



OBITUARY

Luigi Gedda 1902–2000



Founding President of the International Society for Twin Studies

To be asked to write about Professor Gedda is a great honour and privilege, and I am particularly pleased to do so for the readers of *Twin Research*, an area to which he so much contributed and the official journal of a scientific society which he and I established and co-ordinated for so many years. Writing about him, however, involves much more than that.

Luigi Gedda died in the evening of 26 September 2000. Four weeks later he would have been 98 years old, having been born on 23 October 1902. He had been active until the very last, always assisted by his wife Linda, who was entirely devoted to him and his only family relation following the death, a few years ago, of his beloved sister Marie, a mystic currently being considered for beatification.

Trying to face the manifold, incredibly rich expressions of such an extraordinary personality, which powerfully unfolded itself in unceasing endeavour for almost a century, is no easy task. It means passing through contemporary history and the developments of medicine and science, in the many areas to which he contributed in various ways. It specifically means passing through the history of genetics since its very beginnings, particularly medical genetics and twin research, of which he was a founder and recognised leader. From another angle, reviewing his endeavour also means dealing with the relation between science and spirituality, the two being closely interwoven in his life and action. It means dealing with the history of the commitment of Catholic laymen, and the role this played in the affairs of the Church and in the history of Italy and other countries in the critical decades of confrontation with communism and the Soviet block. To me personally, if I may add, writing about him means reviewing 40 years of my life, since the day I first met him, in the summer of 1959, and had the privilege, a young student as I was, of becoming associated with him – an association which was to be soon closer and closer and which expressed itself intensely over the years, our various differences being largely overshadowed by mutual respect and esteem.

The son of a civil servant who repeatedly changed residence in the course of his duty, Gedda was born in Venice and for some years studied in Pavia and Milan, but considered himself to be from Turin, the city where he spent most of his youth and early adulthood. There, in 1927, he obtained his medical degree, with honours and acceptance of his thesis for publication and a prize. An army medical officer in 1928, in that year he started on an internship in the Medical Clinic, where he then became Assistant. He spent periods of research at the University of Strasbourg to learn tissue culture techniques, published several papers and contributed to various congresses, and in 1933 was appointed Lecturer in Pathology.

A fervent Catholic, intensively committed to religious and political organisations, at the Pope's request in the late 1930s Gedda moved to Rome. There he continued his scientific studies and career both as a Lecturer in the Biology of Human Races and at the Institute of Pathology, at the time directed by Professor Pende, one of the founders of constitutional medicine. Increasingly interested in growth and heredity, he developed a medical research service in an orphanage of some 500 children, and

this is where, in 1942, his attention was drawn to the extraordinary biochemical concordance of two identical twin boys, appropriately called Romulus and Remus. This stimulated his interest in twins as a tool for medical genetic studies, which led him to establish a special medical service for twins at Rome's Medical Clinic, where many hundreds of pairs were visited in the immediate after-war years, giving rise to several publications and congress reports.

At the same time, he undertook a thorough analysis of the entire world literature about twins, in the various scientific as well as cultural perspectives, collecting and reviewing over 7000 references, each personally transcribed and annotated, in his clear and elegant handwriting, on individual index cards that were still used many years later. This resulted in his monumental *Studio dei Gemelli (A Study of Twins)*, Rome 1951, 1381 pp), the first part of which was then published in English by Charles C Thomas (*Twins in History and Science*, Springfield 1961).

A year later, in 1952, Gedda founded *Acta Geneticae Medicae et Gemellologiae*, the first journal to be devoted to medical genetics and twin research, which he has edited and published ever since, producing a total of some 20000 pages. The Advisory Board was impressive and included prominent scientists from all countries whom some readers may still recognise as founding fathers of the newborn area of study, such as: Bauer, Buschke, Cummins, Dahlberg, Ford-Walker, Fanceschetti, Gesell, Greulich, Hanhart, Kallmann, Kalmus, Kemp, Lamy, Newman, Rife, Siemens, Strandkov, Turpin, von Verschuer, Waardenburg, Wiener, and others. Over the years, the Board was enriched by new names, such as Allen, Berg, Christian, Eaves, Eriksson, Fulker, Inouye, Keith, Lejeune, MacGillivray, Nance, Vandenberg, Zazzo, and many others, and although I undertook editorial responsibilities, Gedda continued to supervise the journal in every detail.

Immediately after publishing his handbook and the journal, Gedda conceived an extraordinary idea and exerted his best energies to realise it. He promoted and himself designed a new institution, specifically aimed at meeting the needs of twins while serving twin research in the broader context of the new discipline of medical genetics. The Gregor Mendel Institute of Medical Genetics and Twin Research, an exceptionally innovative, original and elegant five-storey building, was officially opened on 8 September 1953, in the presence of the Italian Prime Minister, the Minister of Education, the Cardinal Secretary of State, and many other prominent scientific, religious, and political authorities. The ceremony was preceded by an International Symposium of Medical Genetics, and a special audience and blessing by Pope Pius XII.

A total staff of about 100 doctors, scientists, technicians and other professionals had worked there since the beginning, offering daily completely free assistance, in the various medical branches as well as for psychological and social problems, to any twin pair who applied. Over the years, some 20000 pairs registered and received regular or occasional assistance of some kind, while being at the same time subjects of study for research purposes.

From the very beginning, the Mendel Institute and the journal established themselves as internationally renowned reference points for anyone interested in human genetics and twin research. From the mid 1950s to the early 1960s, Gedda edited and published, among other things, a 10-volume series of monographs in various languages, *Analecta Genetica*, and a 5-volume handbook (originally planned in 7 volumes), *De Genetica Medica*, with some 70 highly authoritative contributors. In 1961, I was fortunate enough to already be one of his close collaborators when his endeavour culminated in the organisation of the Second International Congress of Human Genetics, a highly successful event attended by over 1000 participants which gave a great impetus to the development of the new discipline. A Permanent Committee for the International Congresses of Human Genetics was at that time established, of which Gedda was Secretary for about 20 years.

In the same years, Gedda made Medical Genetics be introduced in the Italian Medical School curriculum and became the first Italian Professor of the new discipline.

In the more specific area of twin research, an International Symposium was called by us in Rome in 1969, which marked a turning point and the beginning of a new trend, countering the decline of interest that had previously occurred as a result of the criticism cast on the twin method and the development of new, more direct approaches in human genetic research. The time seemed then ripe to promote an effective revival, and more systematic action was taken. In 1974, delegates from 27 countries convened in Rome to attend the First International Congress on Twin Studies. At the Closing Session, on 2 November in the Mendel Institute's Auditorium, the proposal Gedda and I made to establish an international association was unanimously accepted and immediately implemented. A Working Group was appointed and shortly afterwards the General Assembly voted the establishment of the International Society for Twin Studies, with the *Acta* as the official journal, Gedda as President, and myself as Secretary General. For the next 20 years, ISTS was to be run from Rome's central office at the Mendel Institute, which also greatly contributed to the organisation of its various congresses, particularly those in Jerusalem (1980) and again Rome (1989).

Among the many other areas to which Gedda contributed, of special relevance were constitutional studies, growth and sport. He conducted extensive observations on sport families and twin athletes, was President of the Scientific Committee of the Rome 1960 Olympic Games, on which occasion he published a detailed report on the participating athletes, and chaired and organised several international meetings of sport medicine. As President of the Scientific Committee of the Italian Auxologic Centre and Editor of *Acta Medica Auxologica*, he called the First International Congress of Auxology (Rome 1977), thus giving rise to another successful international organisation and congress series in the field of growth studies. His scientific interest was particularly attracted by the study of the time dimension in biology and he developed a theory on the timing of genes that he illustrated in a book on chronogenetics that was also translated into French and English (by Charles C Thomas).

A fervent believer, Luigi Gedda lived and expressed his faith through action all his life. A socially and politically committed Catholic ever since his youth, he played a significant role in various movements, and specifically Catholic Action, the organisation established by Pius X (1927) to encourage the laity to participate in the apostolate of the hierarchy, bringing a Christian influence to society. In the difficult war and postwar years, he became the trustee of Pope Pius XII and an important reference point for Western interests in efficiently organising all Catholic forces to counter the rising threat of the Communist Party. The 1948 overwhelming victory of the Christian Democrats was largely considered his victory and is still celebrated as a landmark in modern Italian history and the West–East confrontation. He continued to play a very active role over the years as President of the Civic Committees, a powerful organisation he had founded, as well as President General of Catholic Action, and through several other bodies, but never wanted to undertake government responsibilities nor even enter Parliament, feeling this would be confusing and weaken his position as an independent Catholic. He applied his commitment to numerous areas of social, cultural, and political involvement and was, among other things, for a long time President of the Italian Association and of the World Federation of Catholic Doctors.

Though unceasingly active, he was deeply immersed in the spiritual dimension, and prayer was his constant companion. A brilliant public speaker on any occasion, he otherwise spent his time as much as possible in silence and meditation. This was to him the most congenial dimension, which he also expressed in the establishment of two institutions for spiritual exercises and meditation retreats, especially for laymen, both called 'Gethsemani',

after the garden on the Mount of Olives where Jesus had prayed in anguish before being arrested, and which he held as a sacred symbol of his commitment. These large, modern and impressive institutions, one in Northern Italy, on the mountains surrounding Lago Maggiore, the other in the South, in Paestum, overlooking the temples area and the blue Tyrrhenian sea, have attracted for decades thousands of his friends and admirers, who would then hardly forget such wonderful islands of inner peace and spirituality.

He attained the synthesis of his various dimensions when he eventually succeeded in buying a plot of land on the Mount of Olives close to the original Gethsemani garden. His idea of building there a scientific institution where faith and science would merge had originally been supported by King Hussein, a father of twins and the ruler of Jordan, of which East Jerusalem and the Mount of Olives were a part at the time. But the territory was then occupied by Israeli forces during the Six Day War (1967), and the land came under the jurisdiction of the military governor. As it happened, Gedda thought that we might try and negotiate with the authorities to repossess the land and renew the permission to build, and I was happy to play a role to that effect. Thus started an extraordinary chapter, most intense and challenging, rich in experiences of all kinds, and I am still grateful for having been given a chance to be part of this process. It took several years, and the great support of many Israeli friends, particularly the Mayor of Jerusalem, Teddy Kollek, but in the end we succeeded. We got back the land, and made an agreement whereby part of it would be developed as an interfaith spiritual park and the rest would be transformed into a building area, modifying the City Plan and obtaining permissions and various forms of support to build the planned institute. By 1980, the first part of the Gedda Institute had been completed and an opening ceremony took place at the end of the Third International Congress on Twin Studies. Today, visitors of the Old City standing on the Temple area can admire from close below the beautiful modern building, respectfully integrated into the inspiring landscape of the Mount of Olives, its chapel overlooking the very site of Gethsemani.

These are only some of the highlights of Gedda's impressive life and personality. He was a man of prayer, of knowledge, and of action, who profoundly understood human nature and was well aware of its limitations and the relative value of all human events, and yet committed himself to the best of his possibilities. A man of few words, he was a very good listener, always ready to understand, seek solutions and help. He was very concrete and pragmatic, but adamant on principles and what he believed to be right, clearcut in his positions, and

fearless, unshaken by success or misfortune. He endured opposition, loss of power, and isolation with exemplary moral strength and coherence. With him goes a man and, whatever differences and difficulties there may have been in our relation, particularly in the latest years, I am grateful for having been granted the privilege to spend with him so much of my life.

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Luigi Gedda, the founding president of the International Society for Twin Studies, died in Rome on 26 September. He was born in Venezia in 1902, and studied medicine at the universities of Pavia, Milano and Torino. He moved to Rome where he became interested, in 1933, in the similarity of somatic characters in monozygotic twins. As he stated himself, the high concordance rate of the phenotypes of monozygotic twins opened for him the way to human genetics.

After World War II he planned to build an institute named after Mendel. Around the same time, he published one of his major works: an extensive overview of twinning and twin studies worldwide (*Studio del Gemelli*, 1951), later translated into English under the title *Twins in History and Science*. This voluminous book can be considered as the encyclopedia of the twinning phenomenon or a summa as exemplified by the works of authors in the Middle Ages and the Renaissance. A year later, he became also the founding editor, publisher and owner of the *Acta Geneticae Medicae et Gemellolo-*

giae. His other major work, written with Giovanni Brenci, *Cronogenetica* was also translated into English as *Chronogenetics: the Inheritance of Biological Time*. Crowning his activities as leading figure in the science of twins during the middle of the century, he founded the International Society for Twin Studies at the Mendel Institute, Rome, on 2 November 1974. A second institute, also originally devoted to twin research, was opened in 1980 in Jerusalem, on the Mount of Olives, during the sixth international congress of the Society. Unfortunately for twin research, some years later it was donated to a charity and used for other purposes.

It would be inappropriate to ignore another all-important aspect of Luigi Gedda's life. He was not only a scientist primarily interested in human genetics. He has also played a dominant role in the Italian Catholic Action and the Christian Democratic party (*Democrazia Cristiana*). Because of his great influence in Italian public life and his dedication to the Catholic Church he became one of the most influential lay advisers of the Vatican, especially under the papacies of Pius XI and Pius XII. This is not the place to dwell on the extracurricular activities of Luigi Gedda, but to have an idea of their importance it is sufficient to mention that the Google website devotes 630 pages to list events or citations related to him.

Undoubtedly Luigi Gedda had a unique destiny as a geneticist and a leader in Italian religious and public life. He was one of the most prestigious former presidents of the Society.

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