Meetings

Comparative Endocrinology

The 3rd International Symposium on Comparative Endocrinology was held at Oiso, Japan, 6–10 June 1961, under the sponsorship of the Zoological Society of Japan. The local planning committee, with K. Takewaki as chairman, included the other two professors of the Zoological Institute of the University of Tokyo, T. Fujii and H. Kinosita; H. Kobayashi, who served as secretary; and N. Egami, who served as treasurer. The magnificent surroundings of Oiso on Sagami Bay, the excellent physical arrangements, and the generous hospitality of the Japanese hosts all helped to make this an unforgettable experience for participants from abroad.

There were 161 scientists attending the symposium, including 41 from the United States and 87 from Japan. Of the American delegates, 27 had received travel grants from the National Science Foundation and the National Institutes of Health. In addition to the American delegates there were 33 participants from Australia, Canada, France, East Germany, West Germany, Great Britain, Holland, Hong Kong, India, Italy, Sweden, Taiwan, Uganda, and the U.S.S.R.

The theme of the symposium was neuroedocrine and endocrine mechanisms in developmental, environmental, and metabolic adjustments. The International Committee attempted to avoid duplication of subject matter covered at the two previous symposia, at Liverpool and Cold Spring Harbor. The orientation was, in general, truly comparative. In addition, throughout the symposium there was special emphasis on recent advances in insect neuroendocrinology, to which Japanese biologists have contributed so notably. The proceedings of the symposium, including the discussion, are to be published as a supplement to *General and Comparative Endocrinology*.

The symposium was distinguished by a successful effort to deal with topics of comparative endocrinology on a phenomenologic rather than a taxonomic basis. The line between vertebrates and invertebrates, so evident in much of the research in comparative physiology, was largely effaced by the inclusion of papers on a single topic in the same session, without regard to the taxonomic position of the animals discussed.

The session on hormone chemistry, with Ito (Tokyo) as chairman, covered insect hormones (Karlson, Munich) mammalian pituitary hormones (Li, Berkeley), and the immunology of pituitary and placental gonadotropins (Segal, Laurence, and Perlbachs, New York; Johnson, Iowa City). The session on hormones affecting environmental adjustment, with Gorbman (New York) as chairman, was concerned largely with fish endocrinology: water and electrolyte metabolism (Chester Jones and Phillips, Sheffield), iodine metabolism (Hickman, Edmonton), and the nature of thyrotropin (Fontaine and Fontaine, Paris). In addition, Ghosh (Calcutta) presented a paper on the avian adrenal.

Pigmentary phenomena, in a session with Li as chairman, were considered in crustaceans (Fingerman and Aoto, New Orleans and Sapporo), insects (Joly, Strasbourg), amphibians (van Oordt and Burgers, Utrecht), and mammals including man (Shizume, Mori, and Lerner, Tokyo and New Haven). Shizume's presentation emphasized the mode of action of intermedin and other pigment-influencing factors and led to a rewarding discussion. A session on neuroendocrine phenomena, with Welsh (Cambridge, Mass.) as chairman, included a general consideration of neurosecretory cells (Bern, Berkeley) and three papers on hypothalamo-hypophyseal relations: two on amphibians (Voitkevich, Voronezh; Etkin, New York) and one on birds (Farner, Wolfson and Kobayashi, Pullman, Evanston, and Tokyo). Hormonal regulation on behavioral phenomena was considered, in a session with Benoit (Paris) as chairman, in insects (Hodgson, New York) and in fish (Baggerman, Groningen; Hoar, Vancouver). Marshall (Clayton) commented on the problem of physiologic races in birds.

Two sessions, with Gallien (Paris) and van Oordt (Utrecht) as chairmen, were devoted to integration of reproductive functions in a variety of animal groups. The annelids were surveyed by Durchon (Lille) and the crustaceans, with special emphasis on the androgenic gland, by Charniaux-Cotton (Gif-sur-Yvette). Reproductive phenomena in elasmobranchs (Chieffi, Naples), teleosts (Egami and Ishii, Tokyo; Ramaswami, Jodhpur), amphibians (Ramaswami), birds (Benoit), and mammals (Takewaki, Tokyo) were all considered. Mitskevich (Moscow) contributed a paper on the hormonal relationship between mother and fetus in mammals.

Hormones in relation to development were covered in the final two sessions, with Mitskevich and Bern as chairmen. Extensive attention was paid to the important work being done on insect metamorphosis and related phenomena, by Wigglesworth (Cambridge, England), Gersch (Jena), Williams (Cambridge, Mass.), Ichikawa (Kyoto), and Fukuda (Matsumoto). Gene-hormone interaction in sexual differentiation was discussed in fish by Yamamoto (Nagoya) and in amphibians by Gallien. A paper by Witschi and Dale (Iowa City) on steroid hormones in early vertebrate development concluded the symposium.

There were excellent opportunities for scientific and social exchange at the symposium. A panel, organized and headed by Emil Witschi, devoted an afternoon to considering "perspectives in endocrinology." Panelists included the scientific attaché of the U.S. Embassy in Tokyo, W. R. Boss; R. T. Hill from the National Institutes of Health, Bethesda; R. K. Meyer (Madison); T. Uchida (Sapporo), president of the Zoological Society of Japan; and Benoit, Chester Jones, Karlson, Mitskevich, Wigglesworth, and Williams.

No symposium could cover the subject matter in question without some appreciable gaps. In the present instance, despite the breadth of coverage, one could wish there had been papers on the important recent work on the

molecular and functional evolution of neurohypophyseal principles associated with the names of W. H. Sawyer, H. Heller, and J. Maetz; on higher nervous centers as they impinge upon the hypothalamo-hypophyseal complex; and on the insect subesophageal ganglion as an endocrine structure. Crustacean neuroendocrinology, too, was only touched upon.

The 4th International Symposium will be held in Paris in 1964, under the leadership of Louis Gallien. It will face the challenge of maintaining the high quality of the first three symposia and of providing continued coverage of "frontier" areas in the growing field of comparative endocrinology.

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Forthcoming Events

September

1–5. Danube Research, intern. symp., Budapest, Hungary. (Biological Sciences Group, Hungarian Acad. of Sciences, Roosevelt Tèr. 9, Budapest V)

1–9. Topology and Its Methods in Other Mathematical Disciplines, symp., Prague, Czechoslovakia. (Organizing Committee, Ke Karlovu 3, Prague 2)

1–10. International Pharmaceutical Students' Federation, 7th congr., Munich, Germany. (U. Peto, 10 Groffstr., Munich 19)

2–7. International Assoc. for Quaternary Research, Warsaw, Poland. (R. Galon, Secretary General, INQUA, Geographical Inst. Univ., Torun, Poland)

2–9. International Soc. of Surgery, 19th congr., Dublin, Ireland. (T. C. J. O'Connell, 35 Fitzwilliam Pl., Dublin)

3–7. International Assoc. for Hydraulic Research, 9th congr., Belgrade, Yugoslavia. (H. J. Schoemaker, Waterloopkundig Laboratorium, Raam 61, Delft, Netherlands)

3–8. American Chemical Soc., 140th meeting, Chicago, Ill. (A. T. Windstead, National Meetings Dept., ACS, 1155 16 St., NW, Washington 6)

3–9. International Federation of Gynaecology and Obstetrics, 3rd world congr., Vienna, Austria. (V. Grünberger, Medizinische Akademie, Alserstrasse 4, Vienna 9)

3–10. Inter-American Congr. of Radiology, 7th, São Paulo, Brazil. (W. Bomfim-Pontes, Rua Cesario Motta 112, São Paulo)

4. World Federation for Mental Health, 14th annual, Paris, France. (WFMH, 19 Manchester St., London, W.1, England)

4–6. International Assoc. for Shell Structures, colloquium, Brussels, Belgium. (Prof. Dutron, 127 Avenue Adolphe Buyl, Brussels 5)

4–6. International Symp. on the Earth Storm, Kyoto, Japan. (T. Nagata, Science Council of Japan, Ueno Park, Tokyo)