

Spicer, session chairman): W. Grobman, "Photoemission of organic molecular films"; J. Ritsko, "High energy electron loss spectroscopy on organic films."

**12 January.** Reflection and NMR spectroscopies (J. P. McTague, session chairman): M. Philpott, "Optical spectroscopy of organic surfaces"; R. Vaughan, "Surface nuclear magnetic resonance of organics." Radiation science (C. B. Duke, session chairman): J. Bargon, "Radiation chemistry in organic films"; R. Parks, "Radiation physics phenomena."

**13 January.** Radiation science—applications (T. E. Everhart, session chairman): E. Wolf, "Electron and x-ray lithography"; H. Winters, "Surface plasma etching mechanisms"; A. Bell, "Plasma polymerized organic films." Dielectric properties of organic films (P. Mark, session chairman): A. Jonscher, "Dielectric phenomena in organic layers."

**14 January.** Transport, piezo and pyroelectric properties of organic films (T. C. McGill, session chairman): P. Chaikin, "Transport phenomena in organic films"; M. Broadhurst, "Piezo and pyroelectric phenomena in polymer films."

## Polymers

John D. Hoffman, chairman; H. D. Keith, vice chairman.

**10 January.** (J. D. Hoffman, session chairman): A. Keller, "Crystallization from the strained melt and from solution"; A. J. Hopfinger, "A new theory of polymer melt transitions—a breakthrough?" (F. Stehling, session chairman): S. Krimm, "IR studies on nature of folding"; I. C. Sanchez, "Critique of crystallization theories."

**11 January.** (W. S. Zimmt, session chairman): Thor L. Smith, "Mechanical properties of elastomeric polyurethane and poly(urea-urethane) block copolymers under large deformations"; M. C. Shen, "Molecular theories of viscoelasticity for homogeneous block copolymers and entangled polymers"; D. Klempner, "Simultaneous interpenetrating networks." (E. Petrie, session chairman): R. F. Boyer, "Glass transitions in semicrystalline polymers"; E. W. Fischer, "A molecular viewpoint of the glass transition."

**12 January.** (Session chairman to be announced): C. A. J. Hoeve, "Theoretical aspects and challenges of the adsorption of macromolecules on surfaces"; L. E. Smith, "Adsorption of macromolecules on surfaces." (R. W.

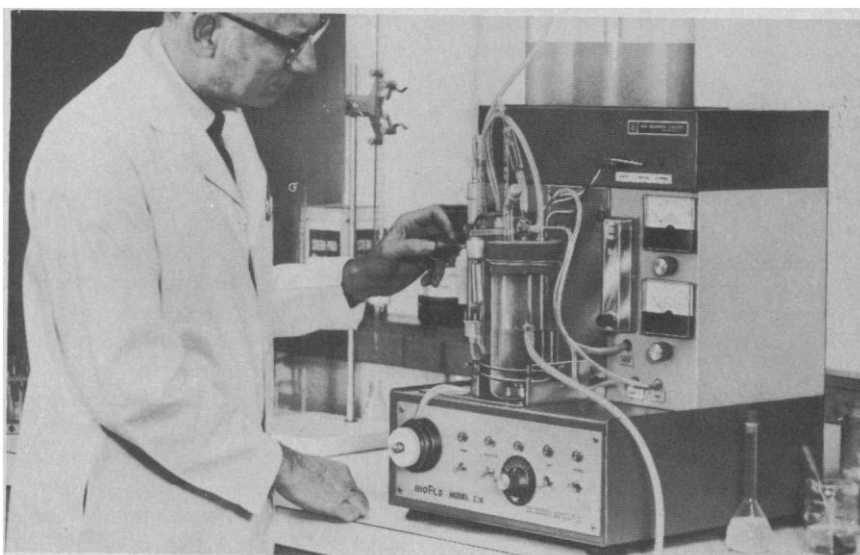
Zwanzig, session chairman): J. L. Schrag, "Apparent side group contributions to the viscoelasticity and oscillatory flow birefringence of polymer solutions: implications for chain dynamics interpretations of dilute solution data"; B. H. Zimm, "Viscoelasticity as a tool for characterization of DNA (also remarks on shear breakage of DNA)."

**13 January.** (A. Peterlin, session chairman): B. Fanconi, "The longitudinal acoustic mode in helical polymers"; S. L. Hsu, "Perturbations on the longitudinal acoustic mode in polymers." (W. McDonald, session chairman): Short topics: H. H. Hoehn, "Effect of molecular

weight on crystallinity and morphology of polyethylenes recrystallized at high pressures"; L. Nielsen, "Temperature dependence of moduli of composite materials"; R. V. Gemmer, "Carbon-13 NMR studies of epoxidized diene polymers"; J. Lando, "X-ray analysis of a diacetylene polymer"; E. L. Thomas, "Mosaic block structure of polymer single crystals"; M. L. Huggins, "Learning about polymers from Mother Nature."

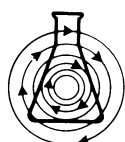
**14 January.** (H. D. Keith, session chairman): M. G. Broadhurst, "Piezoelectric effects in polymers"; R. Baughman, "The polymer (SN)<sub>x</sub>."

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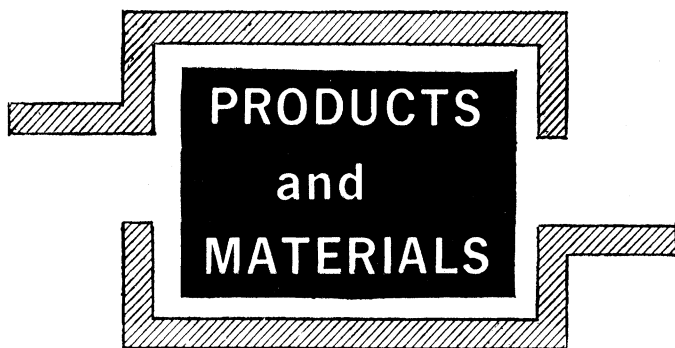
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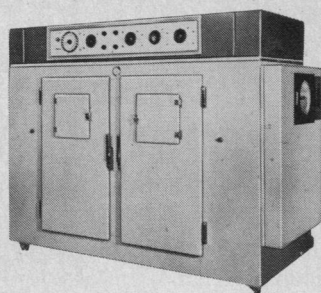
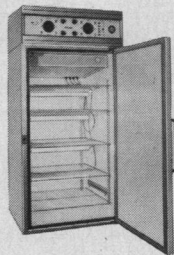
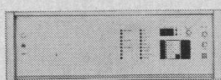
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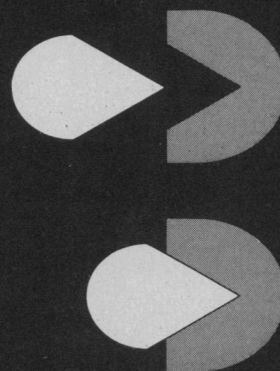
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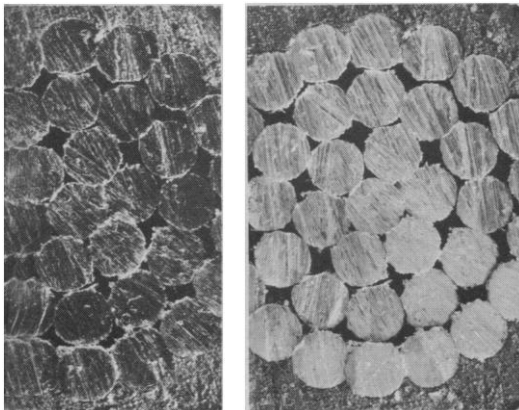
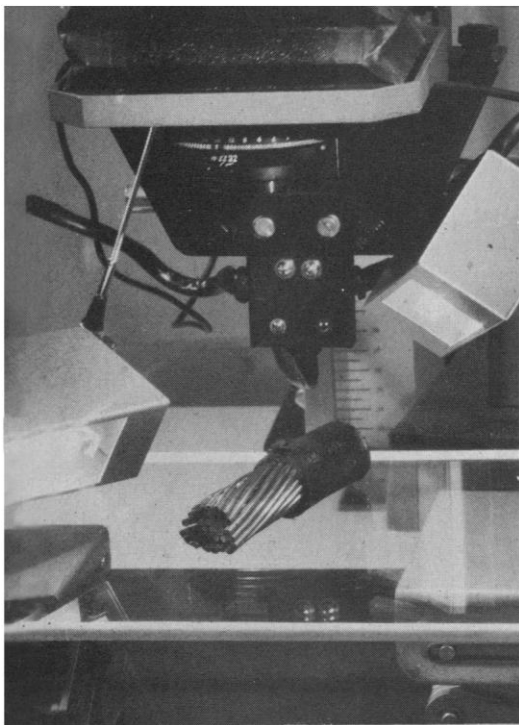
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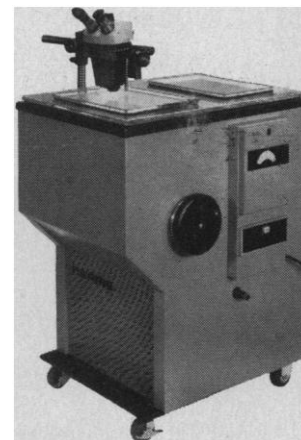
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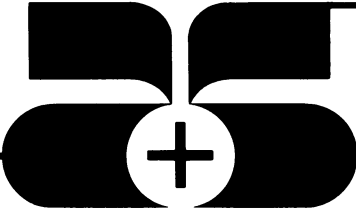
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### AQUATIC FRESHWATER BIOLOGIST

The Department of Biology, Texas Christian University, invites applications for the position of assistant professor, expected to be open fall 1977. This position will require teaching at the undergraduate and graduate levels and a strong commitment to research. Ph.D. required.

Applications, including transcripts, curriculum vitae, three letters of reference, and a statement of professional goals should be submitted by 15 December 1976 to **Dr. Glenn C. Kroh, Department of Biology, Texas Christian University, Fort Worth, Texas 76129. Texas Christian University is an Equal Opportunity/Affirmative Action/Title IX Employer.**

**ASSISTANT PROFESSOR:** Available immediately. Ph.D. required, postdoctoral experience preferred. Must have training and experience in environmental health and in an applied area of microbiology. The individual will share teaching responsibilities and develop a research program. Temporary appointment, grant-funded. Send résumé, transcripts, and five letters of recommendation to: **L. P. Mallavia, Chairman, Search Committee, Department of Bacteriology and Public Health, Washington State University, Pullman, Wash. 99163. Telephone: 509-335-3323. Washington State University is an Affirmative Action/Equal Opportunity Employer.** Applications accepted until position is filled.

### ASSISTANT PROFESSORSHIPS IN CELLULAR IMMUNOLOGY, ANIMAL VIROLOGY, PLANT BIOLOGY, AQUATIC BIOLOGY, AND DEVELOPMENTAL BIOLOGY

A rapidly growing, well-equipped modern department of biological sciences located in the hills outside Baltimore is seeking scientists with postdoctoral research experience who have demonstrated their ability to initiate vigorous research programs and have a commitment to quality graduate and undergraduate teaching. Appointments are contingent upon availability of state funds. Submit curriculum vitae, bibliography, names of suggested referees, and a description of research interests to: **Dr. Thomas F. Roth, Chairman, Search Committee, Department of Biological Sciences, University of Maryland Baltimore County, Catonsville, Maryland 21228. An Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT PROFESSOR—**The Microbiology Department of the Medical College of Pennsylvania seeks, for 1 July 1977, an immunologist with postdoctoral experience and interest in tumor immunology and oncogenic viruses. Prior training should include a strong background in immunochemistry. Previous experience in teaching medical students desirable. Responsibilities include teaching of immunology and microbiology to medical and graduate students. Candidates are expected to continue their own research and collaborate in joint projects. Send curriculum vitae to **Kurt Paucker, Ph.D., Microbiology Department, The Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, Pa. 19129. An Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### ASSISTANT PROFESSOR

Applications are invited from ichthyologists or other marine vertebrate biologists for a permanent faculty position, to begin 1 January, in a rapidly developing department. Requirements include a Ph.D., a record of research accomplishment, and a commitment to excellence in teaching. Send applications to: **Dr. G. C. Webster, Department of Biological Sciences, Florida Institute of Technology, Melbourne, Florida 32901.**

**ASSISTANT PROFESSOR IN AGRICULTURE AND BIOLOGY.** Effective August 1977. Must have B.S. in forestry, animal science, horticulture, or agronomy, and an earned Ph.D. with a strong background in both agriculture and biology. Must demonstrate potential in counseling, teaching, and research. Duties are to counsel agriculture, forestry, and preveterinary students and to teach and/or do research in person's specialty. Deadline: 15 December 1976. Send curriculum vitae, transcripts, and three letters of recommendations to: **Dr. Robert W. Keck, Indiana University-Purdue University at Indianapolis, 1201 East 38 Street, Indianapolis, Indiana 46205.**

*An Equal Opportunity/Affirmative Action Employer*

### YALE UNIVERSITY SCHOOL OF MEDICINE

Applications are invited for positions as **assistant or associate professor** in the Department of Anesthesiology. Applicants should hold the Ph.D. and/or M.D. degree and have several years of research experience in neuropharmacology, neurophysiology or cardiopulmonary physiology, or pharmacology.

Please respond by 1 December 1976 to:

**L. M. Kitahata, M.D., Ph.D.  
Department of Anesthesiology  
Yale University School of Medicine  
New Haven, Connecticut 06510**

*Equal Opportunity/Affirmative Action Employer. Qualified women and minority group members are encouraged to apply.*

**ASSISTANT PROFESSOR—ANALYTICAL CHEMISTRY.** A position is available in September 1977 for an individual with a demonstrated exceptional ability in any area of chemistry and an interest in any area of analytical chemistry. The person will be expected to participate in development of graduate and undergraduate courses as well as maintain a productive research program of high caliber and originality. Send a curriculum vitae, a short description of research plans, and have three letters of reference sent to **Dr. Allen J. Bard, The University of Texas at Austin, Department of Chemistry, Austin, Texas 78712.** All applications must be complete by 15 November 1976. *The University of Texas is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT PROFESSOR OF BIOCHEMISTRY—PHYSICAL BIOCHEMIST** with doctoral degree and extensive training in the theory and practice of ultracentrifugation and other techniques required for the characterization and study of macromolecules. The candidate must have extensive research experience and publications and be ready to initiate independent and productive research programs. The position requires participation in the teaching of medical biochemistry and of graduate courses in the physical biochemistry of macromolecules. Qualified applicants should submit curriculum vitae, bibliography, and the names of three individuals familiar with the candidate's training and research to: **Search Committee, Department of Biochemistry, Temple University School of Medicine, Philadelphia, Pa. 19140. An Affirmative Action/Equal Opportunity Employer.**

### CELL BIOLOGIST

The Department of Biological Sciences at Purdue University is seeking a cell biologist with several years of postdoctoral training and research interests in eukaryotic cell biology (for example, cellular immunology, animal virology, cell cycle, or regulatory biology). The successful candidate will be expected to sustain a program of quality research and to share in the teaching of a core undergraduate course in cell biology. Appointment at the assistant professor level is expected, but a higher-rank appointment is possible. Interested applicants should submit 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 Opportunity/Equal Access Institution.**



## POSITIONS OPEN

**ASSISTANT PROFESSOR, PATHOLOGY**—University of Health Sciences/Chicago Medical School is actively recruiting for faculty at the assistant professor level in clinical and anatomic disciplines. Clinical chemistry, clinical microbiology, immunopathology, and cytogenetics interests preferred. Teaching and research activities strongly emphasized. Candidates must have reached that stage of research competence to conduct independent programs. Responsibilities will be at the University of Health Sciences/Chicago Medical School new north suburban site. Applicants should send curriculum vitae to **Arthur S. Schneider, M.D., Professor and Chairman, Department of Pathology, University of Health Sciences/Chicago Medical School, 2020 West Ogden Avenue, Chicago, Illinois 60612. An Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT RESEARCH NEUROLOGIST**—The Department of Neurology at the UCLA School of Medicine has an opening for a junior scientist with completed doctorate, postgraduate training in neuroanatomy, neurophysiology, and knowledge of histochemistry for a project in the basic mechanisms of epilepsy. Applicants should submit curriculum vitae to: **Richard D. Walter, M.D., Chairman, Department of Neurology, Reed Neurological Research Center, University of California, Los Angeles, Los Angeles, Calif. 90024. UCLA is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority groups.**

## BIOCHEMIST

Full-time position at assistant professor level available fall 1977 for a physical biochemist at Bryn Mawr College. The position involves teaching undergraduate and graduate biochemistry courses and an occasional undergraduate chemistry course. Candidates will be expected to establish and develop a research program and to supervise research at M.A. and Ph.D. levels. Submit complete curriculum vitae and three references by 1 December to: **Dr. George L. Zimmerman, Department of Chemistry, Bryn Mawr College, Bryn Mawr, Pa. 19010. Equal Opportunity/Affirmative Action Employer.**

## CELLULAR PHYSIOLOGIST

The Department of Zoology, University of California, Davis, is seeking applicants for a position on its faculty. The person appointed will be expected to teach a one-quarter course in introductory physiology with associated laboratory course, and an advanced course in cell biology as well as a graduate seminar in his or her own field of specialization. It is expected that the individual will initiate and carry out a productive research program and will participate in the Department's graduate program. The appointment level and salary will depend on qualifications and experience. Appointments are normally at the assistant professor level, minimum salary \$14,500 per annum.

Persons who wish to apply should forward a curriculum vitae, a description of their research programs and future plans, a summary of their teaching capabilities, and three letters of recommendation to **Dr. Ronald J. Baskin, Chairperson, Department of Zoology, University of California, Davis, California 95616. The University of California is an Equal Opportunity/Affirmative Action Employer.** Screening of applications will begin 15 November; closing date for receipt of applications is 15 January 1977.

## CHAIRMAN DEPARTMENT OF MICROBIOLOGY/IMMUNOLOGY

The College of Medicine of the University of South Alabama is seeking candidates for chairman (M/F), Department of Microbiology/Immunology. Prospective candidates should be prepared to develop a first-rate academic department within the setting of a rapidly developing program of medical education. Candidates must have demonstrated scholarly as well as administrative and managerial abilities. Interested individuals are invited to apply by direct submission of curriculum vitae and three letters of recommendation to:

**Dr. Charles M. Baugh  
Chairman, Search Committee  
Department of Biochemistry  
College of Medicine  
University of South Alabama  
Mobile, Alabama 36688**

*The University of South Alabama is an Equal Opportunity Employer.*

## POSITIONS OPEN

### UNIVERSITY OF SOUTHWESTERN LOUISIANA DEPARTMENT OF BIOLOGY

Two positions: **VERTEBRATE ZOOLOGIST**, Ph.D., to teach herpetology, comparative anatomy, introductory courses; curate collection; with research promise, publications in systematics and/or experimental vertebrate biology, and interest in graduate program. **BOTANIST**, Ph.D., to teach agrostology, dendrology, general botany; coordinate botany labs; curate herbarium; with active research interests. Applicants should send complete curriculum vitae with reprints, research interests, and names of three references by 8 November to: **Search Committee, Department of Biology, Box 4-2451, University of Southwestern Louisiana, Lafayette, Louisiana 70504. An Equal Opportunity/Affirmative Action Employer.**

## CELL BIOLOGIST

The Department of Zoology, University of Texas at Austin, has an opening for faculty appointment in cell biology. Research-oriented department requires capability in graduate and undergraduate teaching and the development of an outstanding research program. Send curriculum vitae, selected reprints, a prospectus of research program, and names of five references by 1 December to **Clark Hubbs, Chairman, Faculty Development Committee, Department of Zoology, University of Texas, Austin, Texas 78712. An Equal Opportunity/Affirmative Action Employer.**

## CELL BIOLOGIST-BIOCHEMIST

Research position for Ph.D. biochemist with extensive experience in culture of mammalian cells. Position involves full-time research on methods for culture of mammalian endocrine cells and the biochemical characterization of somatic hybrids and viral transformants. Studies of receptor mechanisms, peptide hormone synthetic pathways, and cell-free translation experiments are anticipated. The positions available are for junior and senior scientists who will be accorded appropriate responsibilities for program development. Send application with curriculum vitae to **Daniel H. Mintz, M.D., Chief of Endocrinology and Metabolism, University of Miami School of Medicine, P.O. Box 520875, Biscayne Annex, Miami, Florida 33152. An Equal Opportunity Employer.**

## DEAN COLLEGE OF NATURAL SCIENCES

The University of Texas at Austin invites applications for the position of dean of the College of Natural Sciences. Applicants should qualify for a tenured appointment in a natural sciences department and should provide evidence of accomplishment in teaching and scholarship. Administrative experience is desirable. Interested persons should address inquiries to **Professor W. W. Bledsoe, Chairman, Consultative Committee, Department of Mathematics, RLM 8-100, The University of Texas at Austin, Austin, Texas 78712.** The committee should receive all applications by 5 November. *The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.*

## DIRECTOR, GEOPHYSICAL INSTITUTE AND DIVISION OF GEOSCIENCES, UNIVERSITY OF ALASKA

Applications are invited for the position of director, Geophysical Institute and Division of Geosciences. The director will provide scientific leadership and will have administrative and budgetary responsibility for the research programs of the Institute which involve solar-terrestrial physics and aeronomy, meteorology and climatology, glaciology, geology, and solid-earth geophysics; and for the instructional programs within the Division which include graduate studies in all of these fields leading to M.S. and Ph.D. degrees. The current budget exceeds \$6 million and involves 50 professorial and 95 technical and administrative staff. Applicants should be senior scientists with a doctoral degree or its equivalent in training and experience. Selection criteria will include the quality of published scientific contributions, other evidence of scientific innovation and leadership, and administrative/fiscal experience as in the scientific planning and supervision of major projects. Prior involvement with instruction and with research in polar regions will be advantageous. *The University is an Equal Opportunity Employer.* For further information write to **Peter Morrison, Search Committee Chairman, Irving Building, University of Alaska, Fairbanks, Alaska 99701.** The closing date for receipt of applications is 1 March 1977.

## POSITIONS OPEN

### COMPARATIVE ENDOCRINOLOGIST PARASITOLOGIST

Two assistant professor positions for August 1977. Applicants must have demonstrated abilities in research as evidenced by publications and a demonstrated teaching ability. Teaching duties include both graduate and undergraduate courses. Postdoctoral experience preferred. Applicants for the endocrinology position should have interest and ability in introductory laboratory course instruction. Send a complete curriculum vitae, reprints, a full description of research interests, and four letters of reference before 1 January 1977 to: **Dr. Victor H. Hutchison, Department of Zoology, University of Oklahoma, Norman, Oklahoma 73019. An Affirmative Action/Equal Opportunity Employer.**

## KITT PEAK NATIONAL OBSERVATORY OBSERVATORY DIRECTOR

Responsible as principal scientific officer for operation of the Observatory. The director of Cerro Tololo Inter-American Observatory, Chile, also reports to this officer. These Observatories are operated and managed by the Association of Universities for Research in Astronomy, Inc. (AURA), under contract with the National Science Foundation. The Observatory director reports to the Board of Directors of the Association through the president.

Candidate should be a scientist of stature, with an earned Ph.D. degree in astronomy or a related scientific field and should have demonstrated ability in leadership and management.

Send application or recommendation of candidates to the **Chairman of the Search Committee, Association of Universities for Research in Astronomy, Inc., P.O. Box 49290, Tucson, Arizona 85717.** All applications should be accompanied by a résumé and be received by AURA no later than 15 January 1977.

*AURA is an Equal Opportunity/  
Affirmative Action Employer.*

## ENTOMOLOGISTS

Three positions open for research entomologists to work in Mali, Africa, to conduct full-time research on the biology, ecology, and control of the tsetse fly. The first position is for a **senior entomologist** (in charge) to serve as team leader and project administrator. Ph.D. in entomology required with evidence of administrative ability. Postdoctoral experience preferred. Person selected must have strong background in medical entomology, parasitology, taxonomy, statistics, population dynamics, and field experience. The second position is for a **field entomologist** to determine species composition and population dynamics and to develop the best control procedures for Mali conditions. Ph.D. in entomology preferred but will consider M.S. plus experience. The third position is for an **entomologist** to develop procedures for mass-rearing tsetse. Ph.D. in entomology preferred but M.S. with adequate training and experience will be considered. Individuals selected will be employees of the Texas A & M University System. Salary is open depending on training and qualifications with allowances for housing and living expenses. Initial appointment will be for 1 year with options for renewal to 3 years. Closing date is 1 November or until suitable candidates are found, whichever is later. Send résumé, transcripts, and names of five references to **Dr. P. L. Adkisson, Head, Department of Entomology, Texas A & M University, College Station, Texas 77843. Equal Opportunity/Affirmative Action Employer.**

## FACULTY POSITIONS—NEUROBIOLOGY

The Department of Physiology and Biophysics at the University of Iowa College of Medicine invites applications for faculty positions from individuals with well-defined interests and research accomplishments in cellular or integrative neurophysiology. Applicants must hold the Ph.D. and/or M.D. degree and have a minimum of 2 years of postdoctoral training, with a publication record demonstrating productivity in original research. Candidates should be prepared to establish strong independent research programs and to take an active role in the medical and graduate teaching activities of this department. Please send curriculum vitae, bibliography, and a brief description of research interests, teaching experience, and career objectives, with names of at least three references, to **Dr. Robert E. Fellows, Department of Physiology and Biophysics, University of Iowa College of Medicine, Iowa City, Iowa 52242.**

*The University of Iowa is an Equal Opportunity Employer.*



## POSITIONS OPEN

### ECOLOGIST

A position for an aquatic ecologist at the assistant or associate professor level is open January or August 1977. Primary responsibility will be undergraduate/graduate instruction in ecology. Research activity is encouraged. Contact: **William Davies, Chairman, Department of Biology, Purdue University at Fort Wayne, Fort Wayne, Indiana 46805. An Affirmative Action/Equal Opportunity Employer.**

### FACULTY POSITION

The Division of Health Administration of the Columbia University School of Public Health has an opening for a senior faculty member to develop a program of service, education, and research relating to health policy. Physician with M.P.H. or M.B.A. or Ph.D. or Dr.P.H. is preferred. Send full curriculum vitae and names of references to **Professor and Head, Division of Health Administration, 6th Floor, Columbia University School of Public Health, 600 West 168 Street, New York, New York 10032. An Affirmative Action/Equal Opportunity Employer**

### HEAD, DEPARTMENT OF ANATOMY

The University of Illinois College of Medicine invites applications and nominations for the position of head, Department of Anatomy, in the School of Basic Medical Sciences. The Department presently consists of 17 faculty members 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. N. Khoobyarian, Chairman, Search Committee, Department of Microbiology, 835 South Wolcott Avenue, Chicago, Illinois. Mailing address: P.O. Box 6998, Chicago, Illinois 60680.**

*The University of Illinois is an Affirmative Action Employer.*

## THE UNIVERSITY OF ADELAIDE

invites applications for appointment to the

### CHAIR OF DENTAL HEALTH

The University is seeking an outstanding person to provide academic leadership in the teaching, research and clinical activities of the Department. A dental qualification registrable in South Australia is essential.

**SALARY:** \$A26,153 a year with superannuation on the F.S.S.U. basis and, for an eligible candidate, supplementary superannuation and pension schemes. In addition to basic salary the Professor will receive, on account of his registrable dental qualification, a clinical loading at the rate of \$A1,000 a year. Academic salaries in Australian Universities are currently under review.

**FURTHER INFORMATION,** is available from the Registrar of the University. **APPLICATIONS,** in duplicate, giving the particulars listed in paragraph 9 of the Statement should reach the Registrar of the University, G.P.O. Box 498, Adelaide, South Australia 5001, not later than 15 November 1976.

## POSITIONS OPEN

**FACULTY POSITION—BIOMETRY:** The Department of Biometry has an opening for an experienced biostatistician/epidemiologist. Applicants should have a record of effectiveness in medical education and in statistical collaboration and consulting. Effective function will require that the applicant be an experienced computer user. Level of appointment will depend upon qualifications although applicants qualified for appointment at the associate professor level are desired. Forward curriculum vitae and three letters of recommendation to **Rufus F. Walker, Jr., Ph.D., Department of Biometry, Louisiana State University Medical Center, P.O. Box 33932, Shreveport, La. 71130. An Equal Opportunity Employer.**

### VISITING LECTURERS Department of Biology

The University of Virginia has two openings for one-semester lectureships beginning 15 January 1977, in the areas of animal behavior and either general vertebrate biology or a more specialized zoology course such as mammalogy or ornithology. Salary levels negotiable. Applicants should send no later than 10 November a curriculum vitae with references and a proposed lecture course outline to **Lecturer Search Chairman, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, Virginia 22901. An Affirmative Action/Equal Opportunity Employer.**

### QUEEN'S UNIVERSITY Kingston, Ontario DEPARTMENT OF PHYSIOLOGY

Applications are invited from **MAMMALIAN PHYSIOLOGISTS** with the Ph.D. and/or M.D. degree for appointment to two faculty positions at the rank of assistant professor. One position is for a sensory/motor neurophysiologist and the other for a cardiorespiratory physiologist. Proven research ability and teaching experience at undergraduate and graduate levels. Application to **Chairman, Selection Committee, Department of Physiology, Queen's University, Kingston, Ontario, Canada, K7L 3N6,** should include curriculum vitae and names of three references.

## POSITIONS OPEN

Applications invited for position in **HUMAN ANATOMY.** Individual to teach and coordinate gross morphology in an interdisciplinary curriculum. Demonstrated commitment to excellence in research and teaching essential. One or more years of experience after the doctoral required. Rank of appointment dependent on individual's qualifications. Send complete curriculum vitae, including a statement of research interests, and names of at least three references to **Dr. Allen C. Enders, Chairman, Department of Human Anatomy, School of Medicine, University of California, Davis, California 95616.** Closing date for applications is 15 November 1976. *The University of California is an Equal Opportunity Employer. Applications from women and minorities are encouraged.*

Applications invited for position in **HUMAN ANATOMY.** Individual must be able to teach aspects of gross morphology, cell biology, and histology or neuroanatomy in an interdisciplinary curriculum. Demonstrated commitment to excellence in research and teaching essential. Preference shown to individuals whose research uses the methods of cell biology in examining functional problems. A minimum of 1 year of postdoctoral experience is required. Send complete curriculum vitae, including statement of research interests and names of at least three references, to **Dr. Allen C. Enders, Chairman, Department of Human Anatomy, School of Medicine, University of California, Davis, California 95616.** Closing date for applications is 15 November 1976. *The University of California is an Equal Opportunity Employer. Applications from women and minorities are encouraged.*

**IMMUNOLOGIST, ASSISTANT PROFESSOR.** Duties: initiate own research program and participate in teaching medical, dental, and graduate students. Send curriculum vitae and names of three references to:

**Dr. Glenn A. Gentry  
Department of Microbiology  
University of Mississippi Medical Center  
Jackson, Mississippi 39216**

*An Equal Opportunity/Affirmative Action Employer*



International Atomic Energy Agency seeks professional officer (P-4 level) for division of scientific and technical information, International Nuclear Information System (INIS) subject control unit for abstracting and indexing IAEA publications, indexing quality control and improvements to INIS thesaurus. Required degree in higher energy physics and mathematics. Initial contract two years. Emoluments depending on experience about US\$25,000 per annum, tax free. Additional allowances if married. Travel and removal expenses paid. Six weeks annual leave. Send curriculum vitae under VN 43/76 to IAEA, Division of Personnel P.O. Box 590, Vienna, Austria.

## PHARMACOLOGIST

Candidates should have a Ph.D. in Pharmacology with a major interest or preferably experience in evaluation of analgesics. Primary responsibility is in further development of an established program studying the site and mechanism of action of new and novel agents for the treatment of pain and related phenomena such as tolerance, habituation, addiction and inflammation. Interested persons should submit curriculum vitae to:

**Mr. Charles L. Smith  
Research Administrator**

**Wyeth WYETH  
LABORATORIES INC.  
P.O. Box 8299  
Philadelphia, Pa. 19101**

*An Equal Opportunity Employer,  
M/F*

## POSITIONS OPEN

### DEVELOPMENTAL BIOLOGIST NORTHWESTERN UNIVERSITY

An assistant professor position with opportunity for advancement to tenure is available in the Department of Biological Sciences. The applicant should have a background in developmental and molecular biology with postdoctoral experience and is expected to establish a strong research program on molecular aspects of development.

Send curriculum vitae and names of three referees to: **Neena B. Schwartz, Chairman, Department of Biological Sciences, Northwestern University, Evanston, Illinois 60201.**

*Northwestern University is an Equal Opportunity Employer.*

One **FACULTY POSITION IN DEVELOPMENTAL PSYCHOLOGY**, Institute of Child Development, University of Minnesota, beginning September 1977. The position is at the level of beginning assistant professor (completed doctoral degree). Candidates with research and teaching competence in some combination of the following: language and communication (broadly defined), atypical development, and age periods other than infancy are especially sought. Interested persons should send copies of their curriculum vitae and three letters of recommendation to **Professor Anne D. Pick, Institute of Child Development, University of Minnesota, Minneapolis, Minn. 55455.** Completed applications must be received by 15 February 1977 for adequate consideration. Salaries at the University of Minnesota are competitive. *The University of Minnesota is an Equal Opportunity/Affirmative Action Employer.*

The University of Arizona solicits applications for the position of **HEAD** of the Department of Ecology and Evolutionary Biology. Applicants should have leadership and administrative ability, a productive research record, and a desire to develop a strong program that utilizes the unique environmental resources of the region. The department consists of 17 professionals with broad interests in ecology, evolution, systematics, and genetics. Applications, consisting of curriculum vitae, selected reprints, and names of three references, should reach the following address by 1 December 1976: **Dr. William B. Heed, Chairman, Search Committee, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona 85721.** *An Equal Opportunity/Affirmative Action Employer under state and federal laws and regulations including Title IX, 1972 Education Amendments.*

The Peoria School of Medicine, one of three clinical schools within the University of Illinois College of Medicine, is seeking a **HEAD** or **CHAIRPERSON** for the Department of Family Practice. This position requires a physician who must be graduated from an approved medical school, must be licensed or eligible for licensure in the state of Illinois, and preferably Board-certified in family practice. Applicants should possess administrative experience, knowledge of funding educational and research programs, teaching experience, and interpersonal skills. This position is available at present, starting date to coincide with selection and approval of the candidate by the dean of the Peoria School of Medicine. Salary open. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applications from members of minority groups and women.* Interested persons should send curriculum vitae to **H. Hugh Rohrer, M.D., Chairman, Search Committee for Head/Chairperson for the Department of Family Practice, Peoria School of Medicine, 123 SW Glendale, Peoria, Illinois 61605.** Telephone 309-671-3000. Applications accepted until 31 December 1976.

The Department of Biological Sciences at Purdue University is seeking a **MICROBIOLOGIST** with research interests and several years of postdoctoral training in the diverse functions of microorganisms and their manipulation. The successful candidate will be expected to teach a course in general microbiology and be capable of sustaining a program of quality research. Interested applicants should submit 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.** Unsuccessful applicants for the similar position advertised earlier may also write to reactivate and update their previous applications. *Purdue University is an Equal Opportunity/Equal Access Institution.*

## POSITIONS OPEN

**NEPHROLOGIST**—The Division of Nephrology in the Department of Medicine at the University of Alabama in Birmingham has available a position at the assistant professor level. The position is open to qualified individuals at a senior level fulfilling three criteria. First, the individual must have expertise in the care and management of patients with renal disease and in the operation and administration of a hemodialysis unit. Second, the individual must have a firm commitment to teaching programs oriented to medical students, graduate students, house officers, and fellows. Finally, the individual should have a research background and be able to carry out independent research, preferably in the physiology of renal tubular transport processes. Apply to the **Division of Nephrology, University Station, Birmingham, Alabama 35294.** Telephone: 205-934-3585. *An Equal Opportunity/Affirmative Action Employer.* Expiration date for receipt of applications: 1 January 1977.

**NEUROVIROLOGIST:** The Department of Neurology, UCLA School of Medicine, has an opening for a clinical neurologist who has had research training in virology. Please send curriculum vitae to **Richard D. Walter, M.D., Chairman, Department of Neurology, Reed Neurological Research Center, Los Angeles, California 90024.** *The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from qualified members of minority groups and women.*

### ONCOLOGIST or PHARMACOLOGIST with Nutritional Interests

Staff scientist for a government-sponsored contract research program investigating the relationship of diet and nutrition to cancer etiology and therapy. Position involves research and administrative responsibilities. Applicants should have Ph.D. or equivalent experience. Position available immediately. Salary open. *Equal Opportunity Employer, M/F.* Send résumé to **Dr. L. O. Crosby, Diet, Nutrition and Cancer Program, c/o Enviro Control, Inc., 11300 Rockville Pike, Rockville, Md. 20852.**

### PATHOLOGY, ACADEMIC

Applications are invited for positions available in both anatomic and clinical pathology including hematopathology, microbiology, laboratory director, immunopathology, organ systems specialists, and so forth. The rapidly expanding department now has five each of M.D.'s and Ph.D.'s, has a 400-bed hospital soon to expand to 500, and a 4-year-old medical school with 64 students per annum. Responsibilities will include teaching, service, research, and administration. Support is available for pilot projects or transfer of research activities. Opportunities for rapid advancement will be provided. Candidate should send curriculum vitae, available publications, three references, and reason for leaving current position. Level of appointment and salary are negotiable.

Climate tepid in summer, superb October to June. People are as warm and friendly as the weather. Gulf Coast city of 400,000 financially secure because of recent oil finds. The 470-year French/Spanish/Italian/Greek heritage is reflected in culture and civic events. Correspond with **Dr. Alden W. Dudley, Jr., Professor and Chairman, Department of Pathology, 3190 Medical Sciences Building, University of South Alabama, Mobile, Alabama 36688.**

*The University of South Alabama is an Equal Opportunity Employer.*

### PHARMACOLOGIST

The Department of Pharmacology of the Texas College of Osteopathic Medicine, a state-supported medical school, invites applications for a newly created faculty position. The rank and salary will be commensurate with experience and other qualifications. Applicants must hold a Ph.D. degree in pharmacology and preference will be given to those with teaching expertise outside the areas of CNS pharmacology, drug metabolism, and toxicology. The successful candidate will be expected to participate in teaching medical students and to engage in productive research projects of his/her choosing. Please send curriculum vitae, list of publications, and three references to:

**Dr. Elroy Cantrell, Chairman  
Department of Pharmacology  
Texas College of Osteopathic Medicine  
North Texas State University  
Denton, Texas 76203  
Telephone: 817-788-2376**

*Texas College of Osteopathic Medicine is an Equal Opportunity Employer.*

## POSITIONS OPEN

**NMR SPECIALIST.** Ph.D. physical scientist with experience in the operation and maintenance of NMR instrumentation. Supervision and instruction of members of the **Department of Chemistry, Cornell University, Ithaca, New York 14853.** Send résumé to **Professor E. L. Muetterties.** *Affirmative Action/Equal Opportunity Employer.*

**NUTRITIONAL ECONOMIST.** Teaching-research position in Department of Nutrition. Salary and rank dependent on qualifications. Doctorate and international experience required. Send inquiries, curriculum vitae, and names of three references to: **Dr. Joseph C. Edozien, Department of Nutrition, School of Public Health, University of North Carolina, Chapel Hill, N.C. 27514.** *Equal Opportunity/Affirmative Action Employer.*

**PHYSIOLOGICAL PSYCHOLOGIST.** A position as an assistant professor in the Department of Psychology at Arizona State University is available fall 1977 for a recent Ph.D. whose principal interests are in sensory processes from an electrophysiological perspective. Applicant must be prepared to teach courses in sensory and experimental psychology. Special consideration will be given to applicants who are familiar with microelectrode techniques and whose interests are in peripheral auditory processes. Opportunities exist for collaboration in a hearing-science grant program. Send curriculum vitae and three letters of reference to **Dr. Peter Killeen, Department of Psychology, Arizona State University, Tempe, Arizona 85281.** *The University is an Affirmative Action/Equal Opportunity Employer.* Applications must be completed by 3 December 1976.

### WEST INDIES CENTRAL SUGAR CANE BREEDING STATION PLANT PATHOLOGIST

*Scope of work.* Screening commercial and parental clones for reaction to smut disease. Development of curative treatments for diseases to standards acceptable for international exchange of clones. Close liaison with quarantine authorities. Early stages of the work will be centered in Guyana.

*Qualifications.* Graduate with several years of field experiment or research experience oriented toward practical disease problems of a crop plant. Candidate should show evidence of adaptability to work without specialized laboratory facilities.

*Contract* for 3 years in the first instance.

*Salary* linked to lecturer/senior lecturer scales of the University of the West Indies. Superannuation similar to FSSU. Passages for appointee and family, unfurnished house, and traveling allowances.

Further details from the **West Indies Central Sugar Cane Breeding Station, Groves, St. George, Barbados, West Indies.**

Closing date: 31 October 1976.

### POPULATION GENETICS AND BIOLOGY

We invite applications from candidates with an established research reputation in the general area of population genetics and biology. Research and teaching interests might focus on evolution, ecology, behavior, or similar fields. The position is at the professor or possibly associate professor level, and the appointment will be made during the year 1977. Salary is negotiable, but the salary range for a full professor is \$21,500 to \$33,500, and the salary range for an associate professor is \$18,000 to \$23,700.

Please send curriculum vitae to:

**Biology Search Committee  
Attn: Burney J. Le Boeuf  
Thimann Laboratories  
University of California  
Santa Cruz, Calif. 95064**

The application filing deadline is 1 February 1977.

*The University of California is an Equal Opportunity/Affirmative Action Employer. Candidates will be considered without regard to race, color, religion, sex, or origin.*

**THEORETICAL PARTICLE PHYSICIST.** The Administration of the University of Pennsylvania has encouraged the Physics Department to present an outstanding candidate for a possible tenure appointment in elementary particle theory. Professor Alfred K. Mann is serving as the chairman of an ad hoc committee to develop a list of potential candidates. Nominations and applications for the appointment should be sent to **Professor A. K. Mann, 209 South 33 Street, Philadelphia, Pennsylvania 19104,** prior to 15 November 1976. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

## TISSUE CULTURE SECTION HEAD

An opening is available for a Section Head, tissue culture research, in the Biological Research Division of Pitman-Moore, Inc. Duties include developing and certifying new tissue culture cell lines, testing present cell lines as required by U.S.D.A., supervising, maintenance and supply of cell lines and tissue cultures used for the development of viral vaccines and developing diagnostic tests that involve viral or microbiological components. Educational background could include MS, PhD or DVM with specific knowledge of the development of tissue culture systems. 5 years technical experience desirable. Our modern, well equipped laboratories are located in Washington Crossing, N.J. in a rural setting. Resumes should be submitted to Professional Employment, Pitman-Moore, Inc., A Johnson & Johnson Company, P. O. Box 344, Washington Crossing, N.J., 08560.



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## POSITIONS OPEN

### POSTDOCTORAL POSITION IN BIOORGANIC CHEMISTRY

Position immediately available for organic chemist with background in quinone chemistry to assist in the investigation of the mode of action of vitamin K and regulation of prothrombin synthesis in the Department of Biochemistry. Send curriculum vitae and names of three references to:

Dr. Robert E. Olson  
St. Louis University School of Medicine  
Department of Biochemistry  
1402 South Grand Boulevard  
St. Louis, Missouri 63104

**POSTDOCTORAL POSITION** in air pollution science. Fall 1976. Heterogeneous reaction studies of  $H_2SO_4$  aerosol. First-year salary \$10,000 with possibility of renewal for second year. Send résumé, three letters of recommendation, and undergraduate and graduate transcripts to Dr. J. J. Huntzicker, Oregon Graduate Center, 19600 NW Walker Road, Beaverton, Oregon 97005. An Equal Opportunity Employer.

**POSTDOCTORAL POSITION.** A recent Ph.D. in chemistry or the biological sciences to do immunology research. To begin immediately. Send résumé or call

Dr. T. J. Yoo  
University of Iowa  
Iowa City, Iowa 52242  
Telephone: 319-338-0581, Ext. 507

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The vacancy is with a group located in the Department of Applied Mathematics with major interests currently in biological self-assembly (membranes), macromolecular interactions, and solution chemistry. There is also an ongoing experimental program on direct measurement of molecular forces between macroscopic bodies and films. Persons interested in joining the group in visiting capacity are invited to write to Professor B. W. Ninham or Dr. J. N. Israelachvili, Department of Applied Mathematics, The Australian National University, P.O. Box 4, Canberra, A.C.T. 2600, Australia.

The appointment would be for up to 1 year from January 1977. An appropriate grant toward travel, removal, and living expenses will be negotiated. Assistance with accommodation is available.

### VERTEBRATE PHYSIOLOGIST

The biology department at the University of Texas at Arlington is seeking a vertebrate physiologist with a Ph.D. to fill a teaching-research position at the assistant professor level, available in September 1977. Primary responsibilities will include undergraduate and graduate courses in physiology and developing an independent research program. Send curriculum vitae and the names of three references to Faculty Search Committee, Biology Department, University of Texas at Arlington, Arlington, Texas 76019. Applications are due by 15 December 1976. An Equal Opportunity/Affirmative Action Employer.

### VICE PRESIDENT FOR HEALTH SCIENCES

The University of New Mexico seeks a vice president for health sciences. The health sciences include University/County Hospital, School of Medicine, College of Nursing, College of Pharmacy, Cancer Research and Treatment Center, Allied Health Sciences, and Mental Health—Mental Retardation Center. Desirable qualifications include: advanced degree with strong background in health sciences area; proven experience in administering health science interdisciplinary teaching, research and patient-care programs; and high-level administrative and analytic ability. Skills in communications and interpersonal relationships and commitment to affirmative action and equal employment are essential.

The vice president for health sciences serves as the chief executive officer of the health sciences under the direction of the president of the University.

Applications and nominations should be directed to:

Chester C. Travelstead, Provost  
Scholes Hall 226  
The University of New Mexico  
Albuquerque, New Mexico 87131

Deadline for receipt of applications: 15 January 1977. The University of New Mexico is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

**POSTDOCTORAL POSITIONS (TWO) IN NEUROPHARMACOLOGY:** electrophysiologic and neurochemical approaches in neuromuscular function and CNS factors controlling muscle tone. Strong neurophysiology or neurochemistry background and facility with modern techniques essential. Available 1 January 1977. Send résumé to: F. G. Standaert, M.D., Chairman, Department of Pharmacology, Georgetown University, Washington, D.C. 20007.

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## TRAINEESHIPS

**POSTDOCTORAL TRAINEESHIPS IN CLINICAL CHEMISTRY** available 1 July 1977, in an ABCC-approved program designed to train Ph.D. biochemists or chemists to become clinical chemists in a research-oriented hospital. Appointments are for 1 year only at an NIH stipend of \$10,000. Preference will be given to those with prior experience in a hospital laboratory. Send curriculum vitae and three letters of reference to Dr. Alex Kaplan, Department of Laboratory Medicine, SB-10, University of Washington, Seattle, Wash. 98195. Equal Opportunity/Affirmative Action Employer.

## FELLOWSHIPS

### POSTDOCTORAL FELLOWSHIP

Position available in July 1977 for M.D. or Ph.D. with background in biochemistry and/or cell biology and with interests in metabolism and diabetes. Support from NIH Institutional Grant on Cell Membranes. Project concerns mechanism of insulin action involving ultrastructural and biochemical studies on insulin-receptor interactions and insulin effector system. Applicants should apply to:

Dr. Leonard Jarett  
Professor of Pathology and Medicine  
Washington University School of Medicine  
St. Louis, Missouri 63110

### POSTDOCTORAL FELLOWSHIP IN EXPERIMENTAL HEMATOLOGY

NIH-supported postdoctoral fellowship immediately available for study of the hematopoietic and immune systems by transmission and scanning electron microscopy, freeze-fracture-etch and related techniques. Appointments on annual basis, renewable. U.S. citizens or permanent residents. Send curriculum vitae to Dr. Leon Weiss, Department of Animal Biology, School of Veterinary Medicine, University of Pennsylvania, 3800 Spruce Street, Philadelphia, Pa. 19174. The University of Pennsylvania is an Equal Opportunity Employer.

Applications are invited for a 1-year FELLOWSHIP (renewable) in medical mycology with special emphasis in regulation of morphogenesis, membrane biology, host-parasite relationships, and extended training in laboratory medical mycology. Background of the applicant should include recent Ph.D. or M.D. degree with training in general mycology, microbiology, and/or biochemistry. Inquiries should be addressed to G. S. Kobayashi, Department of Medicine, Box 8123, Washington University School of Medicine, St. Louis, Missouri 63110.

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## FELLOWSHIPS

### POSTDOCTORAL FELLOWSHIP IN MEMBRANE BIOLOGY

Postdoctoral research fellowships available for Ph.D.'s or M.D.'s in an NIH-funded membrane biology training program. Research areas include: membrane transport of anticancer agents, kinetics of drug-target interactions within cells; transport phenomena in artificial membrane systems, epithelial tissues, and single cell systems; transport theory—network thermodynamics. Starting date is 1 July 1977 or earlier. Stipend is \$10,000 to \$12,800 depending upon previous experience. American citizenship or permanent visa required. For further information, send curriculum vitae to Dr. I. David Goldman, Department of Medicine, Medical College of Virginia, Richmond, Virginia 23298.

### SURGICAL PATHOLOGY FELLOWSHIP July 1977

A 1-year fellowship in tumor pathology for an M.D. will be available on 1 July 1977, at Rush Medical College and Rush-Presbyterian-St. Luke's Medical Center. This is an outstanding academic referral and teaching institution in Chicago. The fellow will be involved in the analysis of surgical pathology material by a variety of sophisticated techniques. Training opportunities will be available in electron microscopy, microstereology, freeze-fracturing, immunofluorescence, and so forth. Candidates should send a complete curriculum vitae and the names of at least three references: Dr. Ronald S. Weinstein, Professor and Chairman, Department of Pathology, Rush-Presbyterian-St. Luke's Medical Center, 1753 West Congress Parkway, Chicago, Illinois 60612.

### ENDOCRINE RESEARCH FELLOWS

Two endocrine research fellowships at the University of Arkansas for Medical Sciences are available beginning in July 1977. Two-year appointments with combined clinical and research responsibility leading to Board qualification in endocrinology. Send inquiries to: Dr. James Wynn, University of Arkansas for Medical Sciences, Little Rock, Arkansas 72201.

**THE CENTER FOR SYSTEMS NEUROSCIENCE** Invites applications for fellowships, tenable 1 September 1977 to 30 May 1978, with a stipend of up to \$10,000 (which fellows may supplement from other sources). Applicants may be either established neuroscientists or postdoctoral researchers. Fellows will collaborate with Center staff to develop neural models and computer techniques related to experimental research. For further information and application forms, write to Michael A. Arbib, Director, Center for Systems Neuroscience, Graduate Research Center, University of Massachusetts, Amherst, Mass. 01002. Awards will be made on an Equal Opportunity basis.

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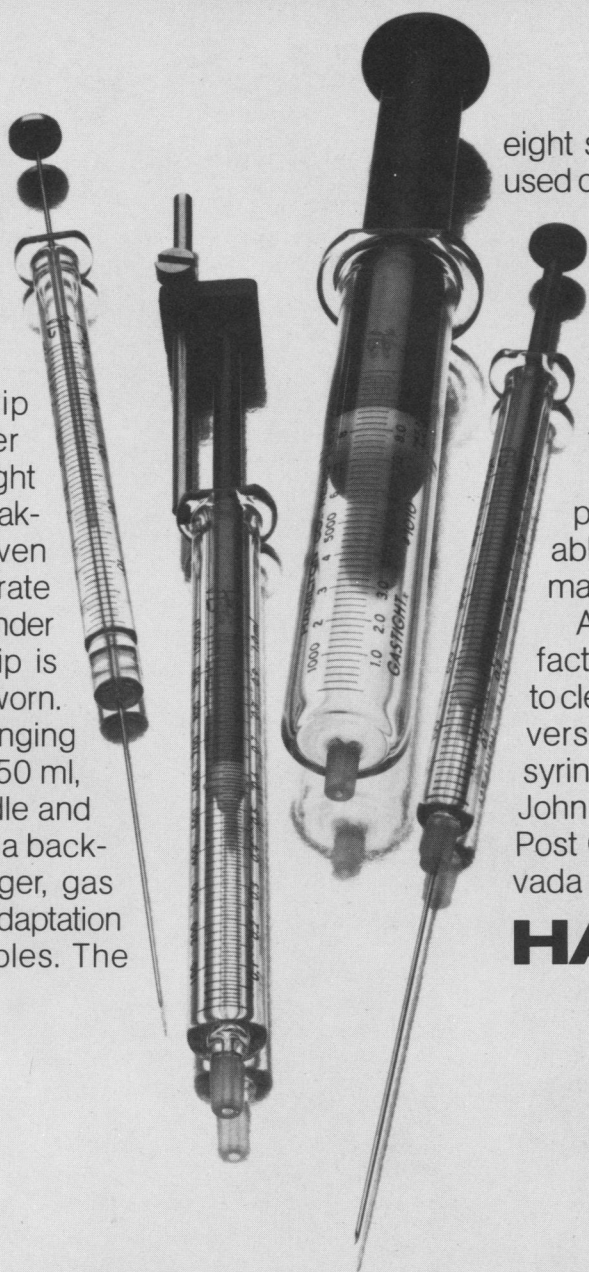
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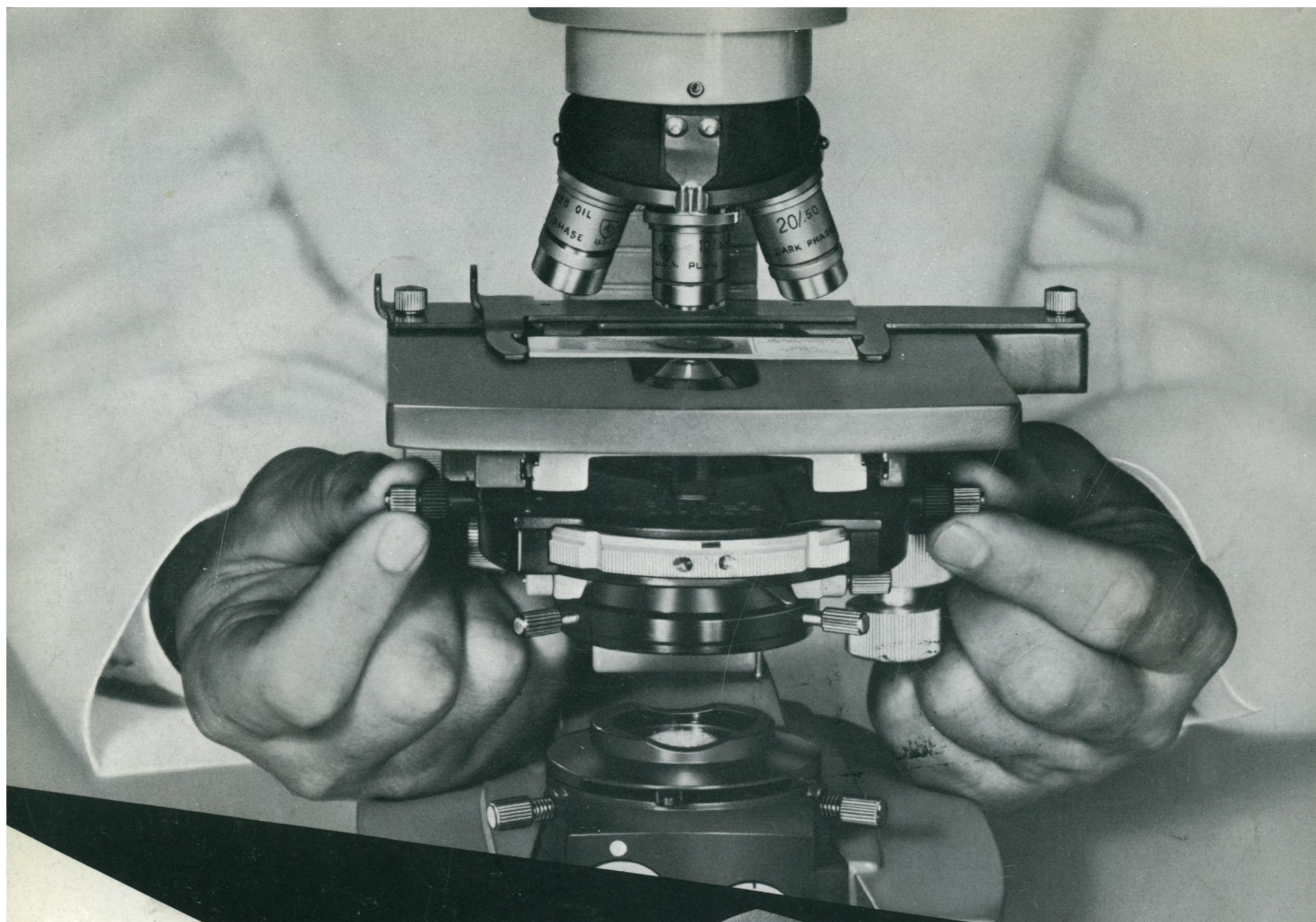
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