# PERSONNEL PLACEMENT

CLASSIFIED: Positions Wanted. 25¢ per word, minimum charge \$4. Use of Box Number counts as 10 additional words. Payment in advance is required.

COPY for ads must reach SCIENCE 2 weeks before issue date (Friday of every week).

before issue date (Friday of every week).

DISPLAY: Positions Open. Rates listed below—no charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount.

Minimum ad: 1 inch. Ads over 1 inch will be billed to the nearest quarter inch. Frequency rate will apply to only repeat of same ad. No copy changes. Payment in advance is required except where satisfactory credit has been established. Send copy for display advertising to SCIENCE, Room 1740, 11 West 42 St., New York 36.

Single insertion 4 times in 1 year

\$50.00 per inch 48.00 per inch

For PROOFS on display ads, copy must reach SCIENCE 4 weeks before date of issue (Friday of every week).

Replies to blind ads should be addressed as follows:

Box (give number) SCIENCE 1515 Massachusetts Ave., NW Washington 5, D.C.

# 指揮網 POSITIONS WANTED:

**Botanist, Ph.D.** 20 years' experience botany, biology, zoology. Desires relocation with opportunity for teaching and/or administration. Box 114, SCIENCE.

Director Atherosclerosis Research. Large teaching and experimental background in cardiovascular physiology, arterial metabolism, and atherosclerosis. Box 111, SCIENCE. 6/1

Pre-Doctoral Microbiologist (Bacteriologist), experienced medical microbiology, desires position August. Research oriented. Box 118, SCI-ENCE.

Virologist-Microbiologist, D.V.M., M.S., Ph.D. Desires research position, preferably institutional or government. Part-time teaching or veterinary diagnostic duties are acceptable. Twelve years' diagnostic and research experience. Five years' tissue culture experience. Available August. Box 121, SCIENCE.

(a) Zoologist/Entomologist, M.S., would like biological research. (b) B.S. Chemist (analytical/pharmaceutical) 11 years' industrial experience. (Please write for information regarding these and other scientists, senior and junior, in all fields; nation-wide and very active service.) Science Division. The Medical Bureau, Inc., Burneice Larson, Chairman, 900 N. Michigan Avenue, Chicago 11, Illinois.

# POSITIONS OPEN

PHYSICAL CHEMIST, PHYSICIST, OR CHEMICAL ENGINEERS with backgrounds or interests in cryogenics, ultra high vacuum techniques and instrumentation, absorption and diffusion phenomena to engage in research and development studies in connection with space environmental simulation. Applicants should have strong physical chemistry training and experience or 3 to 5 years' experience in related fields. The work will be carried out in a modern Air Force research and development laboratory, with excellent opportunities for professional growth in aerospace research. Send résumé to:

Technical Recruiting, ARO, Inc., Arnold Air Force Station (near Tullahoma), Tenn. An equal opportunity employer

Zoologist to teach "Comparative Anatomy" and "Histology" in 1962-63, as a temporary substitute for staff member on leave of absence. Some teaching experience is necessary, rank lecturer or assistant professor, salary scale starts at \$5,000 for lecturer and \$6,500 for assistant professor. There is a possibility that the position might be made permanent in 1963. Send curriculum vitae, publication list, and three references to Professor W. B. Stallworthy, Head of the Department of Biology, Mount Allison University, Sackville, N.B.

# 

Bacteriologist to take charge of both elementary and advanced bacteriology courses in 1963-64 and to assist with the design and equipment of a new laboratory. Experience and advanced degree re-quired. Rank and salary dependent on qualifica-

Send curriculum vitae, publication list, and three references to Professor W. B. Stallworthy, Head of the Department of Biology, Mount Allison Universiy, Sackville, N.B.

#### Female or Male Help Wanted

Laboratory technician. Cancer Research, good background in immunology either in course work or professional experience; age 22 to 35; salary open; excellent benefits. Apply Personnel Office

Indiana University Medical Center

1100 W. Michigan St., Indianapolis, Indiana.

for chemical laboratories in a 500 bed general hospital. Excellent remuneration for a competent man, who can supervise, introduce new procedures and maintain high standards of performance. Research facilities available. Well equipped and staffed laboratories. Give full details to:

Bernhard Steinberg, M.D.

The Toledo Hospital

2142 North Cove Bldg., Toledo 6, Ohio

Junior Scientists: (a) Clinical Biochemist, M.S. eastern hospital; \$7200 up. (b) Biochemist/Endocrinologist, M.S., or experienced B.S., eastern pharmaceutical house, to \$10,000. (c) Research Technician, B.A., B.S. in basic science; no experience; southwestern medical center; to \$482. (d) Microbiologist, M.S., clinical, teaching; southern hospital. (e) M.A. Biology/Zoology, faculty midwest college. (f) M.S. Mathematics, faculty, central university; to \$7000. (g) Hematologist, experienced; western university. (h) M.S. Virologist, East Coast industrial research; to \$10,000. (j) M.S. Physical Chemist, supervisory, central hospital; \$7500. (k) Chemistry, faculty, north central college. Many other opportunities available for both junior and senior scientists. Please write Science Division, Chairman, 900 North Michigan Avenue, Chicago 11, Illinois.

(a) Plant Pathologist; (b) Soil Chemist for Latin America—U.S. company with permanent agricultural operations has openings for recent Ph.D. plant scientist (or M.A. with 4-5 years' experience) and recent M.A. soil chemist to join research staff in Latin America. Both are challenging positions with opportunity for personal and professional advancement. Not for every man, but if capable of and interested in working in tropical agriculture send résumé for full information. Box 119, SCIENCE.

### Research Biochemists and Biologists

Ph.D.'s with interest in applying skills to strategic problems. Should be imaginative and able to work cooperatively with other disciplines on varied problems. For Northeast and Midwest locations.

Industrial equal opportunity employer. Box 116, SCIENCE

#### DIRECTOR OF RESEARCH San Diego Biological Research Institute

Applications are invited for above position in the San Diego Zoological Gardens. Salary: In \$10,000-\$20,000 per year range, depending upon experience. Desired qualifications: a) Ph.D. degree or its equivalent; b) training in some phase of animal biology such as physiology, biochemistry, nutrition, pathology, behavior, etc.; c) active in research; d) experience supervising the work of others; e) ability to speak at scientific and public relations meetings; f) willingness to work closely with researchers, technicians, animal keepers, and curators at the Zoological Gardens as well as with scientists at other research organizations in the San Diego area.

Correspondence concerning the position

Correspondence concerning the position should be addressed to: Dr. Charles R. Schroeder, Director, San Diego Zoological Gardens, P.O. Box #551, San Diego 12, California.

# POSITIONS OPEN

#### **BIOCHEMIST**

Ph.D. with background in endocrinology to collaborate in research concerning synthesis and metabolic actions of adrenocortical hormones. Well-equipped laboratory in large teaching hospital, academic atmosphere, liberal salary.

Box 122, SCIENCE

### **BIOCHEMIST-PHYSIOLOGIST**

An expanding midwestern pharmaceutical company has opportunity for Ph.D. biochemist-physiologist to conduct fundamental research related to atherosclerosis and/or obesity. Post-doctoral experience preferred. An equal-opportunity employer. Please send complete resume to

**Technical Employment Coordinator** The Upjohn Company Kalamazoo, Michigan

#### **MICROSCOPE SALES**

Here is an excellent opportunity for an energetic college-trained person with either experience in Microscopy or training in the Physical Sciences & Sales experience or personality to promote sales of Precision Microscopes & accessories. After intensive training you will back up our salesmen as a Microscope specialist—travelling, giving demonstrations, recommending equipment, handling technical inquiries, etc. Excellent Salary + Paid Expenses & Liberal Benefits all add up to the Right Job for the Right Man selected. SEND Complete résumé, in confidence, to A. H. Gewecke, personnel supervisor,

# FISHER SCIENTIFIC CO.

N.Y. 14, N.Y.

633 Greenwich St.

An Equal Opportunity Employer
"Serving Science since 1851"

"Opening for assistant Director of Laboratory Animal Breeding Facility in Eastern New York. Background in microbiology, genetics and small animal husbandry desirable; knowledge of gnotobiotic technology useful; must have pleasing personality and initiative.

State training, experience, age and family status. Position offers good potential."

Box 123, SCIENCE

## PHARMACOLOGIST-TOXICOLOGIST (Ph.D.)

Research organization offers unusual opportunity for responsible scientist trained in pharmacology and toxicology to head laboratories. Industrial experience preferred but not essential. Salary commensurate with experience. Liberal benefit program includes profit sharing. Call collect or write: Arthur D. Herrick, New Drug Institute, 660 Madison Avenue, New York (MU 8-0640).

Ph.D. Virologist/Director of Quality Control Tissue Culture Technicians/B.S. or M.S. Biology Graduates

Independent, expanding company, located in suburban Maryland, openings in several programs of virus research and tissue culture activities. Associate with stimulating professional group. Liberal employee benefits. Equal opportunity employer. Send complete curriculum vitae to: Box 120, SCIENCE.

# The Market Place

# BOOKS AND MAGAZINES

### Your sets and files of scientific journals

are needed by our library and institutional customers. Please send us lists and description of periodical files you are willing to sell at high market prices. Write Dept. A3S, CANNER'S, Inc.

Boston 20, Massachusetts

### BOOKS AND MAGAZINES

## Your Book Published

If we think your manuscript has unusual possibilities, we will publish it on a straight royalty or partial subsidy basis. Send manuscript for free editorial report or write for Brochure sx. Pageant Press. Inc. 101 Fifth Avenue, New York 3, N.Y.

## SCIENTIFIC JOURNALS WANTED

Sets, Runs and Volumes bought at top prices.

— Your wants supplied from our Back Files of over 3,000,000 periodicals. Abrahams Magazine Service N. Y. 3, N. Y.

#### PROFESSIONAL SERVICES

## Consultation and Research since 1922

**T**ood and Drug

Maurice Avenue at 58th Street New York City Televearch TWINING 4-0800

Toxicology PharmacologyNutrition

BERNARD L. OSER, PH.D. Director

## WHERE EXPERIENCE COUNTS



#### LABORATORY SERVICES

Applied Research and Development, Test-ing and Consultation ● Food, Feed, Drug and Chemical Analyses, Animal Studies, Pesticide Screening, Pesticide and Addi-tive Residue Analyses

For price schedule and specific work proposals, write

WARF
Madison 5, Wisconsin

#### SUPPLIES AND EQUIPMENT



Clipboard With A Drawer! Light-weight, Sturdy Storage Drawer 11/2" x 10" x 14" — \$7.95 Write for Free Literature Kathco Enterprises Box 148 Jeannette, Pa.

SPRAGUE-DAWLEY, INC. Pioneers in the development of the STANDARD LABORATORY RAT. P.O. Box 2071 Madison, Wisconsin CE 3-5318

# YOU NEED THIS FREE

1962 CATALOG

Serums, antiserums and bloods of all kinds for technicians and tissue culture laboratories. No salesman will call.

COLORADO SERUM CO. 4950 York St. • MAin 3-5373 • Denver 16, Colo.



AREA CODE 617 RE 4-2000 1018 Beacon St., Brookline 46, Mass.

# **PHOTOPERIODISM** AND RELATED PHENOMENA IN PLANTS AND ANIMALS

AAAS Symposium Volume No. 55

Editor: Robert B. Withrow

Proceedings of the Gatlinburg Conference on Photoperiodism, 29 October-2 November 1957, sponsored by the Committee on Photobiology of the National Academy of Sciences-National Research Council and supported by the National Science Foundation, Preface by Alice P. Withrow.

57 papers by 75 authors. 6 x 9 inches, 921 pages, 256 illus., genera and species index, subject index, cloth, 1959. Price \$14.75. AAAS members' cash orders \$12.50.

The volume surveys the plant and animal facets of photoperiodism and portrays a diversity of approaches in the study of photoperiodic phenomena in a wide range of organisms. The various papers are presented from the perspectives of the photochemist, biochemist, plant physiologist, and zoologist and are by well-recognized members of the various disciplines. This is a unique and stimulating contribution toward the understanding of photoperiodic function in the biological kingdom, and it provides a fundamental basis for the analysis of various parameters of the phenomenon.

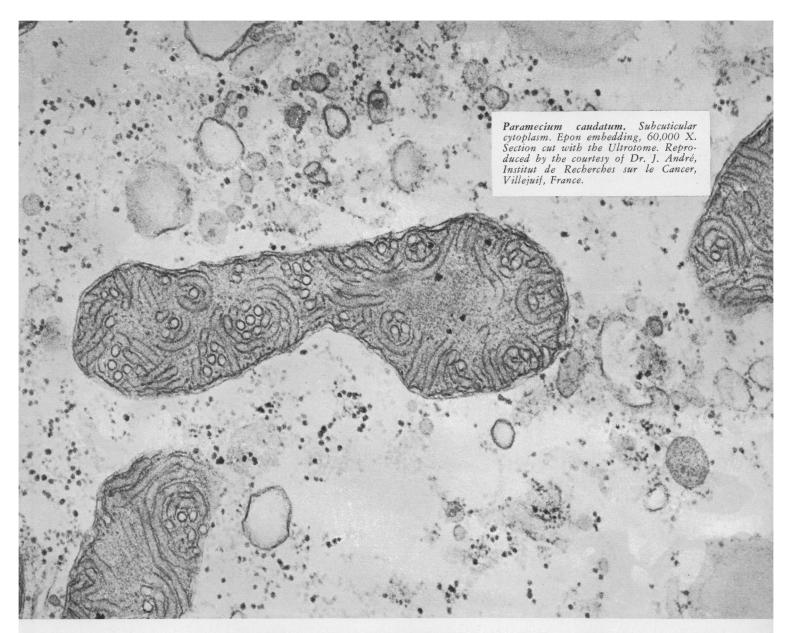
#### **CONTENTS**

Photochemical Principals Photocontrol of Seed Germination and Vegetative Growth by Red Light Role of Chemical Agents in Photocontrol of Vegetative Growth Photoperiodic Control of Reproduction in Plants Growth Factors and Flowering Analysis of Plant Photoperiodism The Relation of Light to Rhythmic Phenomena in Plants and Animals Photoperiodism in the Invertebrates Photoperiodism in the Vertebrates Photoperiodic Control of Reproduction and Migration in Birds Control of Periodic Functions in Mammals by Light

> British Agents: Bailey Bros. & Swinfen, Ltd. Hyde House, West Central Street London W.C.1, England

American Association for the Advancement of Science

1515 Massachusetts Ave. NW, Washington 5, D.C.



BIOLOGICAL SECTIONS OF

# QUALITY IN QUANTITY

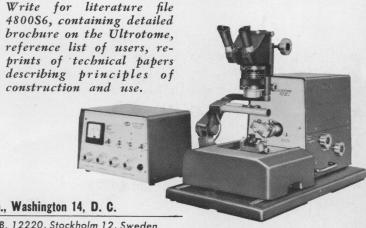
FROM THE ULTROTOME®

Fine results like the reproduction above are already published by many of the 500 Ultrotome users throughout the world. Each of these micrographs is an eloquent demonstration to the specialist.

High Quality sections of uniform thickness are produced without chatter from specimens in Epon, Vestopal, Araldite, methacrylate and paraffin. Even hard materials like bone and certain metals are cut excellently.

Unlimited Quantity of ultrathin (100-1000 Å), thin (0.1  $\mu$ ), or thick (1-10  $\mu$ ) sections can be cut in long series or short, just as you will at a mere turn of a knob.

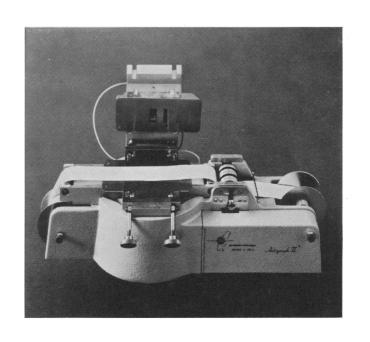
A wide range of accessories and supplies has been developed for the Ultrotome to promote efficient microtomy. These include specimen orientation head with vernier scale, plug-in specimen holders in 6 sizes, 26 types of specimen grids, grid storage box, and diamond knives.



LKB Instruments Inc., 4840 Rugby Ave., Washington 14, D. C.

International Headquarters: LKB-Produkter AB, P.O.B. 12220, Stockholm 12, Sweden

New 4-pi chromatogram scanning system from Nuclear-Chicago doubles sensitivity, counts with or without window



NEW: 4-pi Actigraph® system scans both sides of radio-chromatogram strips—doubles measurement sensitivity. NEW: "Clam-shell" design permits easy loading of strip (see photo). UNIQUE: Capable of both window (low gas consumption) and windowless (maximum sensitivity) operation. BACKGROUND: Less than 15 cpm.EFFICIENCY: Up to 2% for tritium, 10% for carbon. VERSATILE: 10 synchronized scanning speeds, 11 ratemeter time constants, 16 count rate ranges, 4 collimator slit widths. AVAILABLE: Specification bulletin plus information about simple conversion of older Actigraph models to 4-pi operation. Write Nuclear-Chicago.

