Recent Studies of Hypothalamic Function


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Editors: K. Lederis and K. E. Cooper, Calgary

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Preface

The diverse functions of the hypothalamus have, in recent years, been shown to be clearly inter-related. The hypothalamic control of any one physiological function cannot any longer be considered in isolation. For example, during the reproductive cycle in man, which is under hypothalamic control, water and salt balance and body temperature are also regulated and emotional changes are often apparent. Thus, the research endocrinologist needs to consult with the neurochemist-neurophysiologist, the behavioral scientist and the clinical investigator.

The symposium was part of the opening celebrations of the new Health Sciences Centre which houses the Medical School at Calgary in which research and teaching have both been organized on an interdisciplinary basis. At Calgary a nucleus of hypothalamic researchers had already come together. This setting provided a reason for an attempt to gather leading investigators concerned with endocrine, metabolic and behavioral research, who usually work in parallel but are not always cognizant of likely relationships between divergent functional aspects. It is felt that this integration has been of mutual benefit to the workers from different fields.

Another aspect of this symposium, namely the publication of the proceedings within a few months after the presentation of the reports, should also be beneficial to those interested in the diverse hypothalamic functions: the progress in investigations at present is such that new knowledge presented today may become obsolete within a year or two. Realization of this and appropriate co-operation by the Messrs. S. Karger AG will, no doubt, be appreciated by interested readers when the proceedings arrive on the bookshelves.

The proceedings are presented in the form and in the sequence in which the symposium was held. The section dealing with ‘Hypothalamus
and hormones’ includes all presentations in 3 sessions dealing with the endocrine aspects. Equally, the reports given in sessions on ‘Metabolic and behavioral’ functions and in ‘Thermoregulation’ are grouped under separate headings. The Summary represents an abbreviated edited form of the final sessions of the symposium, in which general aspects of endocrine and nonendocrine functions of the hypothalamus were considered in several formal presentations by members of the panel and the resulting general discussion.

The planning of the symposium was the joint effort of the members of the Symposium Organizing Committee and the Central Opening Ceremonies Committee, to whom our thanks are due. Especially, the input by Dr. Warren Veale, before, during and after the symposium is greatly appreciated.

The symposium could not have been held without the generous financial support from the Medical Research Council of Canada and contributions from many organizations and firms (Astra Chemicals Ltd., Ayerst Laboratories, Beckman Instruments Inc., Boehringer Ingelheim (Canada) Ltd., Burroughs Wellcome Co., Garworth, Walter A. Carveth Ltd., Fisher Scientific Co. Ltd., Mead Johnson (Canada), The William S. Merrell Co., The Mogul Corporation, Sandoz Pharmaceuticals, Schering Corporation Ltd., Warner-Chilcott Laboratories Co. Ltd., E. R. Squibb & Sons Ltd., Wild of Canada Ltd., Winthrop Laboratories, Wyeth Limited, Abbott Laboratories Ltd., Smith, Kline & French of Canada Ltd., Merck-Frosst Laboratories and Pfizer). Special thanks are due to Messrs. Merck-Frosst (Canada) who supported the session on ‘Metabolic-behavioral aspects of hypothalamic function’ in its entirety.

We are grateful for the smooth day-to-day operation of the symposium to Miss Betty Buchanan from the Department of Continuing Education, University of Calgary, and her assistants, especially to Mrs. Sandra Demchuk; to Mr. V. Jackson and Mr. Stewart Eaton for excellent audio-visual services and other physical arrangements.

Miss Louise Workman, assisted by Miss Linda Smyth, Mrs. Jean Goldie, Miss Judy Stearns and Miss Marianne Jochumsen carried the main secretarial burden in the organization of this symposium and, especially, in the patient and rapid preparation of manuscripts for the press. Last, but not least, the patience and indulgence of our wives during the period before and during the symposium, and the editorial work, are greatly appreciated.
Calgary, June 1973

K. Lederis
K. E. Cooper