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The Beginnings of Embryonic Development

AAAS Symposium Volume No. 48

1957

Edited by Albert Tyler, California Institute of Technology R. C. von Borstel, Oak Ridge National Laboratory Charles B. Metz, The Florida State University

6 x 9 inches, 408 pages, 132 illustrations, references, subject and author index, clothbound

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A symposium on "Formation and Early Development of the Embryo", held 27 December 1955, at the Second Atlanta Meeting of the AAAS, served as the basis for this volume. Emphasis was placed on the problems of early development and of the initiation of development. The investigations presented in the various communications cover both descriptive and experimental work on the biological and chemical levels. Apart from their intrinsic interest and the measure of progress that they provide, the specific discoveries and analyses presented serve to exemplify various approaches toward the understanding of the manner in which sperm and egg contrive to produce a new individual.

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Meetings

History of Science

The 9th International Congress of the History of Science convened in Barcelona, 1 September 1959, bringing together scholars from many nations-Arabia, Austria, Belgium, Canada. Czechoslovakia, Denmark, France, Germany, Great Britain, Holland, Israel. Italy, Japan, Poland, Russia, Spain, Sweden, Switzerland, Turkey, and the United States—both to share their ideas and to establish those personal contacts which are so important in bringing about an exchange of information. The opening meeting was held in an impressive assembly room in the city hall and was followed by a visit to the Disputación Provincial, directly across the square.

The president and secretary of the congress were, respectively, José Millás-Vallicrosa and Juan Vernet of the University of Barcelona. The university was the seat of the congress, and the academic papers were presented in its lecture rooms. The papers were divided into long ones, which had been requested, and short ones which had been offered. There were six of the former and innumerable of the latter. Printed copies of the longer papers and printed résumés of the shorter ones were distributed to the members as they completed their registration.

The first of the long papers was read on the afternoon of the opening day by Millás-Vallicrosa, who discussed the relations between oriental and occidental science. Three more of the long papers were presented on the succeeding three mornings. They dealt with the development of science in medieval Europe, especially in the 14th and 15th centuries; the relationship between American and European science; and the development of classical medicine and biology from medieval to modern times. The congress moved to Madrid on 5 September, and the remaining two invited papers were delivered there. The subject of one was cartography. The other was concerned with recent studies on the history of mathematics and physics in Europe from the 16th century to the 18th century. Although these papers bore little relation to each other, they all pointed either to the interrelation of the different sciences in their historical development or to the interaction between the science of one nation or one culture and that of another. In one way or an other, each talk stressed the continuity of scientific development.

The 10-minute papers covered a very wide field and were grouped into sessions dealing with the history of technology and applied science; the history of chemistry and pharmacy; the

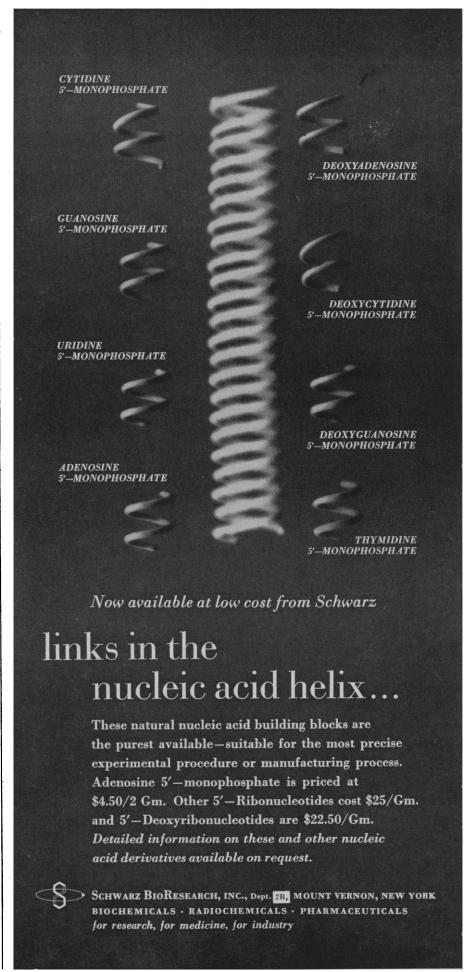
SCIENCE, VOL. 131

history of mathematics, physics, and astronomy; and the history of geography and geology. There was, in addition, a catch-all session for papers not clearly within the subject area of one of the other divisions. The very large number of these shorter papers bears witness to the world-wide growth of interest in the history of science and to the increase in the number of individuals trained as specialists in this field. However, having so many papers scheduled for these sessions made it necessary to divide some of the groups at the last minute. Thus, for example, it was impossible for the physicists to hear the papers of their colleagues in astronomy, and vice versa. This was unfortunate because, as those at the congress so well knew, the history of science is not a history of the development of the separate sciences but must be based on the concurrent development of these sciences and their contributions to each other.

A number of papers corrected or amplified previous assumptions by historians and bore witness to the high caliber of the scholarship represented and to the fact that the history of science is being rewritten in the light of recent research. The discussions which followed the talks were lively and significant.

The genial, hospitable Spanish hosts provided numerous opportunities for sight-seeing and social gatherings. In Barcelona there was a visit to the naval museum, a reception at the Spanish Village, a visit to the Academy of Medicine and Surgery and to the Biblioteca Central across the courtyard, and an excursion from Barcelona to Masnou and the museum of pharmacology at the Laboratorios del Norte de España. In Madrid, there were opportunities to see the naval museum, and the Prada, which many of the participants in the Congress revisited several times.

The final meeting was held 7 September at the Escorial near Madrid. A magnificent luncheon was served at a hotel on the hill overlooking the monastery. There the George Sarton medal was awarded by Henry Guerlac, president of the History of Science Society, to Alexandre Koyré, eminent scholar of 16th- and 17th-century physics and astronomy, who divides his time between the Sorbonne and the Institute for Advanced Study at Princeton. At this luncheon it was announced that the next International Congress of the History of Science will be held in the United States, at Cornell University, in 1962. The invitation had been issued and accepted at a meeting in Barcelona of the general assembly of the Division of the History of Science of the International Union of the History and Philosophy of Science. The congresses are a responsibility of the division, although the actual task of organizing and run-



5 FEBRUARY 1960 363

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ning them is left to the host nations. the division has also set up international committees to study the teaching of the history of science, to catalog scientific instruments of historical importance, and to examine or maintain bibliographical and documentary services. The United States adheres to the Union through the National Academy of Sciences-National Research Council, under whose auspices the United States National Committee for the International Union of the History and Philosophy of Science has been established. The other division of the Union is that of the Philosophy of Science.

During the course of the congress there were two meetings of that especially distinguished body known as the Académie Internationale d'Histoire des Sciences. At the second meeting Henry Guerlac was elected president, to succeed Vasco Ronchi of Italy.

The United States delegates to the congress were Henry Guerlac (chairman), Marshall Clagett, I. Bernard Cohen, C. Doris Hellman, Harry Woolf (alternate), and Duane Roller (alternate). C. Doris Hellman

U.S. National Committee for the International Union of the History and Philosophy of Science, National Academy of Sciences-National Research Council, Washington, D.C.

Forthcoming Events

March

- 2-4. Low and Medium Energy Nuclear Physics, colloquium, Grenoble, France. (F. Netter, C.E.N., Saclay, BP. No. 2, Gif-sur-Yvette, Seine et Oise, France.)
- 3-5. American Acad. of Forensic Sciences, Chicago, Ill. (W. J. R. Camp, AAFS, 1853 W. Polk St., Chicago 12.)
- 3-5. Association of Clinical Scientists, Albany, N.Y. (R. P. MacFate, 323 Northwood Rd., Riverside, Ill.)
- 4-6. National Wildlife Federation, Dallas, Tex. (C. H. Callison, 232 Carroll St., NW, Washington 12.)
- 6-13. American Otorhinologic Soc. for Plastic Surgery, Miami Beach, Fla. (J. G. Gilbert, 75 Barberry Lane, Roslyn Heights,
- 7-9. Wildlife Management Inst., Dallas, Tex. (C. R. Gutermuth, 709 Wire Bldg., Washington 5.)

7-11. American Soc. of Civil Engineers, New Orleans, La. (E. S. Kirkpatrick, ASCE, 33 W. 39 St., New York 18.)

10. Recent Developments in Poultry Nutrition (Assoc. of Vitamin Chemists), Chicago, Ill. (J. T. Sime, Director of Research, Evaporated Milk Assoc., 228 N. La Salle St., Chicago 1.)

10-11. Institute of the Aeronautical Sciences-Flight Propulsion, Cleveland, Ohio. (S. P. Johnston, 2 E. 64 St., New York 21.)

13-14. American Otological Soc., Miami Beach, Fla. (L. R. Boies, University Hospital, Minneapolis 14.)

14-16. American Railway Engineering Assoc., annual conv., Chicago, Ill. (N. D. Howard, AREA, 59 E. Van Buren St., Chicago 5.)

14-17. Positive Health of Older People, forum, Miami Beach, Fla. (A. Mallach, National Health Council, 1790 Broadway, New York 19.)

14-18. National Assoc. of Corrosion Engineers, 16th annual, Dallas, Tex. (W. A. Mapler, NACE, 18263 W. McNichols Rd., Detroit 19, Mich.)

15-16. American Broncho-Esophangological Assoc., Miami Beach, Fla. (F. J. Putney, 1712 Locust St., Philadelphia 3.)

15-21. Nondestructive Testing, 3rd intern. conf., Tokyo and Osaka, Japan. (S. Ishizaka, Scientific Attaché, Embassy of Japan, 2514 Massachusetts Ave., NW, Washington 8.)

16-18. Genetics Soc. of Canada, 5th annual, Vancouver, B.C. (Miss K. Cole, Dept. of Biology and Botany, Univ. of British Columbia, Vancouver 8.)

17. Congress for Pharmacists, 2nd annual, Jamaica, N.Y. (Congress for Pharmacists, Public Relations Office, St. John's Univ., Jamaica 32.)

17-19. American Radium Soc., conf., San Juan, Puerto Rico. (ARS, 635 East Union, Pasadena, Calif.)

17-19. Blood Platelets, intern. symp. (by invitation only), Detroit, Mich. (Miss S. A. Johnson, Henry Ford Hospital, Detroit 2.)

17-20. International Assoc. for Dental Research, Chicago, Ill. (D. Y. Burrill, Northwestern Univ. Dental School, 311 E. Chicago Ave., Chicago 11.)

18-19. American Laryngological Assoc., Miami Beach, Fla. (L. Richards, Massachusetts Inst. of Technology, Cambridge.)

20-23. American Assoc. of Dental Schools, Chicago, Ill. (R. Sullen, 840 N. Lake Shore Drive, Chicago 11.)

20-26. American Cong. on Surveying and Mapping, Washington, D.C. (C. E. Palmer, American Soc. of Photogram-metry, 1515 Massachusetts Ave., NW, Washington 5.)

20-26. American Soc. of Photogrammetry, Washington, D.C. (C. E. Palmer, ASP, 1515 Massachusetts Ave., NW, Washington 5.)

21-24. American Acad. of General Practice, 12th annual, Philadelphia, Pa. (AAGP, Volker Blvd. at Brookside, Kansas City 12, Mo.)

21-24. Institute of Radio Engineers, natl. conv.. New York, N.Y. (L. G. Cumming, IRE, 1 E. 79 St., New York 21.)

22-24. High-Polymer Physics, 20th, Detroit, Mich. (T. L. Smith, American Physical Soc., Stanford Research Inst., Menlo Park, Calif.)

23-25. National Council on Alcoholism, annual, New York, N.Y. (M. Ross, American Psychiatric Assoc., 1700 18 St., NW. Washington 9.)

23-25. Optical Spectrometric Measurements of High Temperatures, symp., Chicago, Ill. (F. Brech, Laboratories for Applied Science, Univ. of Chicago, 6220 S. Drexel Ave., Chicago 37.)

24-25. Human Factors in Electronics, 1st annual symp. (IRE), New York, N.Y. (J. E. Karlin, Bell Telephone Laboratories. Murray Hill, N.J.)

24-26. American Assoc. for the History