

## Foreword

The purpose of sponsoring and organizing the First International Symposium on Twin Studies in Rome is the result of two circumstances which may be considered as the basic ideas, the forces underlying this initiative.

First of all, was the wish of having a scientific event to celebrate the completion of the fifteenth year of life of the Mendel Institute. The Gregor Mendel Institute of Medical Genetics and Twin Studies was in fact founded in Rome in 1953, preceded by the publication of the handbook "A Study of Twins" in 1951, and by the foundation in 1952 of an international journal, *Acta Geneticae Medicae et Gemellologiae*, which keeps being the only one in the world especially devoted to twin studies, and which has now given hospitality to these Proceedings. The fifteen years of life of the Mendel Institute have particularly stressed the attention given to twins, both through the medical care and social assistance provided to the 15 000 pairs of Italian twins up to now registered and followed by the Institute, and through the numerous scientific observations and publications that this activity has promoted.

Secondly, the project of our Symposium was the result of the generally increasing interest in twin studies, both at the quantitative and the qualitative level, mostly on account of the official introduction of Human, Medical and Clinical Genetics into medical studies. The increased interest in twin studies is the natural result, not only of the growing impact of genetics in biological sciences, but also of the realization that twins provide a unique tool of research, the only alternative to the ethical and practical impossibility of experimentation in human sciences. And this application of twin studies will be highly enhanced by an international organization and standardization of twin registers.

Under these circumstances, with the perspective of a wider potential development of twin research, the organization of our Symposium, rather than a simple wish and a pleasure, became a precise duty. Bring into contact research workers of different countries and experience; make methodologies, techniques and results be explained, compared and discussed, and be available to anyone; stimulate new ideas and working hypotheses, and perspectives of new goals in the organization of research; and finally stress the particular position and the advances of this meeting point of genetics with all other branches of biomedical sciences — all this became the fundamental aim of our Symposium.

The impression of success we had when the Symposium was over is now confirmed by the publication of these Proceedings, showing the extent, interest and up-to-dateness of the subjects dealt with.

A number of contributions from the Mendel Institute are only abstracted in this volume, having meanwhile been published within a wider experimental work

supporting the hypothesis of a chronological unit of the gene (L. Gedda and G. Brenci: Biology of the Gene: the Ergon/Chronon System. *Acta Genet. Med. Gemellol.*, 18: 329-379).

I wish to express my particular gratitude to Paolo Parisi, the careful editor of these Proceedings, as well as to the single authors, who have enthusiastically contributed to the success of the Symposium and the publication of the present volume. I also wish to recall and acknowledge with thanks the kind hospitality given to our works by the Italian National Research Council.

May the history of the Mendel Institute be entrusted with the present volume, as a most important and honorable document for the celebration of its fifteenth year of life.

LUIGI GEDDA

Rome, 29 June 1970