## **OPENING REMARKS**

THIS issue contains the papers and discussions presented at the *First International* Symposium of the Journal of Steroid Biochemistry, devoted to the recent developments in theoretical and practical aspects of the Interaction of Steroids with Macromolecules.

The question of the relationship of the steroid hormones to macromolecules was posed a few years after the discovery of steroid hormones themselves, when in 1934, B. Brunelli postulated the hypothesis that oestrogens can be linked with proteins, but the development of this field was really only launched between 1955 and 1960, when W. H. Daughaday, W. R. Slaunwhite, A. A. Sandberg, U. Westphal and others, found that steroid hormones are transported by specific proteins. Another fascinating track was opened up at the end of the fifties by R. F. Glascock and W. G. Hoekstra and by E. V. Jensen and H. I. Jacobson who reported the interaction of oestrogenic hormones in target tissues and the formation of steroid receptors. Their discoveries were followed by a series of studies by different research groups who found specific receptors for steroid hormones: androgens, corticosteroids and progesterone.

A very interesting development in the practical aspect of this field was introduced by B. E. P. Murphy in 1964 with the competitive protein binding methods for evaluation of minute quantities of steroids in biological fluids, and the development of radioimmuno- and radio-receptor assays for steroid hormone evaluation.

More recently, the connection between the binding of steroid hormones to macromolecules and the mechanism of action of the hormones should lead to a significant step forward in the knowledge of how the hormone effects its biological action.

We would like to express our sincerest thanks to all the participants at the meeting for their enthusiastic collaboration in the presentation of their papers and discussions. Our deepest thanks to Drs., H. Adlercreutz, J. Crabbé, J. K. Grant, E. V. Jensen, A. E. Kellie, A. Munck, B. O'Malley, H. J. van der Molen and A. Vermeulen, who acted as Chairmen of the Sections and for their active participation in the correction of the discussions.

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> J. R. PASQUALINI Editor

## FIRST INTERNATIONAL SYMPOSIUM OF THE JOURNAL OF STEROID BIOCHEMISTRY

## THE INTERACTION OF STEROIDS WITH MACROMOLECULES

(Paris, 13-15 September 1971)

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