

# 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).

**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 only to 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 \$65.00 per inch  
4 times in 1 year 60.00 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.

## POSITIONS WANTED

**Biochemist**, Ph.D. Desires top administrative position in college or university. Highest qualifications. Box 119, *SCIENCE*. X

**Biologist**, Ph.D., 4 years of industrial microbiology. Seeks college teaching position: general biology, microbiology, botany. South Central or Southeastern states. Box 130, *SCIENCE*. X

**B.S., M.A., Biological and Physiological Sciences**, 27; 3 years of cancer research experience. Desires assistantship anatomy toward Ph.D. degree. Available September. Box 106, *SCIENCE*. X

**Embryologist**. Experimental, descriptive. Experience: embryology, genetics, gross anatomy, microanatomy. Research: cardiogenesis. Position desired: balanced teaching/research or research in liberal arts, Midwest. Box 128, *SCIENCE*. X

**M.D., B.Sc.** (mathematics-physics). Nuclear medicine, radiotherapy, teaching. Research experience: physiology, radiobiology, radioisotopes, tissue culture. Research/academic/clinical position. Box 127, *SCIENCE*. X

**Microbiologist**, postdoctoral research and teaching experience. Bacteriology, protozoology, immunology. Faculty appointment in graduate school. Teaching-research position with opportunity for independent work. Box 121, *SCIENCE*. 5/3, 10, 17

**M.S. Physiology-Zoology**. Background biochemistry. Research position, academic or industry. Interest—blood proteins and enzymes. Box 129, *SCIENCE*. X

**Ph.D.**, in experimental biology and pathology, main interest comparative oncology, many publications, is looking for permanent position. Box 125, *SCIENCE*. X

(a) **Ph.D.** (pending) **Biology**, parasitology, ecology; prefers teaching, histology research. (b) **Ph.D. Biochemist** (organic chemistry), hemoglobin protein chemistry research, teaching experience; prefers research/teaching. (c) **M.A. Zoologist** (botany, anatomy) interested in liberal arts junior college teaching. (Please write for information regarding these and other scientists, senior and junior, in all fields.) Science Division, The Medical Bureau, Inc., Burnice Larson, Chairman, 900 North Michigan Avenue, Chicago 11, Illinois. X

**Ph.D. Paleontologist**, many publications, is looking for permanent position. Box 126, *SCIENCE*. X

**Ph.D. Physiology**, M.S. zoology. Desires teaching-research position. Available September. Box 132, *SCIENCE*. X

**Physics Department Chairman**, Ph.D. with experience teaching at the master's level, failing for several years to secure additional Ph.D. staff seeks association with department in similar situation for possibility of research time and some summer vacation. Advertiser could assume occasional chairmanship to relieve associates. Please write with description of facilities, salary and benefits. Box 134, *SCIENCE*. X

## POSITIONS WANTED

**Toxicologist**, DVM, 5 years' experience in all phases of toxicity testing. Available in June. East Coast desired. Box 131, *SCIENCE*. X

**Translator**—French, German, and Polish. Skilled in medical biochemical and related subjects seeks permanent post. Box 133, *SCIENCE*.

## POSITIONS OPEN

### BIOCHEMIST

U.S. Veterans Administration hospital position in career civil service (\$6650 to \$7125 p.a.) requiring 1 to 1½ years of experience in research investigation in biochemistry. Emphasis on enzymes and cellular physiology. Reply: **Personnel Officer, V.A. Hospital, East Orange, N.J.**

### UNIVERSITY OF SASKATCHEWAN APPOINTMENTS IN BIOLOGY

**Assistant Professor of Vertebrate Zoology**. Ph.D. for research, teaching in embryology and comparative anatomy. Salary \$7,500 to \$9,300, depending on experience. Benefits and removal allowances. Effective July 1st; duties commence September.

**Temporary Appointments**. Instructors or Assistant Professors in animal ecology and animal physiology to replace two staff members who are on leave for 1963-64. Salary, \$6,000 to \$9,300 per annum, depending on qualifications and experience. Appointments for a shorter period (Sept.-May) can be arranged.

A curriculum vitae, recent photograph, and the names of three referees should be submitted to **Dr. M. Shaw, Head, Biology Dept., University of Saskatchewan, Saskatoon, Saskatchewan.**

## BIOPHYSICIST

OR

## PHYSICAL CHEMIST

Expanded research in the area of high molecular natural products (proteins, nucleic acids) has opened an attractive position for independent senior research scientist, Ph.D. level, to conduct appropriate studies with newly acquired analytical ultracentrifuge.

Preference will be given to candidates with experience in ultracentrifuge research. However, interested physical chemists with background in biochemistry will also be considered. Salary will be commensurate with experience.

*All replies confidential and acknowledged. Send résumé to*

**Business Manager**

**SQUIBB INSTITUTE  
FOR MEDICAL RESEARCH  
New Brunswick, New Jersey**

*An equal opportunity employer.*

## Research

# Histologist Biochemist

The expanding program of cardiovascular and reproductive physiology requires two scientists for independent and collaborative research with endocrinologist.

### Histology—Histochemistry

Ph.D. or experienced Master's with knowledge of pathology and the ability to relate techniques and theory of histology and histochemistry to the above problems.

### Biochemist—Physiologist

Ph.D. or experienced Master's with some background in radioisotopic and chromatographic techniques related to normal and drug metabolism.

Openings are with the Physiology Department—Basic Sciences Division. Full opportunity and encouragement to publish. Superior Staff services include: library, abstracting technical information, etc.

Extensive benefit program includes paid relocation.

*Send resume to Technical  
Employment Dept.*

## WARNER LAMBERT Research Institute

Morris Plains, New Jersey

*An Equal Opportunity Employer*

## POSITIONS OPEN

### UNIVERSITY OF ALBERTA

Application is invited for the position of **Assistant Professor of Botany**. Preference will be given to applicants who hold the Ph.D. degree, have a well-established program of research in plant ecology and some teaching experience.

The incumbent will be expected to teach one or more courses in plant ecology and to participate in the departmental program of other courses in some capacity.

For this position, appointment to date from 1 September 1963. The salary offered is between \$7000 and \$7500 per annum depending upon qualifications.

Applications should be submitted to Dr. H. J. Brodie, Department of Botany, University of Alberta, Edmonton, Canada. Each applicant should provide a curriculum vitae, a transcript of record, a recent photograph and three letters of reference sent directly to Dr. Brodie. X

**Clinical Biochemist for Hospital Laboratory.** Direct active service, 5 technicians, routine procedures well-established, quality control program, brand new quarters opening. Time, ample opportunities research, clinical and basic. Ph.D. preferred. Salary depends on qualifications and experience. **Box 135, SCIENCE.**

### SCIENTISTS

To develop and carry out research cytogenetics and tissue culture programs in Medical Division. Emphasis on effects of irradiation primarily in man.

**Cytogeneticist (Ph.D.)**

**Tissue Culturist (Ph.D. or M.D.)**

Personnel Office  
**OAK RIDGE INSTITUTE  
OF NUCLEAR STUDIES**  
Oak Ridge, Tennessee  
An Equal Opportunity Employer

### HISTOLOGIST, HISTOCHEMIST

M.S. or equivalent to supervise routine histology, and take part in research program with emphasis on enzyme and electrochemistry. Hospital affiliated research institute, New York.

**Box 101, SCIENCE**

### MICROBIOLOGIST III

for the state of Hawaii bubonic plague research project. Requires master's degree in biological or medical science and 3 years' experience conducting bacteriological, parasitological and serological tests and analyses. \$7488-\$9522. Contact Mrs. L. Fukuda, Department of Personnel Services, 825 Mililani St., Honolulu 13, Hawaii. 6/7; 7/5; 8/2

(a) **Ph.D. Neuropharmacologist**, R&D, well-known eastern pharmaceutical firm. (b) **Ph.D. Biological Science**, experimental pharmacology, small ethical drug house; East. (c) **B.S./Biochemistry Supervisor**, radiation effect laboratory; western university. (d) **Junior Immunologist**, cancer research; eastern medical center. (e) **Radiological Health Specialist**, B.S. with chemistry, physics, or engineering background; to \$710. *Faculty Appointments:* (f) **Sanitary Biology**, Ph.D. midwestern medical school; \$10,000. (g) **Science Department Chairman**, dynamic Ph.D.; eastern state college. (h) **Ph.D. Biochemist and Zoologist**, for rapidly developing central state university. Many other opportunities available for both junior and senior scientists. Please write to Science Division, **The Medical Bureau, Inc., Burnelle Larson, Chairman**, 900 North Michigan Avenue, Chicago 11, Illinois. X

### DALHOUSIE UNIVERSITY

#### Institute of Oceanography

Applications are invited for an academic post in marine geology within which the appointee will conduct research on marine problems and undertake a limited amount of formal teaching. Appointment will be made at a rank and salary appropriate to qualifications. For a recent Ph.D. the beginning salary is \$7000. Address all correspondence and recommendations to: The Director, **Institute of Oceanography, Dalhousie University**, Halifax, Nova Scotia. 5/17, 31; 6/14

## FELLOWSHIPS

### EXPERIMENTAL SURGERY

One year appointments for trained surgeons. Interdisciplinary group engaged in projects relating to electronic control of impaired physiologic systems. New, well-equipped laboratory with excellent operating facilities. Address inquiries to **Adrian Kantrowitz, M.D.**, Director, Cardiovascular Surgery, **Maimonides Hospital**, Brooklyn 19, New York.

## The Market Place

BOOKS • SERVICES • SUPPLIES • EQUIPMENT

### 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

**SCIENTIFIC BOOKS** for sale. Chemistry, biochemistry, organic chemistry, and other technical books.

**Box 30, SCIENCE**

**Wanted: Back issues Journal of Applied Bacteriology. THE RATH PACKING COMPANY, Research Library, Waterloo, Iowa.**

### SUPPLIES AND EQUIPMENT

#### PEN-RAY® Miniaturized Quartz Lamps

- Monochromatic source for optical systems
- Spectrophotometry calibration standard
- Any size, shape; special gases, windows

FOR MORE DETAILS, write Dept. 5-5

**ULTRA-VIOLET PRODUCTS, INC.**

San Gabriel, Calif

Commercially available for the first time in large quantities—lyophilized bacteria (all species), and highly polymerized bacterial RNA and DNA.

For complete information and prices write or wire: **BMW Biological Specialties, 5309 Whittsett Avenue, North Hollywood, California.**

(Note: Please indicate species desired)

#### SPRAGUE-DAWLEY, INC.

Pioneers in the development of the **STANDARD LABORATORY RAT.**

P.O. Box 2071

Madison, Wisconsin

CE 3-5318

**FREE catalogs**  
of your choice

No salesman will call

**COLORADO SERUM CO. LABORATORIES**

4950 YORK STREET • DENVER 16, COLORADO • MAIN 3-5373

## SYMPOSIUM ON BASIC RESEARCH

Editor: **Dael Wolfe** 1959

### AAAS Symposium Volume No. 56

328 pages, cloth \$3.00

AAAS members' cash order, price \$2.50

Sponsored by the National Academy of Sciences, the American Association for the Advancement of Science, and the Alfred P. Sloan Foundation.

### CONTENTS

**J. Robert Oppenheimer**, The Need for New Knowledge

**Alan T. Waterman**, Basic Research in the United States

**W. O. Baker**, The Paradox of Choice

**Laurence M. Gould**, Basic Research and the Liberal Arts College

**C. A. Elvehjem**, Basic Research and the State University

**Lee A. DuBridge**, Basic Research and the Private University

**James R. Killian, Jr.**, Capsule Conclusions

**Crawford H. Greenewalt**, Basic Research: A Technological Savings Account

**Dwight D. Eisenhower**, Science: Handmaiden of Freedom

**Allen V. Astin**, Basic Research in Government Laboratories

**James B. Fisk**, Basic Research in Industrial Laboratories

**Merle A. Tuve**, Basic Research in Private Research Institutes

**Paul E. Klopsteg**, Support of Basic Research from Government

**Robert E. Wilson**, Support of Basic Research by Industry

**Robert S. Morison**, Support of Basic Research from Private Philanthropy

**Dael Wolfe**, The Support of Basic Research: Summary of the Symposium

British Agents: **Bailey Bros. & Swinfen, Ltd.**

**Hyde House, W. Central Street, London, W.C.1**

### American Association for the Advancement of Science

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



## This is the most versatile camera microscope

**It is the Carl Zeiss Ultraphot II.** If you want a microscope that will do just about everything and is easy to operate, this is the one you ought to choose.

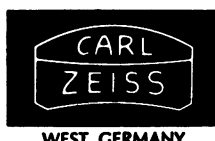
It gives you the highest degree of performance yet attained in photomicrography. Once the image is focused, at the touch of a button, the automatic camera produces sharp and properly exposed photomicrographs. Sheet film 4 x 5", 35mm roll film, or Polaroid film can be used. The camera head can be substituted by ground glass screen for projection viewing.

The camera microscope has a unique illuminating system: you can work with reflected or transmitted light or use both simultaneously.

A choice of three light sources is available: tungsten filament bulb, high pressure mercury burner, carbon arc lamp with automatic feed.

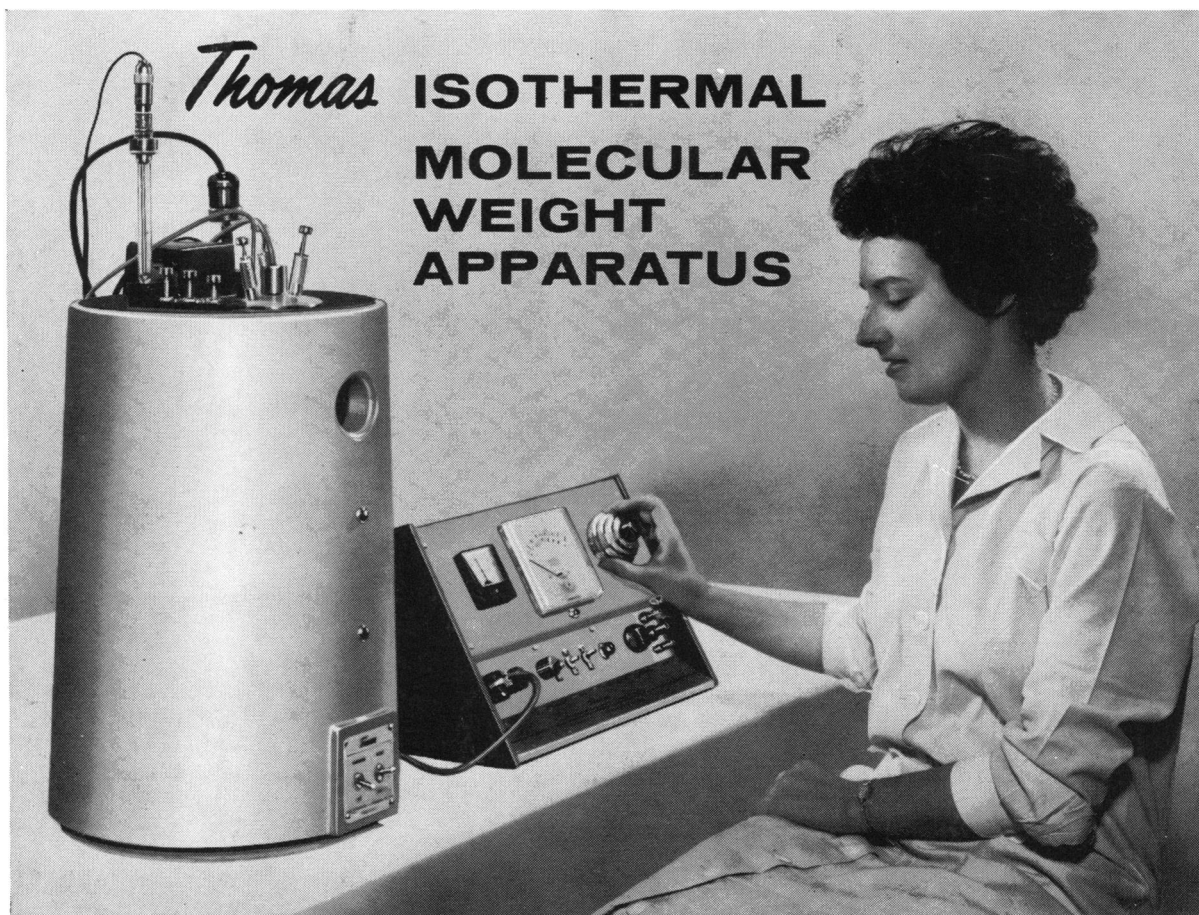
The tube head is provided with a quintuple revolving nose-piece for the objectives and the built-in "Optovar" which increases the magnification by 1.25x, 1.6x, or 2x. Therefore no additional eyepieces are required. The binocular tube is equipped with an interpupillary distance adjustment device and can be corrected for ametropia.

A full complement of accessories makes it possible to do any kind of study in your specialty. Write for more detailed information. **Complete service facilities available.**



The Symbol of World Famous Optics

**Carl Zeiss, Inc., 444 Fifth Ave., New York 18, N.Y.**  
**IN CANADA: CARL ZEISS CANADA LTD., 60 OVERLEA BLVD., TORONTO 17, ONTARIO**



- ◆ With thermistor probes jacketed for use in aqueous or non-aqueous solvent systems
- ◆ Accuracy within  $\pm 1\%$  in the 5000 number average range\*
- ◆ Temperature range 30-70°C without modification

Provides values for calculation of number average molecular weights up to 5000\*, with an accuracy within  $\pm 1\%$ , on single-drop samples of centimolal solutions. Usable with aqueous or non-aqueous, polar and non-polar liquids. Temperature range, without modification, 30 to 70°C; lower and higher temperatures may be obtained with accessory heating and cooling equipment. Serial determinations can be made in minutes following approximately 1 hour set-up period. Method is essentially that described by J. J. Neumayer in *Analytica Chimica Acta*, 20, 519 (1959).

**Principle.** In an equilibrium system, condensation takes place on the surface of a solution exposed to saturated vapor of its solvent. The heat transferred causes a slight increase in temperature of the solution. In the same system an equivalent surface of liquid solvent will remain at a constant temperature because the rate of vaporization and condensation is the same. The rate of condensation and heat transfer to the

solution, and thus the rise in temperature produced, is proportional to the mole fraction of solute in the solution. The temperature rise, or any proportional effect which it produces, can be used to calculate the molecular weight of solute in solutions of known concentration.

**Technique.** Two thermistors are used to measure temperature difference between solvent and solution in a solvent vapor chamber thermostatically controlled within  $\pm 0.003^\circ\text{C}$ . Samples are applied to thermistor tips by means of micrometer syringe pipets. Provision is made for delivery of solvent to both thermistors, and for subsequent delivery of solution to the measuring thermistor. Readings made with only two dilutions of a known sample suffice to establish the molar constant for a given solvent. Change in measuring thermistor resistance is made by means of a high-sensitivity d.c. resistance bridge. Molecular weight can be calculated directly using the resistance value obtained. *Conversion to temperature units is not required.*

**7253. Molecular Weight Apparatus, Thomas Isothermal Distillation**, as above described. Complete with six syringe pipets, and directions. For use on 115 volts, 50 or 60 cycles a.c. . . . . **2,200.00**

\*usable to 10,000 with diminishing accuracy

Bulletin 141, giving detailed information, sent upon request



**ARTHUR H. THOMAS COMPANY**

*Scientific Apparatus and Reagents*

VINE STREET AT 3RD • P. O. BOX 779 • PHILADELPHIA 5, PA., U. S. A.