

OXFORD biology texts



GENETICS

By Robert C. King, Northwestern University. Illustrated by E. John Pfiffner, Chicago Natural History Museum

A clear, thorough introduction to the elements of genetics, this volume combines a sound classical viewpoint with the most modern research advances to explore this increasingly vital field. Careful attention is focused on such topics as developmental genetics, population genetics, biochemical genetics, radiation genetics, and evolution theory. Cytology is discussed in substantial detail. The work is superbly illustrated and contains some 100 expertly prepared original drawings. Extensive references and a wide range of study questions are included.

1962, 368 pp. illustrated \$7.50.

THE LIFE OF VERTEBRATES

Second Edition

By J. Z. Young, Professor of Anatomy, University College, London

This classic study of the anatomy, physiology, and natural history of vertebrates has been completely revised and brought up to date. The second edition provides a systematic, balanced account of all vertebrate types and a study of fossil vertebrates and their evolution. Incorporating much new knowledge gained since the book's original publication, the author examines various aspects of the life of each animal or group and discusses the problems involved in each type of study. 1962, 824 pages, 514 figures, \$10.00.

HEREDITY AND DEVELOPMENT

By John A. Moore, Professor of Zoology, Columbia University and Barnard College

Designed for use in the introductory biology course, this book presents two sections from Dr. Moore's distinguished text, *Principles of Zoology*. The reprinted portions comprise a valuable and original treatment of genetics and embryology. Several new chapters have been added to the genetics section and a single new chapter to the account of embryology.

In preparation, 256 pp., 24 illus., paperbound, \$1.95.

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due to their guidance. The conference closed with a unique talk by H. Lehmann (London) who connected the ethnological distribution of the abnormal human hemoglobins throughout the world with certain unusual social customs.

The conference was sponsored by the Department of Medicine of Columbia University and generously supported by the National Heart Institute.

VERNON M. INGRAM
DICKINSON W. RICHARDS
ALFRED P. FISHMAN

*Department of Medicine,
Columbia University, New York*

Forthcoming Events

January

7-8. Ultra-High Energy Nuclear Physics, conf., Bristol, England. (Administrative Assistant, Inst. of Physics and the Physical Soc., 47 Belgrave Sq., London S.W.1, England)

14-16. Radiation Research, intern. conf., Natick, Mass. (Army Quartermaster Research and Engineering Center, Natick)

14-18. Association of Surgeons of West Africa, Ibadan, Nigeria. (V. A. Ngu, University College Hospital, Ibadan)

14-19. Atomic and Molecular Quantum Theory, symp., Sanibel Island, Fla. (D. W. Smith, Chemistry Dept., Univ. of Florida, Gainesville)

15-15 Feb. World Meteorological Organization, Working Group on Meteorological Transmissions, Paris, France. (WMO, 41 Avenue Giuseppe Motta, Geneva, Switzerland)

15-17. Association of American Colleges, annual, Atlantic City, N.J. (T. A. Distler, AAC, 1818 R St., NW, Washington 9)

15-17. Sesame, intern. conf., Maracay, Venezuela. (D. G. Langham, Sesamum Foundation, Milford, Conn.)

15-19. Immunopathology, intern. symp., La Jolla, Calif. (by invitation). (Science Information Div., National Foundation, 800 Second Ave., New York 17)

17-19. Engineers' Training, conf., Strasbourg, France. (Council of Europe, Avenue de l'Europe, Strasbourg)

17-19. Royal College of Physicians and Surgeons of Canada, annual, Edmonton, Alberta. (J. H. Graham, RCPSC, 74 Stanley Ave., Ottawa 2, Ont., Canada)

18-19. Blood, annual symp., Detroit, Mich. (G. F. Anderson, Dept. of Physiology and Pharmacology, Wayne State Univ., 1401 Rivard St., Detroit 7)

21-23. Chemistry and Biochemistry of Seed Proteins, intern. conf., New Orleans, La. (C. H. Fisher, Southern Utilization Research and Development Div., Agricultural Research Service, U.S. Dept. of Agriculture, P.O. Box 19687, New Orleans 19)

21-23. Institute of the Aerospace Sciences, annual, New York, N.Y. (IAS, 2 E. 64 St., New York 21)

21-24. American Meteorological Soc.,

annual, New York, N.Y. (R. L. Pfeffer, Lamont Geological Observatory, Columbia Univ., Palisades, N.Y.)

22. Infectious Diseases of the Heart and Circulation, conf., New York, N.Y. (C. A. R. Connor, New York Heart Assoc., 10 Columbus Circle, New York 19)

22-24. Reliability and Quality Control, natl. symp., San Francisco, Calif. (L. W. Ball, Boeing Co., P.O. Box 3707, Seattle 24, Wash.)

23-25. Elevated Temperature Mechanics, intern. conf., 3rd Navy Structural Mechanics Symp., New York, N.Y. (by invitation). (A. M. Freudenthal, 624 Mudd Bldg., Columbia Univ., New York 27)

23-26. American Assoc. of Physics Teachers, New York, N.Y. (R. P. Winch, Williams College, Williamstown, Mass.)

23-26. American Group Psychotherapy Assoc., annual, Washington, D.C. (AGPA, 1790 Broadway, New York 19)

24-27. American Mathematical Soc., annual, Berkeley, Calif. (AMS, 190 Hope St., Providence 6, R.I.)

26. Association for Symbolic Logic, Berkeley, Calif. (T. Hailperin, Dept. of Mathematics, Lehigh Univ., Bethlehem, Pa.)

26-28. Mathematical Assoc. of America, annual, Berkeley, Calif. (H. M. Gehman, Univ. of Buffalo, Buffalo 14, N.Y.)

27-1. American Inst. of Electrical Engineers, winter general meeting, New York, N.Y. (R. S. Gardner, AIEE, 33 W. 39 St., New York 18)

28-2. American Library Assoc., Chicago, Ill. (D. H. Clift, ALA, 50 E. Huron St., Chicago 11)

28-2. Body Composition, conf., New York, N.Y. (J. Brozek, Dept. of Psychology, Lehigh Univ., Bethlehem, Pa.)

30-1. Military Electronics, natl. winter convention, Los Angeles, Calif. (F. P. Adler, Space Systems Div., Hughes Aircraft Co., Culver City, Calif.)

31-1. American Soc. for Engineering Education, college-industry conf., Atlanta, Ga. (W. L. Collins, Univ. of Illinois, Urbana)

31-1. Society of Rheology, annual western regional meeting, Emeryville, Calif. (T. L. Smith, Stanford Research Inst., Menlo Park, Calif.)

31-2. Western Soc. for Clinical Research, annual, Carmel-by-the-Sea, Calif. (H. R. Warner, Latter-day Saints Hospital, Dept. of Physiology, Salt Lake City 3, Utah)

February

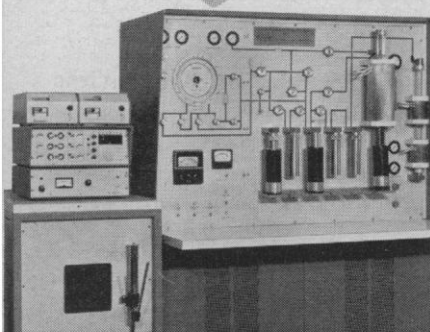
4-8. Rice Genetics and Cytogenetics, symp., Los Baños, Laguna, Philippines. (Inter. Rice Research Inst., Manila Hotel, Manila, Philippines)

4-9. Recent Trends in Iron and Steel Technology, symp., Jamshedpur, India. (Secretary, Indian Inst. of Metals, 31 Chowringhee Rd., Calcutta, India)

4-20. Application of Science and Technology for the Benefit of Less Developed Areas, U.N. conference, Geneva, Switzerland. (Science Conference Staff, Agency for International Development, 826 State Dept. Annex 1, Washington 25)

5-14. International Radio Consultative Committee, Plan Subcommittee for Asia, New Delhi, India. (V. Barthoni, 128 rue de Lausanne, Geneva, Switzerland)

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6-9. American College of **Radiology**, Chicago, Ill. (F. H. Squire, Presbyterian-St. Luke's Hospital, 1753 W. Congress St., Chicago 12)

8-18. United Nations Committee on **Industry and Natural Resources** in Asia and the Far East, Bangkok, Thailand. (S. Santitham, Rajadamnern Ave., Bangkok)

10-16. **Planned Parenthood**, intern. conf., Singapore. (V. Houghton, Intern. Planned Parenthood Federation, 69 Eccleston Sq., London, S.W.1, England)

11-14. American Soc. of **Heating, Refrigerating, and Air-Conditioning Engineers**, New York, N.Y. (R. C. Cross, 345 E. 47th St., New York 17)

11-14. **Industrial Lubrication**, intern. conf. and exhibit, London, England. (E. V. Paterson, Scientific Lubrication, 217a Kensington High St., London W.8)

11-15. **Quantum Electronics**, intern. symp., Paris, France. (Secrétariat, Troisième Congrès International d'Electronique Quantique, 7 rue de Madrid, Paris 8^e)

12-14. **Lysozymes**, symp. (by invitation), London, England. (Ciba Foundation, 41 Portland Pl., London W.1)

13-15. **Electrochemistry**, 1st Australian conf., part I, Sydney, Australia. (F. Gutmann, Physical Chemistry Dept., Univ. of New South Wales, Kensington, N.S.W., Australia)

13-16. National Soc. of College Teachers of **Education**, Chicago, Ill. (E. J. Clark, Indiana State College, Terre Haute)

14-15. American Soc. for **Quality Control**, Textile and Needles Trades Div., annual conf., Clemson, S.C. (H. F. Littleton, c/o Charles H. Bacon Co., Lenoir City, Tenn.)

15-14 *Apr.* **Aeronautics and Space**, intern. exhibition, São Paulo, Brazil. (Santos Dumont Foundation, Avenida Ipiranga N°. 84, São Paulo)

16-23. Caribbean **Dental** Convention, Port of Spain, Trinidad. (A. V. Awon, 43-45 Frederick St., Port of Spain)

17-21. Technical Assoc. of the **Pulp and Paper Industry**, annual, New York, N.Y. (TAPPI, 360 Lexington Ave., New York 17)

18-20. American **Standards** Assoc., natl. conf., New York, N.Y. (ASA, 10 E. 40 St., New York 16)

18-20. **Biophysical** Soc., annual, New York, N.Y. (A. Mauro, Rockefeller Inst., New York)

18-20. **Electrochemistry**, 1st Australian conf., part II, Hobart, Tasmania. (J. N. Baxter, Chemistry Dept., Univ. of Tasmania, Hobart)

18-25. Expert Committee on **Food Additives**, FAO/WHO, Rome, Italy. (Intern. Agency Liaison Branch, Office of the Director General, Food and Agriculture Organization, Viale delle Terme di Caracalla, Rome)

19-22. **Radiochemistry**, inter-American conf., Montevideo, Uruguay. (Pan American Union, Washington 6)

20-22. Fundamental **Cancer** Research, annual symp., Houston, Tex. (L. Dmochowski, Section of Virology and Electron Microscopy, M. D. Anderson Hospital, Houston 25)

(See 23 November issue for comprehensive list)

New Products

High constant-temperature baths use fluidized sand in place of liquid in order to avoid the disadvantages of fire risk, mess, corrosion, and electrical conductivity associated with oils, molten metals, or molten salts. The advantages of ease of access and rapid heat transfer are said to be retained. The sand is kept in suspension by a supply of clean dry air at constant pressure. When the air control valve is slowly opened, the air at first finds its way between the sand particles without disturbing them. As the flow is increased, the sand particles separate and the mass of sand can be seen to have expanded. Further increase of gas flow causes bubbling of the fluidized sand which takes on the appearance of boiling liquid. The sand is heated by electric heaters placed above the porous plate supporting the sand. Temperature is controlled by means of a thermoregulator placed above the heaters. Heat transference figure, said to be typical, is 0.06 w/cm² per degree Centigrade. Electrical leakage currents are of the order of 10⁻⁹ amp for a potential difference of 200 v between electrodes 1 cm² spaced 0.5 cm apart. Temperature is uniform within an effective working space about 20 cm in diameter and 15 cm deep. The swing in temperature at 174°C is $\pm 0.4^\circ\text{C}$. The time required to heat up from 20° to 350° is 37.67 minutes. —J.S. (Techne Cambridge, Ltd., Dept. S510, Route 3, Box 661, Brunswick Pike, Princeton, N.J.)

Servo accelerometer is a force balance device with both the electronic and the seismic systems contained in a cylindrical package weighing 2 ounces. The seismic system consists of a torque motor coupled to a calibrated pendulum. The system moves on jeweled bearings and is monitored by a null detector. A servo system keeps the pendulous mass in a constant state of force balance during acceleration within the

The material in this section is prepared by the following contributing writers:

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