful applicant will be expected to develop an independent research program and participate in the teaching of medical and graduate students.

Applicants should send a curriculum vitae, bibliography, and names of three references, together with a summary of research plans, to: **Chairman, Department of Pharmacology, University of Illinois at the Medical Center, P.O. Box 6998, Chicago, Illinois 60680. An Equal Opportunity/Affirmative Action Employer**

ASSISTANT PROFESSOR OF PLANT PHYSIOLOGY

Position available September 1976. Initial duties will be primarily undergraduate teaching and to develop an agriculturally oriented research program in mineral nutrition, ion transport, nitrogen fixation, or another area compatible with departmental programs. Applications accepted through 20 April 1976. Applicants (Ph.D. required) should send curriculum vitae and three letters of reference to: **Dr. R. J. Newton, Chairman of Search Committee, Department of Plant Sciences, Texas A & M University, College Station, Texas 77843. An Equal Opportunity/Affirmative Action Employer.**

BIOCHEMIST/CELL BIOLOGIST

Available September 1976: teaching position in joint biology-chemistry appointment. Primary duties include teaching introductory, one-semester biochemistry course and participating in team-taught cell biology and undergraduate chemistry courses. New, well-equipped building offers excellent facilities for research. Successful candidate should have commitment to excellence in teaching and ability to develop and pursue an independent research interest. Ph.D., with teaching experience preferred. Letters of application, curriculum vitae, and three letters of recommendation should be sent to: **Dean Dorothy Mulberry, Mary Baldwin College, Staunton, Virginia 24401. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

BIOENGINEERING

The bioengineering program at Texas A & M University expects to add one or more faculty members at the assistant professor level beginning August 1976. Individuals are sought with a research emphasis in one of the following areas:

- (i) Clinical Engineering
- (ii) Medical Device Development
- (iii) Food Engineering

Applicants should send a résumé including the names of references to

**Head, Division of Bioengineering
Texas A & M University
College Station, Texas 77843**

An Equal Opportunity/Affirmative Action Employer

DEPARTMENT OF BIOLOGY UNIVERSITY OF ROCHESTER

Junior or senior faculty position(s) to begin September 1976 or January 1977. The Department is seeking a molecular biologist. Persons working in a variety of areas including plant molecular biology, molecular aspects of development, animal cell virology, nucleic acid sequencing, protein-nucleic acid interactions, or membrane chemistry would be suitable. Applicants must be of exceptional quality with proven ability to carry out research in their field. Faculty are expected to take an active role in undergraduate and graduate education. Interested persons should send a curriculum vitae and a brief statement of current research interests and have three letters of recommendation sent to: **Faculty Search Committee, Department of Biology, University of Rochester, Rochester, New York 14627. An Equal Opportunity/Affirmative Action Employer**

DEPARTMENT OF BIOLOGY UNIVERSITY OF ROCHESTER

The Department of Biology at the University of Rochester invites applications for a new faculty position. Specialties of interest are:

- 1) Theoretical population genetics or population biology;
- 2) Genetics of eukaryotic organisms.

Rank and salary for the appointment are open. Applications should be addressed to: **Faculty Search Committee, Department of Biology, University of Rochester, Rochester, New York 14627.**

An Equal Opportunity/Affirmative Action Employer

CARDIOVASCULAR OR RESPIRATORY PHYSIOLOGIST. Applications are invited from mammalian cardiorespiratory physiologists with the Ph.D. and/or M.D. degree for appointment to a faculty position as an assistant or associate professor. Applicants should have a proven research ability and teaching experience at undergraduate and graduate levels. A curriculum vitae including a complete list of publications and the names of three referees should be sent to **Dr. D. B. Jennings, Chairman of the Selection Committee, Department of Physiology, Queen's University, Kingston, Ontario, Canada, K7L 3N6.**

CELL BIOLOGY

Faculty position in Human Genetics Research Laboratory for mammalian geneticist, cellular immunologist, or tumor biologist. Research experience in one of these areas or in general cell biology to work on projects concerned with carcinogenesis, cellular immunology, and/or autoimmunity. Rank and salary dependent on qualifications. Send curriculum vitae and bibliography to: **Dr. Philip J. Fialkow, Division of Medical Genetics, Department of Medicine, University of Washington, Seattle, Washington 98195. Equal Opportunity Employer.**

CELL/DEVELOPMENTAL BIOLOGIST. The Department of Anatomy is seeking applicants at the level of instructor or assistant professor with background and interest in cell/developmental biology, preferably with a cytogenetic molecular approach. Applicants will have the opportunity to develop their own research programs and/or participate in ongoing departmental research and will be expected eventually to join in the teaching of cell biology and microscopic anatomy to medical students, and establish an association with graduate students. Send curriculum vitae and names of three references to **Dr. Roy C. Swan, Department of Anatomy, Cornell University Medical College, 1300 York Avenue, New York, N.Y. 10021. An Equal Opportunity Employer, M/F.**

POSITIONS OPEN

BIOCHEMIST. Mayo Foundation seeks a Ph.D. or M.D. trained in biochemistry, interested in developing a research program in lung biochemistry. Prior research training in lung biochemistry desirable. Postdoctoral or junior faculty position available. Send curriculum vitae, bibliography, names of three referees, and letter detailing interests to **Box 116, SCIENCE, Mayo Foundation is an Equal Opportunity/Affirmative Action Employer.**

BIOLOGIST—CLAREMONT COLLEGES

Assistant professor beginning 1 January 1977 (possibly 1 September 1976). Teaching duties include: general physiology with genetics or biochemistry desirable, plus introductory-level teaching. Research encouraged. Small liberal arts colleges. Application deadline: 15 April 1976.

Send statement of interests, curriculum vitae, and letters of recommendation to: **Dr. David Sadava, Joint Science Department, The Claremont Colleges, Claremont, California 91711.**

An Equal Opportunity/Affirmative Action Employer

BIOLOGY CHAIRMAN

The College of Arts and Sciences at Creighton University invites applications or nominations for the position of chairman of the Biology Department for fall 1976. Applicants must have the Ph.D. and successful experience in teaching and research. The Biology Department has an eight-man faculty and offers an undergraduate and M.S. program in a liberal arts setting with a strong preprofessional student body. Send résumé with the names of three references to **Dean, College of Arts and Sciences, Creighton University, Omaha, Nebraska 68178.**

West Virginia University invites applications for the position of **CHAIRPERSON**, Division of Forestry, College of Agriculture and Forestry. The duties include administration of undergraduate and graduate programs in forestry, recreation, wildlife, and wood utilization and administration of the forestry research program of the Agricultural Experiment Station. The Division has a faculty of 30 whose responsibilities are divided among teaching, research, and public service and has an enrollment of approximately 900 undergraduate majors and 80 graduate students. Applications and/or inquiries should be submitted by 15 April 1976. *West Virginia University is an Equal Opportunity Employer.* **John R. Hamilton, Chairman, Search and Screening Committee, Division of Forestry, College of Agriculture and Forestry, West Virginia University, Morgantown, West Virginia 26506.**

UNIVERSITY OF CALIFORNIA SANTA BARBARA

One or more positions, including chairperson, in the Department of Ergonomics and Physical Education. Departmental emphasis on human performance: candidates sought with interests in motor learning, biomechanics, and/or public health. Strong research, teaching record, and Ph.D. or equivalent degree required. Salary level dependent on qualifications. Applications, with curriculum vitae, should be sent by 15 April 1976 to **Professor Steven Horvath, Institute of Environmental Stress, University of California, Santa Barbara, Calif. 93106.**

Equal Opportunity/Affirmative Action Employer

CHAIRPERSON Department of SURGERY

The University of Pennsylvania's Medical School invites nominations and applications for the position of Chairman, Department of Surgery. Responsibilities include academic, clinical, and administrative affairs for surgery at the Hospital of the University of Pennsylvania. Applicant should be a qualified surgeon and have related research and administrative experience. Respond to: **Dr. Frank Brooks, Chairman Search Committee, Hospital of the University of Pennsylvania, Room 574 A-Maloney Building, Philadelphia, Pennsylvania 19174. An Equal Opportunity Employer.**

POSITIONS OPEN

CHEMICAL OCEANOGRAPHER (ASSISTANT/ASSOCIATE PROFESSOR)

The School of Oceanography at Oregon State University announces a faculty position for teaching and research in such areas as: low-temperature-solution geochemistry or physical chemistry or organic chemistry of natural waters. Experience in the application of one or more of these specialties to research in oceanography or limnology and demonstrated capability to obtain research grants are required. Candidates must have a Ph.D. in chemistry, chemical oceanography or limnology, or geochemistry. Rank is dependent on qualifications. Apply before 15 April 1976 to **John V. Byrne, Dean, School of Oceanography, Oregon State University, Corvallis, Oregon 97331. An Affirmative Action/Equal Opportunity Employer.**

CLINICAL LABORATORY RESEARCH SCIENTISTS

Several Ph.D.'s interested in applied and basic research leading to the development of new clinical laboratory tests. Must have a solid research background in one or more of the following areas: clinical chemistry, immunochemistry, immunoanalysis, enzymology, analytical biochemistry, toxicology, analytical instrumentation. Facilities and research technicians available for each scientist. Excellent benefits and career opportunities at a division of the Dow Chemical Co. Please send detailed résumé and salary requirements in confidence to:

**Dr. R. E. Thiers, Director
Research Department
BIO-SCIENCE LABORATORIES
7600 Tyrone Avenue
Van Nuys, Calif. 91405**

DIRECTOR SCHOOL OF LIFE AND HEALTH SCIENCES within the College of Arts and Science University of Delaware

Responsibility for: (i) academic and research programs in the basic life sciences, the allied health sciences, and the cultural aspects of biology and medicine; (ii) a co-operative program (with the College of Engineering) in biomedical engineering; (iii) completion of the design of a new 68,000-square-foot Life Science Building. Applicants should be established investigators in the life sciences with demonstrated competence in curriculum development and grant procurement.

The position is open anytime after 1 September 1976. Inquiries should be directed to: **David E. Sheppard, Ph.D., Chair, Search Committee for Director, School of Life and Health Sciences, Department of Biological Sciences, University of Delaware, Newark, Delaware 19711.**

The University of Delaware is an Affirmative Action/Equal Opportunity Employer and committed to employment of female and minority personnel.

DIRECTOR OF MARINE LABORATORY

Ph.D. and extensive research and teaching experience in marine-related biology and chemistry programs. Experience in administering federal, state, and private foundation funded programs. Should have published in food chain, mariculture, ocean resources, or energy. Administrative experience in directing remote operations including research staff and supporting staffs. Because of international scope of operations, fluency in French or Spanish is desirable. Will be responsible for directing a major research facility in a large multidiscipline marine institute. Contact: **Creighton A. Burk, Director, Marine Science Institute, P.O. Box 7999, Austin, Texas 78712.**

An Equal Opportunity/Affirmative Action Employer

DIRECTOR, MEDICAL SCIENCES PROGRAM

Indiana University School of Medicine is seeking candidates for the position of director of the Medical Sciences Program, located on the Bloomington Campus of Indiana University. This program is a key component of the Statewide Medical Education System of Indiana University. The applicant should possess an M.D. or Ph.D. degree with recognized accomplishment in the medical science disciplines and experience in medical and graduate education. The candidate should be eligible for senior faculty and administrative rank. Letters of application including curriculum vitae should be sent before 31 March 1976 to **David M. Gibson, M.D., Chairman, Search and Screen Committee, Indiana University School of Medicine, 1100 West Michigan Street, Indianapolis, Indiana 46202. Indiana University is an Equal Employment Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

DATA MANAGER FOR MARINE BIOLOGICAL AND CHEMICAL PROJECT

at the UNIVERSITY OF TEXAS MARINE SCIENCE LABORATORY, PORT ARANSAS, TEXAS

The Marine Science Laboratory is engaged in a biological and chemical study of the Texas continental shelf. Applicants for the position of data manager of this study should have experience in computer programming and systems analysis as well as experience in handling biological and chemical data. An M.S. or the equivalent is required. Salary \$14,868 to \$17,004 dependent on qualifications. Address inquiries to: **Dr. Robert S. Jones, University of Texas Marine Science Laboratory, Port Aransas, Texas 78373. An Equal Opportunity/Affirmative Action Employer.**

DEAN, COLLEGE OF ALLIED HEALTH SCIENCES wanted to continue development of young, rapidly growing college. Academic administrative experience and substantial knowledge of allied health field required. *Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to **Dr. E. A. Turner, Secretary, Search Committee, College of Allied Health Sciences, Thomas Jefferson University, Philadelphia, Pennsylvania 19107.**

ELECTRON MICROSCOPIST

An opportunity exists for a pathologist (M.D., D.V.M., Ph.D. pathology, or equivalent) trained in ultrastructural analyses to join the faculty of the Department of Pathology, University of Maryland. Duties will include teaching, research, and full responsibility for overseeing and developing a fully equipped electron microscopic facility which conducts comprehensive transmission and scanning microscopic studies as well as electron probe microanalysis. Strong research interest in development of new EM methodology, and special interests in carcinogenesis or cardiovascular, renal, or environmental pathology, are required.

Send curriculum vitae and names and addresses of three referees to

**Dr. Benjamin F. Trump
Chairman, Department of Pathology
University of Maryland
31 South Greene Street
Baltimore, Maryland 21201
Telephone: 301-528-7070**

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

FACULTY POSITION MASSACHUSETTS COLLEGE OF PHARMACY

The Department of Pharmaceutics of the Massachusetts College of Pharmacy is seeking a full-time faculty member at the assistant or associate professorial level. The candidate must have a Ph.D. in pharmaceutics and be willing to accept responsibility for undergraduate education in biopharmaceutics or professional pharmacy practice, as well as graduate instruction and research participation in biopharmaceutics, analytical chemistry, and/or pharmacokinetics. Candidates should possess the ability to relate their expertise to the contemporary health-care demands placed upon pharmacy. Appointment will be effective September 1976. Salary will be commensurate with qualifications and experience.

Interested individuals should send curriculum vitae, references (three), and research interests to:

**Dr. Ronald B. Kluza, Chairman
Department of Pharmaceutics
Massachusetts College of Pharmacy
179 Longwood Avenue
Boston, Mass. 02115**

An Equal Opportunity/Affirmative Action Employer

FACULTY POSITION

Opening for a faculty position is anticipated in September 1976 or January 1977. Candidates who have demonstrated productive research in the area of regulatory mechanisms in prokaryotes and who have some teaching experience are invited to apply. Rank of appointment dependent on the individual's qualifications. Send curriculum vitae, brief statement of research plans, and three letters of reference to: **Dr. Hiroshi Mizukami, Chairman, Division of Regulatory Biology and Biophysics, Department of Biology, Wayne State University, Detroit, Michigan 48202.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

FACULTY POSITION

Faculty appointment as assistant professor in the Department of Medical Microbiology, College of Medicine, University of California, Irvine. Responsibilities include teaching both graduate and medical students. Substantial training and research experience in several areas of biochemistry, genetics, and microbiology or immunology are preferred. Preference given to candidates who would develop a strong research program in some biochemical or molecular aspect of immunology. Postdoctoral experience is required. *Applications from qualified individuals are welcome: minorities and women are encouraged to apply.* The application deadline is 1 May 1976. A curriculum vitae and three letters of reference should be sent to **Dr. Paul S. Sypherd, Department of Medical Microbiology, College of Medicine, University of California, Irvine, Calif. 92717.**

UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE FACULTY APPOINTMENTS IN BIOLOGICAL CHEMISTRY

The department has recently moved into new, enlarged, and well-equipped facilities and is embarked on a program of staff expansion. Two positions are presently available at the assistant professor rank but appointments may be made as associate professor, depending on experience.

All applicants should have at least 2 to 3 years of postdoctoral training, proven research ability, and experience and interest in teaching biochemistry. Applicants will be expected to develop independent research programs and supervise the training of Ph.D. candidates. In addition to fundamental research, excellent opportunities exist for collaboration with clinical colleagues on medically oriented problems. The department seeks individuals with research interests and experience in each of the following areas: (i) immunology, somatic cell genetics, immunochemical interactions with membranes, origin of antibody diversity; (ii) neurochemistry at the molecular, membrane, or cellular level. These areas may be broadly interpreted; the qualifications and experience of the applicant will be given prime consideration.

Applicants should send a résumé and a detailed outline of future research plans to **Dr. Harry Rudney, Director, Department of Biological Chemistry, College of Medicine, University of Cincinnati, Cincinnati, Ohio 45267.**

An Equal Opportunity Employer

FACULTY POSITION: PART-TIME TEACHING, PART-TIME RESEARCH

Sabbatical leave has created a 1-year position beginning fall semester 1976. The appointment is at the assistant professor rank, with a salary of approximately \$12,500 for the academic year. We are seeking an individual in human ethology or developmental-cognitive with special interest in child language use. The candidate must be qualified to teach courses in general psychology, as well as his specialty area, and must be interested in and qualified for collaboration in research on teaching sign language to young chimpanzees. Please send curriculum vitae and three letters of recommendation (before 20 April 1976) to:

**Professor B. T. Gardner
Search Committee Coordinator
Department of Psychology
University of Nevada
Reno, Nevada 89507**

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

ARIZONA STATE UNIVERSITY Department of Geology

Applications are invited for two 1-year positions starting 15 August 1976 and ending 15 May 1977. (i) Person desired in sedimentology or sedimentology/stratigraphy at the assistant professorship level but rank could be negotiated; must have Ph.D. and research interest; graduate and undergraduate teaching. (ii) Instructor to handle general elementary courses and physical geology laboratories. Ph.D. or near completion of Ph.D. desired. Interested persons should send applications, including curriculum vitae and three letters of reference, to: **Dr. Troy L. Péwé, Chairman, Department of Geology, Arizona State University, Tempe, Arizona 85281.** Deadline for applications, 15 April 1976. *Arizona State University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS are immediately available in the Department of Physiology and Biophysics. Full-time appointments from assistant professor to full professor depending upon qualifications. Teaching, research, and graduate training responsibilities and opportunities in a medical school environment. Special attention for candidates with training in pulmonary, cardiovascular, renal, or other disciplines of organ physiology. Send résumé and reference letter to **Dr. L. Costello, Chairman, Department of Physiology and Biophysics, College of Medicine, Howard University, Washington, D.C. 20059. Howard University is an Equal Opportunity Employer.**

The School of Public Health of the University of Texas Health Science Center in Houston is seeking candidates for **FACULTY POSITIONS** in nutrition and epidemiology. These are regular academic appointments, involving teaching, research, and community service; and academic rank will depend upon the training and experience of a candidate. Please send a curriculum vitae to **Dr. R. A. Stallones, Dean, University of Texas School of Public Health, P.O. Box 20186, Houston, Texas 77025.**

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

HEAD—CHESAPEAKE BIOLOGICAL LABORATORY

The University of Maryland invites nominations and applications for the position of head of the Chesapeake Biological Laboratory, Solomons, Maryland. We are seeking an experienced educator with significant research accomplishments to provide leadership for a vigorous program of teaching and research. The Chesapeake Biological Laboratory staff presently numbers 100 and its operating budget is in the range of \$1.5 million to \$2 million, with significant growth in staff and budget expected over the next 10 years. All applications received before 1 April 1976 will receive full consideration. Qualified applicants should forward curriculum vitae, bibliography, and names of referees to **Chairman, Appointment Committee, c/o Department of Microbiology, University of Maryland, College Park, Maryland 20742. An Equal Opportunity/Affirmative Action Employer.**

MARINE BOTANIST—DUKE UNIVERSITY ASSISTANT PROFESSOR, SEPTEMBER 1977

Applications are invited for a position in the Department of Botany, with residence at the Duke University Marine Laboratory. Research emphasis in some aspect of marine botany (except morphology and systematics of marine fungi and benthic algae). Teaching at undergraduate and graduate level, primarily but not exclusively in the summer. Inquiries and applications (deadline is 1 November 1976) to **T. W. Johnson, Jr., Department of Botany, Duke University, Durham, N.C. 27706.** Curriculum vitae, transcripts, reprints, and letters from three references are required.

Duke University is an Equal Opportunity/Affirmative Action Employer.

Two 2-year positions are now available for **MEDICAL BEHAVIORAL RESEARCH** in the University of California International Center for Medical Research program in Malaysia. These positions, open to candidates holding the M.D. or Ph.D., are not limited by discipline. Recent research in this program, within the broad theme of health and change, has emphasized studies of resettlement, urbanization, traditional medicine, and behavioral factors influencing specific diseases. Apply with preliminary statement of research interest to: **Associate Program Director, University of California International Center for Medical Research, Community Health, Department of International Health, 1699 HSW, University of California, San Francisco, California 94143.**

An Equal Opportunity/Affirmative Action Employer

MICROBIOLOGIST. Assistant professor, Ph.D. virologist, broadly trained. Able to assume responsibilities among bacteriology, virology, diagnostic bacteriology, molecular genetics, and cell physiology. Assignments may also include participation in the beginning general biology course. Research encouraged. Application deadline 22 March. Send curriculum vitae to **Dr. Robert F. Clarke, Chairman, Division of Biological Sciences, Emporia Kansas State College, Emporia, Kansas 66801. Emporia Kansas State College is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

The University of California, Irvine, Department of Psychiatry and Human Behavior, invites applicants for four full-time **FACULTY POSITIONS.** M.D. degree, 3 years of accredited psychiatric residency, California licensure, and evidence of scholarly productivity required. (i) Assistant professor level, family therapy and liaison with family medicine (training in family therapy preferred); (ii) assistant professor level, adolescent and child psychiatry (child psychiatry training preferred); (iii) associate professor level to serve as Chief of Psychiatric Services, responsible for overall teaching and service program including adult, adolescent, child, emergency, and consultation services (additional training in administration or inpatient psychiatry preferred); (iv) assistant professor level to coordinate undergraduate psychiatry curriculum, didactic, clinical, and cognate basic sciences at medical student level. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Send curriculum vitae and names of three references to **Dr. E. Mansell Pattison, University of California, Irvine, Calif. 92717, before 15 March 1976.**

PEDIATRICIANS AND INTERNISTS

HMO in greater Houston, opening July 1976, seeks well-qualified pediatricians and internists, chiefly for primary care. Personal interview necessary, travel funds provided. **The Community Health Association, P.O. Box 35746, Houston, Texas 77035. Telephone: 713-771-4326.**

POSTDOCTORAL POSITION (2 years) to participate in research on endocrine control of circadian rhythms in cartilage and bone tissues. Experience in morphological, biochemical, and physiologic aspects of hard tissue metabolism desired. Available 1 March 1976. Send curriculum vitae, summary of current research, and two letters of recommendation to **Dr. David J. Simmons, Division of Orthopedic Surgery, Washington University School of Medicine, St. Louis, Missouri 63110. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

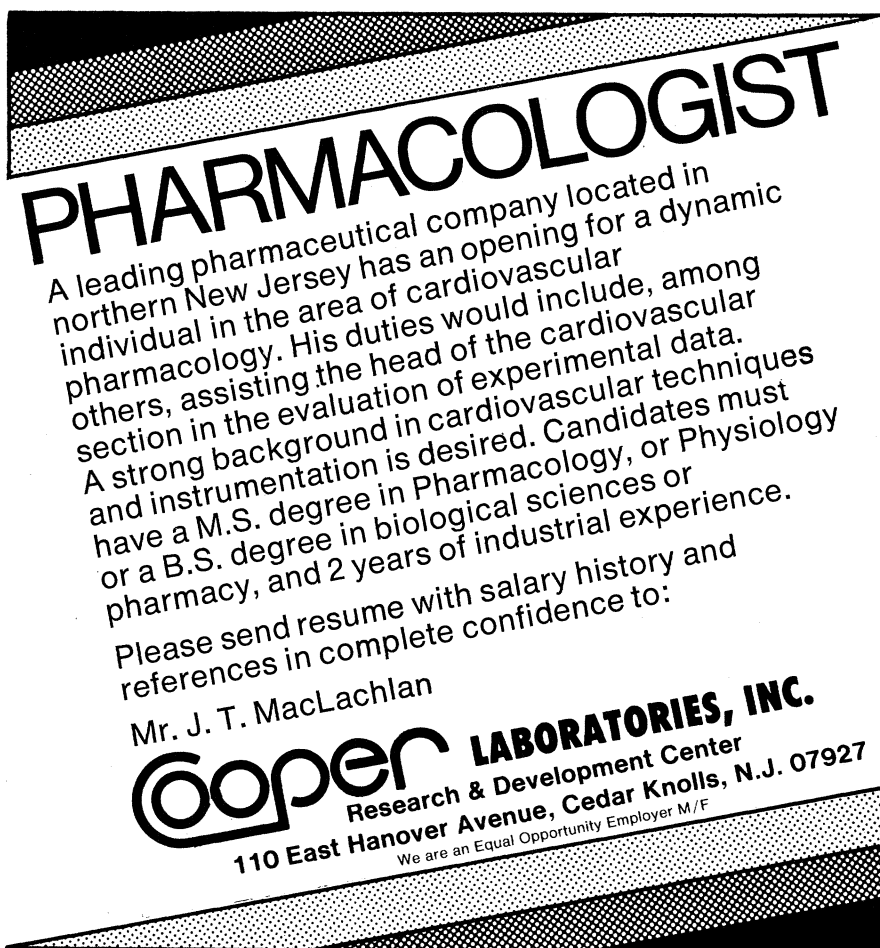
MICROBIOLOGIST. For the fall of 1976 there will be one or two openings in the area of microbiology at the assistant professor level in the Department of Biological Sciences. The individual(s) appointed would be expected to share in the teaching both of an introductory, large enrollment general microbiology course and of advanced courses. Candidates should have postdoctoral research experience and be capable of sustaining a program of quality research. Interested applicants should send a curriculum vitae with a summary of research accomplishments and objectives and the names of three referees to **Professor Struther Arnott, Head, Department of Biological Sciences, Purdue University, West Lafayette, Indiana 47907. Purdue University is an Equal Access/Equal Opportunity Employer.**

NEUROPHYSIOLOGIST AND REPRODUCTIVE PHYSIOLOGIST

Two faculty positions available September 1976. Applicants preferably with postdoctoral experience who have demonstrated productive research with some teaching experience are invited to apply. Send curriculum vitae and names and addresses of three references to: **Dr. H. Mizukami, Division of Regulatory Biology and Biophysics, Department of Biology, Wayne State University, Detroit, Michigan 48202.**

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NUCLEAR MAGNETIC RESONANCE ELECTRONICS EXPERT: The Department of Chemistry at the University of Pennsylvania seeks a person with a degree in electronics, physics, or chemistry or equivalent training with several years experience in NMR spectroscopy (including 2 years in FT), involving the maintenance and repair of CW and FT NMR instruments and other spectroscopic equipment. Duties concerned primarily with maintenance and repair of NMR equipment. Starting salary (dependent on experience), approximately \$15,300. Send complete curriculum vitae and so forth to **Dr. A. G. MacDiarmid, Chemistry Department, University of Pennsylvania, Philadelphia, Pa. 19174. Equal Opportunity Employer.**



PHARMACOLOGIST

A leading pharmaceutical company located in northern New Jersey has an opening for a dynamic individual in the area of cardiovascular pharmacology. His duties would include, among others, assisting the head of the cardiovascular section in the evaluation of experimental data. A strong background in cardiovascular techniques and instrumentation is desired. Candidates must have a M.S. degree in Pharmacology, or Physiology or a B.S. degree in biological sciences or pharmacy, and 2 years of industrial experience. Please send resume with salary history and references in complete confidence to:

Mr. J. T. MacLachlan

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POSITIONS OPEN

ORGANIC MARINE CHEMIST

The Rosenstiel School of Marine and Atmospheric Science of the University of Miami is seeking candidates for a position as assistant or associate professor in the chemical oceanography division. Teaching and research duties in the general area of organic compounds in marine systems. Send curriculum vitae and names of references to:

Chairman, Division of Chemical Oceanography
Rosenstiel School of Marine and Atmospheric Science
University of Miami
4600 Rickenbacker Causeway
Miami, Florida 33149

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

PATHOLOGIST AND PHARMACOLOGIST

Two Ph.D. positions teaching second-year medical students. Emphasis on teaching excellence. Research encouraged but not mandatory. Three lectures and 4 lab hours weekly. Rank and salary commensurate with qualifications. Appointment by 15 July. Modern 400-bed hospital. Excellent suburban living. Send curriculum vitae and names of three references to: Dr. E. H. Whitten, Associate Dean, College of Osteopathic Medicine, 2105 Independence Boulevard, Kansas City, Missouri 64124. Applications from all qualified candidates are welcome.

PHYSICIANS (MULTIPLE OPENINGS) FDA/BUREAU OF DRUGS

Immediate career Civil Service openings for physicians to evaluate clinical data of new drugs. Physicians function as leaders of multidisciplinary review teams reviewing New Drug Applications (NDA's) and Notices of Claimed Investigations Exemptions for New Drugs (IND's). They participate in formulating policy and developing standards and guidelines for the study of new drugs. Positions are available in most specialties with most immediate needs in fields of endocrinology, cardiology, gastroenterology, rheumatology, psychiatry, and anesthesia.

The positions require judgment, ability to plan and organize work, effectiveness in writing, speaking, and interpersonal skills. The positions provide security, good salary, comprehensive fringe benefits, ongoing contacts with professional colleagues, and provision for maintaining clinical expertise. Must be U.S. citizens. Eligibility based on Civil Service Regulations. Salary approximately \$33,126 to \$37,800 a year. *Equal Opportunity Employer.* Send résumé to: FDA Personnel (Frank Mischou), Room 4B-44, 5600 Fishers Lane, Rockville, Maryland 20852.

Ph.D ORGANIC CHEMISTRY: DRUGS

Synthesis and analysis: anticancer drugs and natural products. Start 1 May. \$10,000. Send curriculum vitae, three recent papers to: Dr. M. Apple, 1210-S, University of California, San Francisco, California 94143.
Equal Opportunity Employer

POSTGRADUATE RESEARCHER in molecular biophysics. Spectroscopic studies (natural and magnetic circular dichroism, fluorescence, phosphorescence, action and difference spectroscopy) of cytochrome P-450 and other proteins. The position also involves participation in the department's teaching program. *Applications from qualified candidates are welcome; women and minorities are encouraged to apply.*

Send curriculum vitae to Dr. J. C. Sutherland, Department of Physiology, College of Medicine, University of California, Irvine, Irvine, California 92717.

PROGRAM CONSULTANT

National nutrition education organization, located in a suburb of Chicago, offers career opportunity. Bachelor's degree in education with master's in business administration are preferred. Individuals short of degree qualification but with experience in education evaluation, conference planning, and cooperative organizational development will be considered. Some travel will be necessary. Competitive salary, full fringe benefits. *An Equal Opportunity Employer.* Send detailed résumé to: Box 118, SCIENCE.

POSITIONS OPEN

PLANT PHYSIOLOGICAL ECOLOGIST. Applications and nominations are invited for a position beginning September 1976. Preference will be given to those with research interests in plant physiological ecology but consideration will be given to strong applicants in photobiology and other areas of experimental botany. Rank and salary commensurate with qualifications and experience. Deadline for applications is 15 March 1976. To apply send complete curriculum vitae and names of three references to: Dr. R. A. Paterson, Head, Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061.

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PSYCHOLOGIST

Assistant professor in the area of history/systems of psychology. Candidate must have a Ph.D. with a strong commitment to scholarly research and teaching in above area and another area which will complement departmental expertise. Send curriculum vitae and supporting documents (publications in the history/philosophy of science areas will be given special consideration) to: Harry Madison, Chairman, Department of Psychology, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, Wisconsin 53201.

University of Wisconsin, Milwaukee, is an Equal Opportunity Employer.

RESEARCH ASSOCIATE POSITION available immediately for recent Ph.D. interested in biochemical toxicology. Studies will center on the role of glutathione transferases in the metabolism and toxicity of pesticides in mammals. Send curriculum vitae and two letters of recommendation to:

Dr. R. M. Hollingworth
Department of Entomology
Purdue University
West Lafayette, Indiana 47907

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Applications are invited for an **ADVANCED RESEARCH POSITION** in the Hormone Laboratory of the Department of Clinical Chemistry of the University Hospital, Hamburg, Germany (Scientific Assistant BAT 11a—West German classification). Physicians, biochemists, or biologists with experience in the field of biochemical endocrinology are preferred. Candidates should submit their curriculum vitae, including a list of publications, to Professor K. D. Voigt, Abt. für Klinische Chemie der Med. Kliniken, Universitäts-Krankenhaus-Eppendorf, Martinstrasse 52, 2000 Hamburg 20, Federal Republic of Germany.

NATIONAL RESEARCH COUNCIL NATIONAL AERONAUTICS AND SPACE ADMINISTRATION RESIDENT RESEARCH ASSOCIATESHIPS

Tenable at the Jet Propulsion Laboratory
California Institute of Technology

Awards will be made to doctoral applicants, on a competitive basis, to study and interpret airborne and spaceborne synthetic aperture radar imagery. Areas of research interest for geologists, planetologists, oceanographers, and glaciologists include: (i) interpretation of lunar radar imagery and global profilometry obtained with the Apollo 17 ALSE radar, (ii) analysis of multiseasonal polar ice radar imagery taken during the AIDJEX 75 missions, (iii) analysis and modeling of radar imagery of ocean patterns, waves, currents, internal waves, and (iv) geologic analysis of radar imagery taken over numerous sites in the United States. A variety of aircraft flight experiments will be undertaken next year in support of ongoing and future spacecraft imaging radar projects. No previous knowledge of imaging radar techniques is necessary. Applications will be considered for regular and senior associates.

Further details on the research program can be obtained from:

Dr. Charles Elachi
Jet Propulsion Laboratory (183-701)
4800 Oak Grove Drive
Pasadena, California 91103
Telephone 213-354-5673

or general information and application materials can be obtained from:

National Research Council
Associateship Office (JH606-J)
2101 Constitution Avenue, NW
Washington, D.C. 20418

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATES for calcium transport studies with strong background in protein biochemistry. Send letters of application including names of references to Dr. Felix Bronner, Department of Oral Biology, University of Connecticut Health Center, Farmington, Connecticut 06032. *An Equal Opportunity and Affirmative Action Employer.*

POSTDOCTORAL POSITION

Postdoctoral position is available immediately for a period of up to 3 years for training in research on cell surface receptors for melanocyte stimulating hormone. Send curriculum vitae, list of publications, and three letters of recommendation to: Dr. J. M. Varga, Department of Dermatology, Yale University School of Medicine, 333 Cedar Street, New Haven, Connecticut 06510.

POSTDOCTORAL RESEARCH ASSOCIATE. A position is available starting 1 June 1976 for a recent Ph.D. trained in immunology to work on problems in the pathogenesis of pulmonary emphysema. Experience with immunoradiometric or related assay techniques is desirable. Performance site located at new and expanding University Health Sciences Center near Cold Spring Harbor and Brookhaven National Laboratories, 50 miles east of New York City. Send curriculum vitae and names of three references to: Dr. Aaron Janoff, Department of Pathology, State University of New York at Stony Brook, Stony Brook, N.Y. 11794. *Equal Opportunity/Affirmative Action Employer.*

Dynapol

Dynapol, located in Palo Alto on the San Francisco Peninsula, is creating safe food additives based on a new polymer technology. In keeping with our progress, we are now seeking a capable individual for the following position:

Research Biologist

You will plan and conduct studies evaluating absorption and metabolism of polymeric food additives. Requires a Ph.D. in physiology, biochemistry, or pharmacology with training and experience in drug absorption and metabolism in laboratory animals.

Interested and qualified candidates should submit a résumé, stating salary history, in confidence to:

Dr. Tom Parkinson
Dynapol
1454 Page Mill Road
Palo Alto, Calif. 94304

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KATHOLIEKE UNIVERSITEIT NIJMEGEN

theoretical biologist

Applicants are invited for the above permanent appointment which is roughly equivalent to a reader or assistant professorship. Applicants should have a Ph.D. degree in biology, biochemistry, biophysics or biomathematics and have demonstrated independent, mathematical research ability. Successful candidates will be expected to have experience in the development of mathematical models to simulate the complexity of biological phenomena. An interest in ecological problems is preferred, although applicants with other interests will not be excluded. The primary responsibility of the successful applicants will be the development of an active research program in which graduate students may take part.

Excellent experimental facilities including an advanced computing center are available within the Faculty.

The monthly salary will be in the range of 5000 to 7200 Dutch guilders, depending upon experience and qualifications.

Applicants and those who wish to nominate individuals who might be considered for this position are requested to apply to:

Dr.J.G.G.Schoenmakers, Department of Molecular Biology, Toernooiveld, Nijmegen (The Netherlands).

The closing date for application is March 15, 1976.

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For the past few years, there have been serious shortfalls in world food production and distribution. This, along with soaring agricultural prices, has posed some vital questions which demand answers.

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POSITIONS OPEN

RESEARCH STAFF SCIENTIST wanted. Postdoctoral neurophysiologist with experience in intracellular recording and computer programming. Contact **Dr. J. Pincus, Department of Neurology, Yale University School of Medicine, New Haven, Conn. 06510.** Available 1 July 1976.

PHYSICS DEPARTMENT IOWA STATE UNIVERSITY AMES LABORATORY—ERDA

THEORETICAL SOLID STATE PHYSICIST. Joint position as an assistant professor at Iowa State and an associate physicist in the Ames Laboratory. We are seeking an individual with a wide range of interests which will complement and extend the present Solid State Physics Program. Candidates must have demonstrated potential for teaching at both undergraduate and graduate levels.

Applications should include: (i) a description of educational background, (ii) a résumé of research and teaching experience, (iii) a list of all publications, (iv) copies of unpublished manuscripts, (v) a statement of current research interests and future research plans, and (vi) the names of at least four individuals who can be contacted for evaluation. Applications should be sent to **Professor C. A. Swenson, Chairman, Department of Physics, Iowa State University, Ames, Iowa 50011.** Application deadline: 15 April 1976.

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TOXICOLOGIST

Assistant professor of pharmacology, beginning approximately 1 July 1976. Candidates should be Ph.D.'s or M.D.'s with at least 1 year of postdoctoral training. Duties will include graduate and professional school teaching, direction of Ph.D. candidates, and independent research in cellular and/or biochemical aspects of toxicology. Relevant research experience and publications will be important criteria in evaluations. Applicants should submit curriculum vitae including complete bibliography and request at least two letters of reference be sent to **Dr. William W. Fleming, Department of Pharmacology, West Virginia University Medical Center, Morgantown, West Virginia 26506.** Applications should be received by approximately 15 March 1976. *West Virginia University is an Affirmative Action/Equal Opportunity Employer.*

VETERINARY PATHOLOGIST

D.V.M./Ph.D., Board-certified or working toward certification, to join rapidly growing pharmacology and toxicology group. Requires strong background and interest in animal histopathology. Will participate in ongoing and new long-term programs in the safety evaluation of antimalarial, anticancer agents, and environmental chemicals.

Applications with curriculum vitae and names of three references should be sent to:

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GRADUATE STUDY

GRADUATE STUDY

The Department of Biological Sciences, in cooperation with the basic science faculty of the University of Maryland at Baltimore, provides graduate education toward the M.S. and Ph.D. in the areas of molecular biology and biochemistry; genetics; and cell, developmental, organismic, and population biology.

ASSISTANTSHIPS are available for qualified applicants. For details write to **Dr. R. P. Burchard, Department of Biological Sciences, University of Maryland Baltimore County, Catonsville, Maryland 21228.**

FELLOWSHIPS

PREDOCTORAL FELLOWSHIPS in immunology and microbiology. A number of state graduate stipends (\$3960 per annum) are available for highly qualified applicants for study leading to the Ph.D. in immunology, virology, and microbiology. For information write to **Dr. H. H. Fudenberg, Professor and Chairman, Department of Basic and Clinical Immunology and Microbiology, Medical University of South Carolina, Charleston, S.C. 29401.** *An Equal Opportunity Employer.*

FELLOWSHIPS

FELLOWSHIP: postdoctoral; 2 years. Experimental cancer immunotherapy. Prerequisite: Ph.D. tumor immunology. **Vilas V. Likhite M.D., D.S.C., Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts 02115.**

THE AUSTRALIAN NATIONAL UNIVERSITY invites applications for two **RESEARCH FELLOWSHIPS** in the Department of Immunology, John Curtin School of Medical Research. Consideration given to persons who have worked in general fields of cell biology, experimental pathology, immunochemistry, animal physiology, or tumor immunology. Research work of Department concerned with developmental aspects of the immune response in fetal animals, interactions between allogeneic cells, immunity to helminth parasites, transplantation and tumor immunology, and the physiology of the immune response. Appointment for 3 years in first instance with possible extension to 5 years. Salary A\$12,063 to A\$16,084 per annum; exchange rate A\$1: US\$1.26. Reasonable travel expenses. Superannuation benefits. Further information from **Academic Registrar, Australian National University, P.O. Box 4, Canberra, ACT, 2600, Australia,** with whom applications close 29 March 1976.

Drs. E. H. Sonnenblick, J. Scheuer, and 12 colleagues in cardiovascular physiology and biochemistry have a few NIH-sponsored **postdoctoral (M.D. or Ph.D.) research training positions** available for 1976. Areas include: biochemistry, electrophysiology, and mechanics of cardiac muscle; coronary circulation and capillary exchange; hemodynamics and cardiovascular regulation. Interviews can be arranged on the East Coast or at FASEB meetings. Contact: **Dr. J. Scheuer, Division of Cardiology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, N.Y. 10461.**

MUCOSAL METABOLISM

An experienced investigator with knowledge of intestinal physiology is needed for a multidisciplinary program concerned with the endogenous formation of carcinogens in humans. The successful applicant must be capable of preparing intestinal epithelial cells for short-term metabolism studies and developing an in vitro system using intestinal mucosa to predict the carcinogenic potential of various endogenous substrates.

Qualified Ph.D. should send a curriculum vitae, complete bibliography, and three references to:

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Department 610
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SUMMER RESEARCH FELLOWSHIPS FOR BLACKS AND OTHER MINORITIES AT THE MARINE BIOLOGICAL LABORATORY

The Josiah Macy Jr. Foundation has provided funds to defray laboratory fees and housing costs (up to \$4500 each) for postdoctoral investigators for the summer of 1976 (and future summers). Special attention is to be given to younger faculty members of 4-year black colleges, who will be designated Macy Scholars. For applications and further information, write the **Admissions Office, Marine Biological Laboratory, Woods Hole, Mass. 02543,** or telephone **Dr. James D. Ebert, at 301-467-1414.** *Marine Biological Laboratory admits students of any race, color, and national or ethnic origin.*

MACY SCHOLARSHIPS FOR BLACKS AND OTHER MINORITIES IN SUMMER COURSES AT THE MARINE BIOLOGICAL LABORATORY

The Josiah Macy Jr. Foundation has provided funds to defray the full cost (tuition, room, board) of a limited number of students in Marine Biological Laboratory courses. Special attention will be given to younger faculty members and students in 4-year black colleges. For applications and further information, write the **Admissions Office, Marine Biological Laboratory, Woods Hole, Mass. 02543,** or telephone **Dr. George Woodwell, at 617-548-3705.** *Marine Biological Laboratory admits students of any race, color, and national or ethnic origin.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS

Immediate openings for three trainees in the following areas of research: (i) effects of drugs on craniofacial development; (ii) neural crest cell migration and differentiation; (iii) physical and chemical structure of collagen and glycosaminoglycans and native interactions in developing embryo; and (iv) normal and abnormal suture line closure in developing mammalian skull. Stipends range from \$10,000 to \$14,000. Candidates should have Ph.D., M.D., or D.D.S. Send applications and curriculum vitae to:

**Dr. Jan Langman
Department of Anatomy
University of Virginia School of Medicine
Charlottesville, Virginia 22901**

POSTDOCTORAL FELLOWSHIP IN AUDITORY PROCESSES. Opportunity for research and training in electrophysiological and behavioral studies of the auditory system and animal communication. Applicants must have Ph.D. or M.D. with research experience in neurobiology, animal psychophysics, or ethology of animal communication. **Box 117, SCIENCE.**

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Advancements made in the recovery and applications of this resource, a chemical relative to cellulose found in the exoskeletal structure of arthropods (that is, insects, crabs, shrimp), have led to its availability in industrial quality and supply. Identified markets for applications include pharmaceuticals, food processing, paper formulation, agriculture, waste treatment, adhesives, and textiles.

The Massachusetts Science and Technology Foundation and the Sea Grant Program of the Massachusetts Institute of Technology are planning to convene the first international conference on this subject to be conducted in the greater Boston area, either in November 1976 or in April 1977.

Those interested in submitting papers or in attending should write **Massachusetts Science and Technology Foundation, 10A Lakeside Office Park, Wakefield, Massachusetts 01880.**

PROGRAMS

EYE RESEARCH INSTITUTE OF RETINA FOUNDATION is accepting applications for its POSTDOCTORAL RESEARCH PROGRAM in the Department of Retina Research

The focus of the program is on experimental approaches to problems of the retina and the visual nervous system. Recent Ph.D.'s and M.D.'s who have backgrounds in biochemistry, biomedical engineering, biophysics, chemistry, electron microscopy, histopathology, immunopathology, electrophysiology, optics, pharmacology, surgery, or visual psychology are invited to apply. Full details of the program are set forth in a brief pamphlet that can be obtained by writing to:

**Director, Postdoctoral Research Program
Department of Retina Research
Eye Research Institute of Retina Foundation
20 Staniford Street
Boston, Massachusetts 02114**

SPECIAL SUMMER PROGRAM ON ENZYMES AND THEIR USE IN ANALYSIS AND CLINICAL DIAGNOSIS

Massachusetts Institute of Technology
12-16 July 1976

The objective of the program is to develop the participants' abilities to use enzymes as analytical reagents. It will provide a comprehensive theoretical background and practical knowledge in *applied enzymology*, and develop an awareness for the multiple areas of application of enzymatic assays, including clinical diagnosis and the use of immobilized enzymes.

For further details and application forms, write

**Director, Summer Session
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Send curriculum vitae and references to:

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POSITION DESCRIPTION: The Atmospheric Analysis and Prediction Division (AAP) undertakes studies of the dynamics of the earth's atmosphere on all size scales. In the research area, as in others, NCAR selects for emphasis problems which are scientifically important, which require the size and continuity of a national center for their successful study, and which relate to concerns of the nation and the world. The division comprises about forty Ph.D. scientists plus support staff, working in seven scientific projects. These projects focus on climate, synoptic and statistical meteorology, general circulation modeling, numerical weather prediction, tropical meteorology, boundary layer and subsynoptic circulations, and dynamical oceanography.

JOB RESPONSIBILITIES: The AAP director is responsible for long range planning; budget and other resource allocations; scientific goals and productivity; staff appointments; affirmative action; staff morale; scientific interaction with the university atmospheric science community; and advising the UCAR Director and NCAR Executive Director on NCAR scientific policies, priorities and goals, and on NCAR operations.

ESSENTIAL QUALIFICATIONS: Demonstrated ability to perform original research to qualify for a Senior Scientist appointment; demonstrated potential to manage, wisely and effectively, a research division the size of AAP; sufficient knowledge of and breadth of interest in the science represented in the seven projects to enable interaction with the scientists and project leaders.

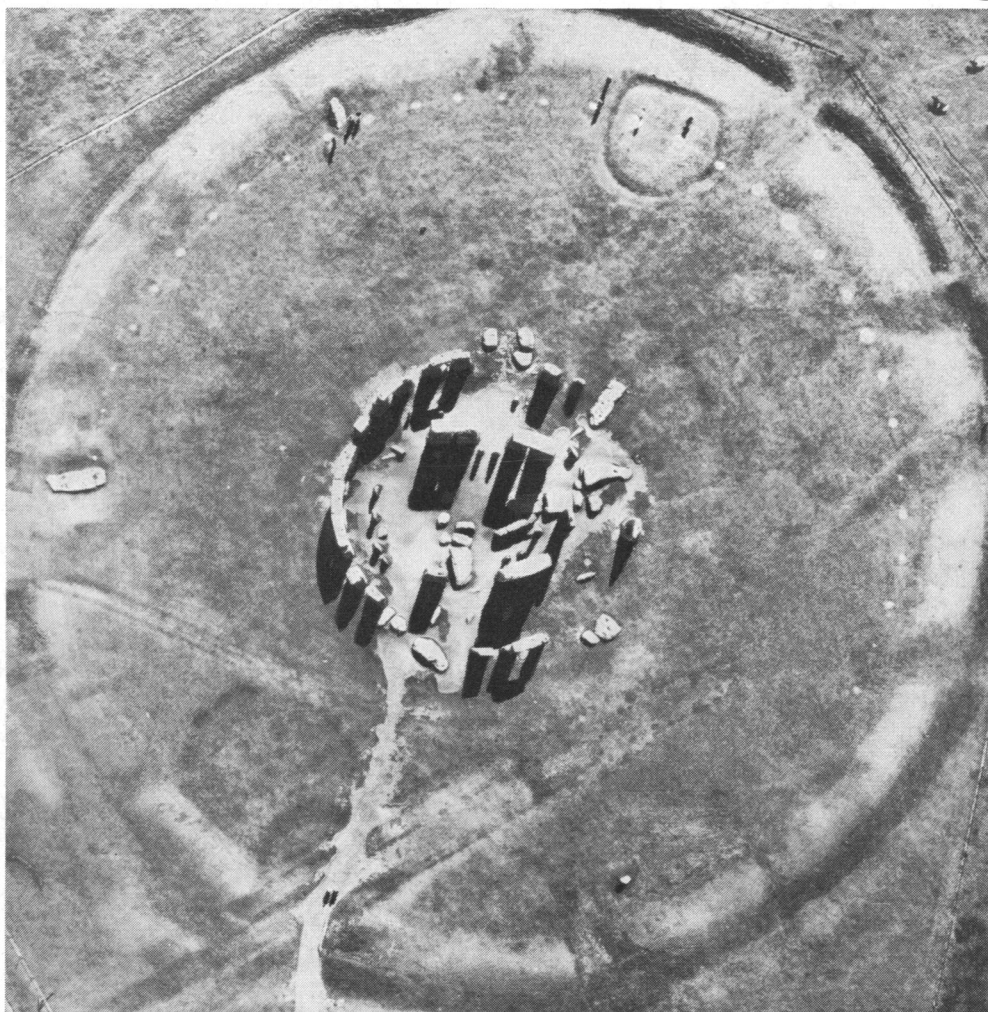
SALARY: To be negotiated on the basis of prior experience and qualifications. Those interested in applying should send a resume of experience, a list of publications and names of three references to:

Personnel Office
National Center for Atmospheric Research
P.O. Box 3000
Boulder, CO 80303

Closing date for receipt of applications is 19 March 1976.

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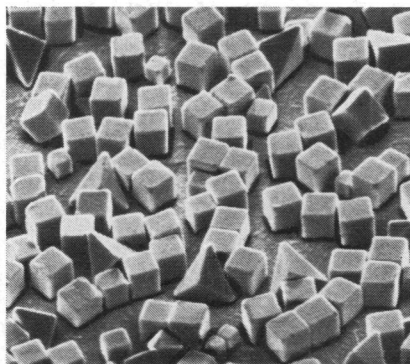


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Silver halide imagery, among other uses, illuminates mankind's path from its past towards its future. Few traces of our forebears are as obvious as Stonehenge. Nor does aerial photography merely lead the ethnographers and archaeologists to interesting sites. They need it as much to see why the sites were chosen. Their disciplines are useful, with pertinence to any regional planning commission caught between the environmentalists and the booster types.

Homo sapiens uses grass fires or nuclear fission, a lichen uses rock-dissolving acids, and both organisms change the surface of Earth in pursuing their respective needs. Seeking a longer perspective and better guide to understanding human needs than the bottom line on an accountant's balance sheet, scholars study photographs of our old planet's surface for subtle clues left in geologically recent times by our kind. The aerial camera is the tool for surface study, just as the shovel and brush are for vertical exploration, but the price of air-survey contracts sometimes frustrates scholars when dealing with people interested in balance sheets.

Let them take heart. All existing aerial photography has not yet been drained of ethnographic excitement. For the sparks to fly, the photography and a specific conceptual framework must strike together. If you've got the concepts, we may have hints on where to find the photography. Just please don't explain the concepts. Our mind is on a balance sheet. State question to E. G. Tibbils, Aerial Mapping Markets, Kodak, Rochester, N.Y. 14650.



Silver halide itself is to colloid science and surface chemistry almost what the colon bacillus and the fruit fly are to

genetics. For doing science, a dispersion like this of near-perfect AgBr cubes—ranging narrowly in edge length size around 4 micrometers—has come a long way from the wild type of AgX crystal on which practical photography based itself until rather recently. This is quite aside from the uniquely retentive memory that such a crystal has for a few photons of light. The practical consequences thereof have kept numerous scientists the world around in meat and potatoes. So intensely has interest been focused on this stuff that scientists pursuing pure, fundamental studies in adsorption phenomena, dielectric loss, electrophoresis, light scatter, etc. like to work with silver halide and its extensive literature. If you want the name of someone whose interests run in that direction, try Dr. A. H. Herz, Kodak Research Laboratories, Rochester, N.Y. 14650.

