

Our Forty Years

L'Istituto di Genetica Medica e Gemellologia «Gregorio Mendel» (The Gregorio Mendel Institute of Medical Genetics and Twin Study) was inaugurated on 6 September 1953 and *Acta Geneticae Medicae et Gemellologiae*, which was present at its birth, has continued to follow its development over the last 40 years. In fact, the first issue of *A.Ge.Me.Ge.* carries the date of 1 January 1952.

The name of the Institute was conceived with the intent of expressing the three main reasons for its creation. The first, was to afford the city of Rome the possibility of paying tribute to Gregorio Mendel, who was not only a pious and exemplary figure of the Catholic Church, but also a scholar who left an indelible mark on modern science. His “laws of heredity”, first made known in 1865, revealed the existence of those hidden factors, “the genes”, which every cell possesses and which produce the structures and functions of every living creature, thus bestowing on it a personality or phenotype. In 1955, the Institute published a volume containing Mendel’s original manuscript, with a facing Italian translation and the valuable comments of many well-known researchers, starting with Tschermak von Seysenegg who was one of the first to re-discover Mendel’s laws at the beginning of this century. In 1984, the Institute promoted the celebration of a Mendelian commemoration ceremony in the Vatican. The ceremony was held in the most honoured presence of His Holiness Pope John Paul II and was conducted by His Eminence Cardinal Paul Poupard, President of the Pontifical Cultural Council. This solemn event was enthusiastically supported by the highest offices of the Augustinian Order to which Mendel belonged and his nephew, who is also an Augustinian monk, was present for the occasion.

The second message in the name, “Genetica Medica” (Medical Genetics), was intended to evoke an awareness of the importance of this doctrine to medical students and practitioners. Up to the 1950s, Italian university medical schools entrusted the teaching of genetics to biologists who, obviously, were not in a position to present the subject in its clinical aspects which are of the utmost importance to clinicians and practitioners in the diagnosis and prevention of hereditary disease. With the establishment of the Institute this need was more actively recognised and, as a result, in 1956 the Faculty of Medicine of “La Sapienza” University of Rome designated me to teach medical genetics. Soon afterwards, the Ministry of Health announced the first public examination for third level teaching posts in medical genetics and the other two successful candidates who joined me were Prof. Ruggero Ceppellini and Prof. Luca Cavalli-Sforza. This

sealed the status of medical genetics as an integral part of general medical studies in Italian State universities.

Lastly, we turn to the third objective, “Gemellologia” (Twin Study). At first, this new term seemed something of a tongue twister but over the years it proved to be a precious key in disseminating an awareness of the important contribution of this method to genetic research. I must confess, this appendix was sequential to “Lo Studio dei Gemelli” (The Study of Twins) which I published in 1951. While compiling the Bibliographic Catalogue of some 7,304 entries for this rather copious volume, it emerged that most of these had projected objectives and conclusions by drawing on twin study for comparison only, rather than consciously appreciating the univocal significance of this most refined “natural instrument” available to genetics, especially to human genetic research. McKusick’s most recent edition lists almost 10,000 hereditary diseases in man and, undoubtedly, twin study can claim its share of the merit for their individuation. In fact, given the remarkable genetic correlations existing between cotwins, particularly in the polygenic characters in the human species, the twin method with its naturally elevated explanatory capabilities is by far the most effective genetic research method available. Furthermore, Gedda and Brenci, through their study of monozygotic (MZ) cotwins with regard to the maintenance or loss of their phenotypic identity at the same moment in time, established that each gene has in fact a specific lifespan. This study of ‘time’ is today known as Chronogenetics.

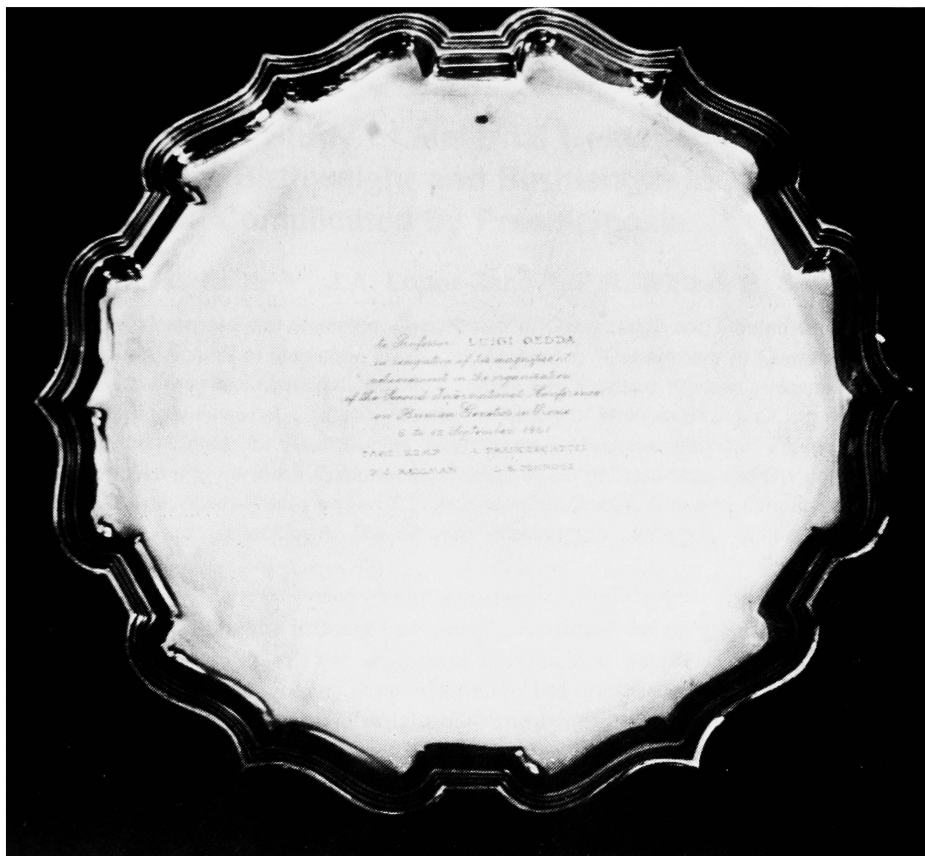
Developments in twin study in all sectors, i.e. epidemiology, gynaecology, obstetrics, paediatrics, geriatrics and clinical medicine etc., have been amply recorded in the 41 volumes of A.Ge.Me.Ge. Needless to say, our journal has also dedicated space to the extraordinary developments and achievements in the fields of molecular biology and cytogenetics.

In 1947, under the auspices of the Gregorio Mendel Institute, the International Society for Twin Studies (ISTS) was founded. Today, this organisation claims among its members some of the world’s leading geneticists and its activity has been highlighted by the 7 International Congresses held to date. The first was in Rome in 1974, followed by Washington 1977, Jerusalem 1980, London 1983, Amsterdam 1987, Rome 1989 and lastly, Tokyo 1992. From the first, these meetings received wide acclaim for their scientific content and, with each passing event, have become a recognised international platform for the exchange of valuable scientific information. Proceedings of the congresses are published in the respective yearly volumes of A.Ge.Me.Ge.

The Institute’s latest initiative was the establishment last year of the “Centro Internazionale di Genetica Pediatrica ‘Luigi Gedda’” (International Centre for Paediatric Genetics), under the direction of Prof. Paolo Durand.

Alongside the twin research work conducted in those years, the equally precious developments made in General Human Genetics were not overlooked. Prof. Tage Kemp held a Congress on Human Genetics in Copenhagen in 1956. I saw it as opportune to follow this up with the 2^o International Congress in Rome in 1961 during which I had the honour to receive from my distinguished colleagues, geneticists T. Kemp, A.

Franchesetti, F.J. Kallman and L.S. Penrose this silver plate which I place here to end this "curriculum" of the Gregorio Mendel Institute and to recall the 29 years in which, with the assistance of Prof. M. Milani-Comparetti, the Institute housed the Secretariat of the Permanent Committee of International Congresses on Human Genetics.



I take this opportunity to thank all of those who contributed with their work, dedication and encouragement to make those Forty Years a remarkably successful realisation of those three initial objectives and a memorable experience for me personally.

Luigi Gedda