

# Origins and development of Bologna's Dermatological School

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## SUMMARY

The first note on dermatology in Bologna goes back to the year 1200, when Taddeo degli Alderotti introduced the bedside teaching. At the time of the syphilis epidemic the hospital of Saint Job was established to care for these patients by the end of 15<sup>th</sup> century. During the following centuries many famous physicians were practising and teaching medicine, dermatology included. The greatest advancement of dermatology in Bologna was however in the 20<sup>th</sup> century. Among the prominent dermatologists at least a few deserved to be mentioned p. Gamberini, S. Giovannini, D. Majocchi and L. Martinotti.

The oldest documents relating to dermatology in Bologna mention a famous clinical physician, Taddeo degli Alderotti, who was teaching at the end of 1200 (1) and who, unlike his colleagues, lecturers gave instruction at the bedside of his patients drawing attention to the symptoms of the illness described in his writings, "Consilia Medicinalis", which include numerous skin diseases. The practical clinical scope of Taddeo was followed by his disciples: Tommaso del Garbo, Gentile da Foligno and Bartolomeo da Varignana.

In the following century Taddeo's method was abandoned and there was a resurgence of the theoretical method whereby dermatology appeared only occasionally in the comments of Galen's work "De Tumoribus praeter naturam" (2), which was preferred by Celso. The perfection of Galen's language was causing major diffi-

culties of interpretation Galen was also considered to be more of a scholar rather than a medical practitioner. (2).

During this period, however, Arab authors were highly appreciated and cautery was in great vogue until Federico Borgognoni (3) restored the use of the scalpel.

The treatment of wounds was the prerogative of surgeons, supreme experts in the topical interventions and use of medicines designed for external local application, so that the role of surgeons in the treatment of skin diseases became almost a matter of the past. (4).

With the advent of syphilis at the end of the 15. century the administrators of the city of Bologna deserved well of their townspeople when they founded a hospital for patients stricken with syphilis. Thus they pro-

## KEY WORDS

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vided assistance and treatment for the afflicted that wandered aimlessly about the city shunned by everybody and removed even from hospitals. And so the Hospital of S. Job was established (5) on the premises of the Hospital of Santa Marina dei Guarini previously intended for the pilgrims (6).

This hospital was accepting not only syphilitic patients but also other sick persons afflicted by the so-called squalid diseases to be treated with mercurial unguents or with the resin of the Latin American tree *Guaiacum officinale* or with the "holy wood" of *Guaiacum sanctum* applied in compresses and steam baths. The statutes of the hospital, that were very precise, clear and synthetic, especially those affecting the assistant personnel, made possible periods of treatment with the obligatory presence of a physiatrist to check urine and prescribe the diet, and of a treating surgeon as represented on a woodcut by Bartholomeus Steber (7). Since some physicians at the Hospital of S. Job were also lecturers at the University, it is only natural that the Hospital of S. Job became the teaching center for venereal and skin diseases. This was witnessed by frequent appearances in hospital wards of numerous scholars and by annual teaching courses which up to the beginning of the 19. century included the reading and commentary of the works of Galen pertaining to Dermatology (2).

Among the first surgeons performing operations at the Hospital of S. Job was the famous Berengario da Carpi, renowned for the use of mercurial ointment that he claimed to be his exclusive property. Thus he enjoyed a great income and was, in the words of Ramazzini at a more recent date, the only physician capable of transforming mercury into gold (8). Undoubtedly, the widely spread ignorance together with bloated doctrine based largely on the most irrational and shaky empiricism favored the growth of his considerable prestige. This was confirmed by Leonardo Fioravanti (10), a noted Bologna physician in 1500, who also used printed material to advertise his professional capabilities.

Dermatology excited great interest due to the teaching of Gerolamo Mercuriale at the Bologna University (11).

Among the physicians at the Hospital of S. Job who from its foundation up to its closure by a Napoleonic edict in 1800 conducted unofficial courses in skin and venereal diseases the following are remembered: Enea Vizzani, Flaminio Rota, Domenico Lanzoni, Francesco Muratori, Fabio Pellini, Omodio Dolci and Antonio Gaddi who was the last to conduct the course in sexual diseases.

In the 17th century began the scientific research. Marcello Malpighi grasped the great possibilities created by the use of the microscope in the study of the

**Figure 1. Profesor Domenico Majocchi, Head of University Department of Dermatology, Bologna University, 1891-1925.**



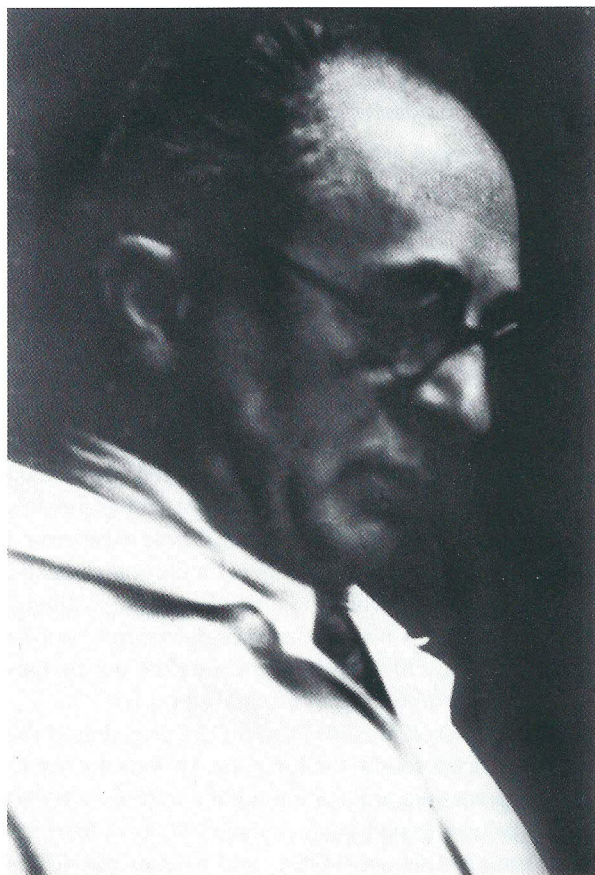
*Domenico Majocchi*

organs and tissues of the human body, and in spite of various polemics at the Academy fuelled by his slanderers and adversaries his work ("De externo tactus organo") and other writings were fully vindicated and accepted. This is clearly confirmed by the respective correspondence (12) with the London Royal Academy and by the fact that he was elected its fellow. In 1800 the Hospital of S. Job was closed down and its inmates were transferred to the Hospital of S. Orsola to be treated by the principal of the Department for chronic diseases, Domenico Palazzi, who was a member of the Academy of Sciences at the University and conducted free courses in venereology. In 1843 he explained the advantages of the Hunter tube used in urethral stenosis.

His successor, Ubaldo Daveri (13), abandoned the unitary concept for the dualistic one. He was the first to use the potassium and sodium iodide in tertiary syphilis. His culture, experiences, and the validity of his treatment attracted various Italian and foreign physicians

who visited the wards of the department under his direction. His successful collaborator was Pietro Gambini who assisted him in publishing numerous clinical observations (13). Among his assistants was not only Marco Paolini, noted for the research in *Trichomonas vaginalis*, but also Michele Medici, Clodoveo Bigi, Francesco Ballotta, G. Battista Hercolani and Domenico Gualandi. They collaborated only a few years with Gamberini who in 1848 became head of the department. In fact, Gamberini did not understand the importance of the means of study and research, already generally recognized, but preferred a practical approach based on the observation of the patient. Therefore his numerous publications, including those of a didactic nature, reveal the same characteristics (14). In 1860 the University introduced the subject of dermosyphilopathy as a regular course for the diploma and entrusted the chair to Pietro Gamberini. At the same time the Department of sexual diseases at the Hospital of S. Orsa became the Royal Dermosyphilopathic clinic of the Bologna University.

**Figure 2. Professor Leonardo Martinotti, Head of Department of Dermatology, Bologna University, 1925-1951.**



One of the disciples of the Gamberini school was Sebastiano Giovannini (15) who after his visits to the clinics in Paris and Vienna felt the need to finish the scientific preparations for the School of anatomic pathology of Professor Tizzoni. At a later date, after winning the competition, he was nominated head of the Dermosyphilopathic clinic at the University of Turin laying the foundations of the Dermatologic school in that city.

In 1891 he abandoned teaching due to old age. His successor became Domenico Majocchi, a Roman by origin as well as by cultural and scientific formation, former head of the dermosyphilopathic clinic at the Parma University. Majocchi renounced the invitation of the Medical faculty at the Rome University and for the rest of his life remained in Bologna. He was the founder of the Bologna Dermatologic school and laid the foundations for scientific activities: the laboratory for microscopy, histology, bacteriology, chemistry, serology, as well as for practical activities: library, X-ray-, radium-, photo- and diathermotherapy, department for sexual diseases, antivenereal dispensary, photographic and casting cabinets (16). He gave short shrift to the conventionalism preceding his term which he defined "expositive nosography", and founded his morphology on sound anatomo-pathological basis (16). His disciples were numerous and many became university teachers, some occupied university chairs. Among them were Pier Lodovico Bosellini in Rome, Giuseppe Bertaccini in Bari, Leonardo Martinotti in Bologna. He published many original scientific works, including the "purpura teleangiectodes" linked with his name. He was a humanist and also took an interest in the history of medicine with an acute critical sense. He also conducted archival research.

In 1925, relieved from the duty of teaching because of old age, he was succeeded by his disciple, Leonardo Martinotti, who had obtained his university chair as a lecturer in Modena and then as assistant professor in Siena. Martinotti completed his studies in Wroclaw at the school of Jadasshon and then at S. Luis (Paris). He was not only a diligent and painstaking clinician, supported by the most updated bibliography, but also an excellent and expert dermatopathologist who devoted himself primarily to the histochemistry and afterwards to the immunohistochemistry. He was engaged in highly original research (1914) in keratohyaline and eleidine (17,18). After occupying his chair in Bologna he founded in 1925 the scientific review of the School, "Archivio Italiano di Dermatologia e Venereologia" that was suspended by Andrea Montagnani in 1978. Moreover, he established the School for Specialization in Dermatology and Venereology at the Bologna University attended by physicians from Italy and also from abroad. In 1938,



Figure 3. Professor Martinotti examining a female patient. Allegoric drawing by doctor Mari, 1935.

in his capacity as Chairman of the Italian Society for Dermatology and Syphilography, he organized an international Congress on Cutaneous Tuberculosis attended by numerous foreign scientists. Among them Domagk who by order of the Nazi government refused to accept in 1939 the Nobel Prize awarded to him for having discovered in 1932 the antibacterial properties of sulphadiazine, the first sulphamidic compound introduced in therapy. In 1948 he added the antibacterial effects of thiosemicarbazones. Martinotti had published numerous original works on important subjects in skin pathology. There were many disciples who became lecturers and head physicians, including Arrigo Bergamasco, the principal in Venice, who completed his scientific clinical studies at the Miescher school in Zurich, and who, following the suggestion of his teacher, devoted himself to virologic research and consequently to the attempts at vaccinal therapy in serious dermatologic pathologies. Moreover, Unita Silvestri should be mentioned too. She occupied the second teaching chair from 1968 until 1978.

In 1945 Martinotti was suspended from teaching for political reasons, but was recalled in 1949. During this period various young physicians frequented the Institute, including Arturo Longhi, Paolo Moroni, Luigi Rasponi and others who could meet and esteem the teacher while actively collaborating with him. They

owed him their professional formation and education. Unfortunately, this lasted only a few years because in 1951 Martinotti gave up teaching due to old age.

The faculty called Gilberto Manganotti of the Florentine school, the former head of the Dermatologic Clinic at the Siena University. The above mentioned disciples of Martinotti together and others collaborated with Martinotti in research conducted by the School: senescence, photodermatitis, autoimmune psychosomatic diseases, and neoplasias. Consequently they became principals at the hospitals in Bologna, Ravenna, Reggio Emilia, thus continuing their teaching at the School for Specialization in Dermatology at the University.

One of the young physicians attending the Clinic during the last years under the leadership of Manganotti was Claudio Varotti who had previously devoted himself to Dermohistopathology, and who is now the head of the Clinic after having substituted in teaching Unita Silvestri and subsequently his teacher, Andrea Montagnani, Manganotti's successor. The School continues its mission supported by numerous and capable disciples under the positive guidance of Claudio Marotti accompanied by Antonella Tosti, primarily engaged in the study of cutaneous problems, whose scientific activity keeps alive the memory of her famous teacher of the Italian dermatology, Antonio Tosti.

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