

WORLD ASSOCIATION FOR THE HISTORY OF VETERINARY MEDICINE (WAHVM)

PROCEEDINGS OF 45TH INTERNATIONAL CONGRESS



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WORLD ASSOCIATION FOR THE HISTORY OF VETERINARY MEDICINE (WAHVM)

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Edited by IVO ZOCCARATO, ANNAMARIA GRANDIS, MARIO PIERO MARCHISIO

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THE PROJECT OF A REGISTER OF GRADUATES AT THE MILAN SCHOOL OF VETERINARY MEDICINE (1812-1933)

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ABSTRACT

The recent arrangement and inventory of the archive of the former Milan Veterinary School has highlighted the importance of several documents which are suitable for providing a reliable and continuous overview over time of all the names of the young graduates of the School throughout the 125 years of its activity, up to its aggregation with the University at the end of 1932, as the Faculty of Veterinary Medicine.

Based on these sources, we have launched the project of creating a computerised register of the graduates of the Milan School, which will represent the main section of a website devoted to the history of the School and the training of veterinarians, which we plan to release by early 2024.

The graduates register will gather various information, including: surname, first name, patronymic, date of birth, place of origin, date of graduation, the title of the final dissertations (a useful element to enrich our understanding of the development of this branch of knowledge). Moreover, whenever possible, a brief mention of the career path followed after graduation will be provided. We have therefore identified a set of data for an Excel spreadsheet filing that will be progressively augmented by means of careful collection of information from the documents.

At the end of this activity, this Excel spreadsheet will be exported to a WordPress plug-in database in preparation for its subsequent publication on the web. Simultaneously with the creation of the database, again using the WordPress platform, a website will be designed to allow the use of search filters so as to browse and query the information in the underlying database.

Furthermore, the website will host other sections in which there will also be space for the results of research on the social history of the profession, for example on the contribution made by veterinary medicine to public and sanitary control of epizootic diseases, the wholesomeness of meat destined for slaughter and sale, the health conditions of livestock sold on the market (with the development of legal veterinary medicine) and of livestock raised in the countryside or used in the military. The activities both of the School and of the graduates will also make it possible to illustrate the ties between the veterinary profession and state institutions, the city elites and the territory, intersecting with issues related to economic development in a European dimension.

Key words

Veterinary graduates register; Milan Veterinary School; history of veterinary medicine, veterinary profession

AN OVERVIEW OF THE LONG HISTORY OF THE MILAN SCHOOL OF VETERINARY MEDICINE

The Milan School of Veterinary Medicine ranks among the oldest training institutes in this profession, having been founded in 1791, during the first period of Austrian rule¹.

It is well known that the two French schools of Lyons and Alfort (the latter near Paris), opened in 1762 and 1764 respectively by Claude Bourgelat, were by far the first institutes where instruction in veterinary science was imparted in a methodical and continuous form and represented the model for the creation of other schools in Europe, in a cultural and political context which looked with favour on the extension of the scientific method to the practice of caring for domesticated animals, in particular horses. It is thus no coincidence that, a few years after the establishment of a veterinary school in Vienna (1765-1767), the Habsburg government sent five young men of humble origins to the two French schools² at the expense of the treasury, between 1772 and 1776, to learn there the theory and practice of

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¹ As early as the 19th century, a number of professors who became directors of the School, embarked on a retrospective reconstruction of the foundation and subsequent development of the Milanese establishment: S. BONORA, Notizie storiche sulla Scuola superiore di medicina veterinaria in Milano, Milan, Libreria Gaetano Brigola, 1863; N. Lanzillotti-Buonsanti, La Regia Scuola superiore di medicina veterinaria di Milano: storia e ordinamento, programmi degli insegnamenti, istituti scientifici, Milan, Tipografia Agnelli, 1884; and again Lanzillotti-Buonsanti, La R. Scuola superiore di medicina veterinaria di Milano nel suo primo centennio (1791-1891). Storia documentata pubblicata nell'occasione delle feste pel centenario, Milan, Tipografia Agnelli, 1891. To a much later stage we owe L. Belloni's summary contribution presented in 1966 as Discorso celebrativo del 175° anniversario di fondazione della Scuola oggi Facoltà di medicina veterinaria, in Università degli Studi di Milano, Studium veterinarium mediolanense 175° anniversario, Milan, Cordani, 1969, pp. 2-28. We had to wait until 1992, on the occasion of the bicentenary celebrations of the School, to see the publication of two interconnected monographs dedicated to the history of the School: G. Armocida, B. Cozzi, La medicina degli animali a Milano. I duecento anni di vita della Scuola veterinaria (1791-1991), Milan, Sipiel, 1992; and La Scuola veterinaria di Milano. Due secoli di ordinamenti e statuti (1791-1991), G. MANDELLI, A. LAURIA, B. COZZI (eds.), Milan, Sipiel, 1992; G. BOCK BERTI, Nicola Lanzillotti-Buonsanti, in Dizionario biografico degli italiani, vol. LXIII, Rome, Istituto della Enciclopedia Italiana Giovanni Treccani, 2004, pp. 680-682; S. TWARDZIK, Una clinica per gli animali. La Scuola di medicina veterinaria directed by Nicola Lanzillotti-Buonsanti, in Milano scientifica 1875-1924, vol. I, La rete del grande Politecnico, E. CANADELLI (ed.) Milan, Sironi, 2008, pp. 163-185; S. TWARDZIK, The consequences of the Great War on the School of veterinary medicine of Milan, in The military veterinary services of the fighting nations in World War One, June 18-20, 2018, University of Turin. Proceedings of the Historical Congress, I. ZOCCARATO, P. PEILA, M. P. MARCHISIO (eds.), Fondazione Iniziative Zooprofilattiche e Zootecniche, Brescia, 2018, pp. 173-184; S. TWARDIZIK, La Scuola veterinaria di Milano, 1791-1932: un profilo storico-istituzionale, in S. TWARDZIK, L'Archivio della Regia Scuola superiore di medicina veterinaria di Milano (1807-1934). Inventario, Rome, Edizioni di Storia e Letteratura, 2020, pp. 3-43; and finally the posthumous volume by E. Decleva, Milano città universitaria. Progetti e protagonisti dell'Unità d'Italia alla fondazione dell'Università degli studi, E. SCARPELLINI, I. PIAZZONI (eds.), Rome-Bari, Laterza, 2022, which devotes three chapters to the story of the Milan Veterinary School.

² Antonio Ferdenzi, Giambattista Volpi, Francesco Bollini, and then Luigi Ponti and Giovanni Battista Lucchini. Of these five, Volpi and Lucchini were to become the two teachers of the Veterinary School opened in Milan, in some premises of the Lazzaretto, on 1 February 1791: the matter is well documented in the State Archives of Milan, *Atti di governo, Studi - parte antica*, bundle 464.

this new profession, so as to spread its benefits in the care of horses (and hopefully other farm animals) once they returned to Austrian Lombardy.

This then was the background to the establishment of the first school of veterinary education in Milan. However, due to the turbulent political situation determined by Napoleon's conquest of Italy a few years later (1796), this institute operated only intermittently between the end of the 18th and the beginning of the 19th century and instruction was mostly limited to so-called "minor veterinary medicine", i.e. to the teaching of shoeing, the most basic surgical operations and the treatment of external and common diseases, particularly of the foot.

The transformation of the establishment into a comprehensive veterinary school, organised over a period of three years, later extended to four, was thanks to Pietro Moscati, head of the General Directorate of Public Education of the Napoleonic Kingdom of Italy, and to the reform of the school system in 1805-1808, which gave a new impetus to professional specialisation and the training of technically qualified public officials. Thus it was that in early 1808 courses began in the new and much larger premises of the former convent of Santa Francesca Romana, in a suburb just outside the Porta Orientale. Here the School continued to operate for many years, until 1927, when it was transferred to the newly built "City of Studies" on the eastern outskirts of the city.

When the School reopened in 1808, it was intended for young people mostly between the ages of 17 and 25 who could «read and write well» and also do arithmetic. It complemented other special schools created by Napoleon and was placed within the framework of secondary school education but was distinct from the grammar schools which offered preparatory paths to university faculties. The five professors on the staff (including the director) were responsible for teaching pathology, anatomy, surgery and horse-shoeing (also known as "practice"), chemistry, physics, botany, medicine and pharmacy.

This orientation was maintained during the decades of the Restoration, under the second Habsburg domination (1814-1859), a period which was in any case marked by the introduction of a number of regulations, from the mid-1830s onwards, which significantly differentiated the training courses now offered at the School. Starting in 1835, in fact, a system based on distinct courses of study was introduced, with very different entry requirements. In particular: the two-year course in hippiatrics, admission to which required evidence of attendance at primary school for three years; and the two-year course in zooiatrics (much less well-attended), for admission to which a degree in medicine and surgery was required. Then, from 1844, in the wake of a similar innovation applied at the Veterinary School of Vienna, a course (with admission requirements slightly higher than the course in hippiatrics³) was introduced for municipal veterinarians: these were intended, among other things, to act as a public health officials employed by the local authority, responsible for veterinary inspections of farm animals.

In the meantime, the Milanese establishment continued - as in the years of Napoleonic domination - to serve as a hospital for the treatment of horses, which were received daily in the two clinics, medical and surgical: a function that would continue even after the Unification of Italy (1861) and that could always represent, until the first decade of the 20th century, an important source of self-financing.

It is essential to recall the importance of this School in the context of the various centres for training veterinarians in Italy and the rest of Europe. During the Napoleonic years, the Milanese institute was the only public institute for the preparation of aspirants to this young profession operating in the sizeable and populous territory of the Kingdom of Italy and was the object of the attentions of Viceroy Eugene de Beauharnais himself. Again, during the Restoration, according to the testimony of a contemporary - Giovanni Battista Ercolani - it

³ Indeed, it was necessary to prove that one had successfully completed the third class of a major primary school (scuola elementare maggiore).

was the best known of all the Italian veterinary schools⁴. Indeed, looking at the situation on the peninsula, the Milan School, with a catchment area that encompassed the whole of the Lombardo-Venetian Kingdom and the South Tyrol (but also attracting students from other parts of Italy), was one of the few comprehensive veterinary schools which functioned continuously throughout the first half of the 19th century: truly comprehensive schools were in fact only to be found in Turin (predominantly a school for army veterinary officers), Modena, Bologna and Naples (here from 1848 together with the School of Agriculture)⁵. The number of students enrolled at the Imperial Royal Veterinary School of Milan (the attribute of Imperial came from forming part of the Hapsburg Empire), in the 1850s stayed year after year in the range from 57 to 72.

Starting in the 1880s, after the Unification of Italy, under the forty-year directorship of Nicola Lanzillotti-Buonsanti (which lasted until 1921), the School became known not only as a training institute, but also as a research centre and on several occasions even a centre for the dissemination of scientific knowledge. It was in constant liaison not only with the Ministry of Education, to which it was subordinate, but also with various offices and technical commissions of the Ministry of the Interior (the Directorate General of Health) and the Ministry of Agriculture, Industry and Commerce. All this took place in parallel with the progressive rapprochement of the Higher Schools of Veterinary Medicine (as the schools in Turin, Milan and Naples were called from 1861) to the didactic and administrative system of the universities, both in relation to the duration of study (unified and reduced to four years), and above all in relation to the requirements for admission, which slowly came (in 1908) to conform to those necessary for enrolment at university.

THE SCHOOL ARCHIVE AND SOURCES RELATING TO STUDENTS AND GRADUATES

University archives, traditionally created and managed as memory-documentation supporting administrative action and decision-making purposes rather than teaching and research, have in recent years also become historical sources and means of transmitting the identity of the university. Starting in the final decade of the last century, new attention towards these archives has developed in Italian academia, coinciding with a renewed season of studies on the history of universities and higher education institutions, particularly of the 19th and 20th centuries.

⁴ G. B. Ercolani, *Ricerche storico-analitiche sugli scrittori di veterinaria*, Turin, Tipografia Franco e figli, 1854, vol. II, p. 133.

⁵ As for the other veterinary training establishments: in Parma and Pisa, until the Unification, the respective schools alternated periods of activity with long periods of closure. In the Papal States - apart from Bologna only the "low-level veterinary" schools of Camerino, Macerata, Urbino and Perugia were active, as well as the municipal school of Ferrara, which was however only intermittently active. For these aspects S. Paltrinieri, La medicina veterinaria in Italia dal XVIII al XX secolo (dalla fondazione delle Scuole alle oggi Facoltà universitarie), Milan-Varese, Cisalpino, 1947 is still useful.

⁶ Royal Decree no. 770 of 29 November 1908, later amended by Royal Decree no. 1256 of 17 November 1912, restricted access to the Royal Schools of Veterinary Medicine to graduates of grammar schools and technical institutes (for the latter: of the physics-mathematics classes and the agriculture and surveying classes), while the previous regulations (Royal Decree no. 2433 of 7 March 1875) allowed the enrolment of those who had been admitted to the third year of a grammar school course or had successfully completed the first three years of a technical institute.

⁷ See the considerations expressed by A. Giorgi, L. Mineo, *Archivi per la storia dell'Alma Mater Studiorum: un centro memoriale per l'Università di Bologna*, Annali di storia delle università italiane, 1, 155-161, 2021.

This increased attention has in many cases maintained the connection between historical research and the valorisation of archival fonds. Historiographical reflection has therefore often been accompanied by extensive reviews of sources or by specific projects for the reorganisation and reordering of university historical archives; to this numerous articles and explanatory guides published in the journal "Annali di storia delle università italiane" bear witness

The task of reordering the substantial archive of the Milan Veterinary School is set in this scenario. The institutional robustness of the School, which we have briefly outlined above, is in fact reflected in its archive, which - unlike the archives of other Italian schools of late 18th or 19th century origin - has come down to us with almost unbroken continuity since the School's re-foundation in 1807-1808, although we must regret the loss of a substantial part of the correspondence from the first thirty years of the 20th century.

The archive, after a long process of reorganisation, has been fully accessible to scholars for several years and now has an inventory which describes it in its entirety⁹. Definable as an aggregate archive of the larger Historical Archive of the University of Milan, the fonds currently consist in 248 conservation units, between folders (201), registers (35), volumes and albums (12), and take up approximately 31 metres of shelf-space. The largest part is housed in the Library of Veterinary Medicine of the University of Milan, in Lodi, at the Faculty of Veterinary Medicine, heir to the former School, and a small part is housed at the Apice Centre of the University, in Milan, in via Celoria 2¹⁰.

The reorganisation of the papers had, among its beneficial effects, the not insignificant one of allowing a resumption of studies on this institution and events related to it, based on primary sources¹¹.

From the archive that has now been reordered there emerges the importance and density of information in a variety of documents, from which, if compared and examined as a whole, it is possible to obtain a reliable and continuous list over time of the names of the students who graduated as veterinarians in Milan over the 125 years of the School's effective operation, until its integration, at the end of 1932, in the Royal University of Milan (now the University of Milan), as the Faculty of Veterinary Medicine.

The sources in question are:

- 1) a register of veterinarians licensed at the School, covering the period 1812-1851 (in 1812 the first veterinary licences "patenti" were issued at the end of the first four-year course; see Figs. 1 and 2);
- 2) a student enrolment register, compiled systematically from 1866 to 1869;

⁸ The loss of almost all protocol registers and a - fortunately minor - part of the 19th century correspondence must also be reported.

⁹ S. TWARDZIK, *L'archivio della Regia Scuola superiore di medicina veterinaria di Milano (1807-1934). Inventario*, Rome, Edizioni di storia e letteratura, 2020.

¹⁰ The Centro Apice also preserves the other fonds of the Historical Archives of the University of Milan

¹¹ Among the recent studies that have benefited from the reorganisation and inventorying of the archive, in addition to the most recent ones mentioned in footnote 1, we would like to mention those by the young German scholar Daniela Haarmann, who aimed to create a complete history of the School of Veterinary Medicine in Vienna during the 19th century, but whose work was unfortunately not concluded with a publication; and the research by C. Rinaldi, M. Amari and S. C. Modina whose results were published in the essay *Eventi e cambiamenti nelle Scuole veterinarie italiane durante il periodo napoleonico (1796-1814)*, in I. Zoccarato (ed.) *Atti del II Convegno nazionale, dell'Associazione Italiana Storia della Medicina Veterinaria e della Mascalcia*, Roma, 24-25 settembre 2021, Fondazione Iniziative Zooprofilattiche e Zootecniche, Brescia, 116, 9-34, 2022. Also by the same authors is the contribution, included in this volume, *The amazing story of Satyr: from impotent stallion to "Napoleon's Horse"*.

- eight registers with the minutes of graduation examinations, covering the period 1888-1933;
- 4) a register-list of veterinary graduates from 1892 to 1927;
- 5) ten registers of students' academic records, covering the period 1886-1934 (the first of the registers in this series, which most probably covered the period 1872-1885, has unfortunately been lost); of course, in this case as with source 2) the list is longer than that of graduates, since all those who enrolled at the School are recorded, including those who later dropped out or transferred to another school;
- 6) three folders containing the "scholars' catalogues" for the period 1842/43 1856/57 (with some gaps), i.e. the lists of students for each course compiled by the respective teachers: they contain for each pupil the patronymic and the professional status of the father, information not present in the register mentioned in point 1;
- 7) six folders containing the "disease histories" of hospitalised animals compiled by students, which have come down to us for the period 1835/36 1859/60, with some gaps;
- 8) Forty-nine folders containing the personal files of students between 1877 and 1934, albeit with considerable losses: in the case of students who graduated (the majority) they often contain their final dissertation.
- 9) several dossiers of the School Management's Annual Correspondence, from which the lists of young people who passed the "grade" examination (later the degree examination) can be obtained year by year, whenever they exist: these documents can fill the gaps in the official registers for the periods 1852-1865 and 1870-1885¹².

On the basis of these documents, with supplementary biographical information for the period 1812-1890 from a very useful slim volume, Gli allievi diplomati nel primo centennio della R. Scuola superiore di medicina veterinaria di Milano (The graduates in the first one hundred years of the Royal Superior School of Veterinary Medicine of Milan) published in 1891¹³, we came up with the idea of creating a sort of computerised register of the graduates of the Milan School, i.e. of creating a database to be published on the web, which would aim to become a useful tool for future research, but also a point of reference for those who simply want to satisfy their need for information on an ancestor or on a particular person, within that population represented by the more than 1,800 young people who in the course of the nineteenth and the first thirty years of the twentieth century obtained the qualification of veterinarian at the Milan School, in its specific denominations corresponding to training courses at different levels - farrier, town veterinary surgeon, zooiatrist (between the 1830s and 1850s) - or corresponding to the development of the discipline and the change in its identity during the nineteenth century; veterinary surgeon and then veterinary doctor. The task of processing the sources to create the database is made easier in our case by their serial nature. In fact, although the documents in question are of partially different quality and nature, the elements recorded in the documents are almost always the same and are repeated over time in a systematic manner with the use of the same terminology: these are therefore types of sources that are particularly suited to information technology (IT) processing.

In this regard, it should be noted that in the last 15 to 20 years, starting with the indispensable and meritorious creation of tools for the reorganisation and the utilisation of

¹² In fact, a careful observation of the list of register series indicated in points 1) to 5) already reveals the gaps in the temporal sequence of these sources, which are unable to document accurately the sequence of those who were licensed or who graduated at the School for the periods indicated.

¹³ Gli allievi diplomati nel primo centennio della R. Scuola superiore di medicina veterinaria di Milano (1791-1891), Società Medico-Veterinaria Lombarda (ed.), Milan, Agnelli, 1891.

archives (inventories), only occasionally have specific projects been developed and completed to create historical registers of students and graduates.

If we look at the situation in Italy, with regard to the span of time from the beginning of the 19th century to the middle or end of the 20th century (which we can label as the contemporary age), i.e. the period in which our project is set, we can see that there are few universities which have carried out initiatives comparable to ours. These include the University of Bologna, which has set up an on-line database of all the dossiers of students enrolled at that university from 1860 to 1930; however, the Bologna database is set up differently from ours: on the one hand, the starting point is more recent and the data collected is of smaller dimensions, and on the other, the target audience is much larger, as all faculties are surveyed, and all enrolled students are included and not solely graduates¹⁴. We can then point to the University of Cagliari project recently published on the web: a case quite similar to that of Bologna (albeit implemented with a more powerful application), with the difference that here the reference population includes not only students, but also lecturers¹⁵.

DATA COLLECTION AND THE CREATION OF A COMPUTERISED REGISTRY OF GRADUATES

The project has now been launched thanks to funding from the University of Milan, chiefly from the Department of Veterinary Medicine and Animal Sciences, with the assistance of the Department of Historical Studies. The filing, the foundation of which was laid down during the summer of 2022, is being progressively extended through the careful collection and systematic organisation of information obtained from the various documents available, supplemented - for the first eighty years of the period covered by our investigation (1812-1890) - by the information contained in the volume published in 1891. Dr Saverio Almini took part in the data collection work, contributing to the success of the project as an external collaborator.

For the extended period of time covered by this historical registry - from 1812 to 1933¹⁶ - we intend to provide a series of data for each graduate, progressively entered in a grid on an Excel spreadsheet: the surname, the first name, the patronymic and the professional status of the father (when possible); the date of birth; the place of origin; the educational qualification possessed at the time of enrolment (when obtainable from the documents); the date of the licence and later of the degree; the title of the "disease history" completed for the final exam, which subsequently becomes the title of the thesis submitted; in addition, whenever possible, we will include for each graduate a brief mention of the career path followed after graduation¹⁷.

¹⁴ The database in question (developed as an ideal continuation of the ASFE project concerning students who attended the University of Bologna between 1500 and 1800) contains over 57.000 records and can be queried by surname, name, place of origin, date of graduation examination, title of thesis, date of last attendance at the University (in the case of non-graduated students); when querying the database, it is possible to apply a filter limiting the search to only the files of students from the School of Veterinary Medicine of the University: see https://archiviostorico.unibo.it/it/patrimonio-documentario/fascicolo-studenti.

¹⁵ The project was realised by the Historical Archives of the University of Cagliari: see https://archiviostorico.unica.it/persone. In addition to the Universities of Bologna and Cagliari, other universities which are developing historical registers of students and graduates for the 19th and 20th centuries which are already available on the Internet are the University of Turin and the University of Padua.

¹⁶ On 17 July 1933, the last graduates to be awarded a diploma issued by the Regio Istituto Superiore di Medicina Veterinaria of Milan were recorded in the respective register of minutes of graduation examinations (archive of the Royal Superior School of Veterinary Medicine of Milan, register 220), while subsequent diplomas were issued by the Faculty of Veterinary Medicine of the Regia Università di Milano (Royal University of Milan).

¹⁷ The book Gli allievi diplomati nel primo centennio della R. Scuola in fact very often contains biographical

These various pieces of information all seem to us to be useful as a basis for multiple paths of research: for example, data on the place of origin will serve to compare, also in a diachronic perspective, the different geographical origins of the students and the School's ability to attract them; information on the father's professional status and on the young person's career path after graduation will facilitate a better understanding of the social history of this professional class; the survey of the date of enrolment and the date of graduation compared with the date of birth will make it possible to observe the fluctuations over time of the average age at enrolment and on obtaining the professional qualification¹⁸.

One certainly significant datum for a deeper understanding of the history of veterinary medicine, of its establishing itself as a scientific discipline, will be the survey of the titles of thesis topics, as they change with the passage of time. We believe that it is interesting, in particular, to observe the changes in the titles of the work carried out by students under the guidance of their teachers between the 1840s and 1850s (the period of the "disease histories") and the subsequent 1880s and 1890s (the dissertations, an evolution of the previous "histories"): this was a very important thirty-year period for the transformations this branch of knowledge underwent, which accentuated its profile as "animal medicine" in the 1870s-1880s, precisely at the same time as the advances in pathology, physiology, histology and the use of the microscope which affected human medicine. Moreover, in spite of the persistent low social status which dogged the profession of veterinarian¹⁹, in the field of research the relations between human and animal medicine were continuous and assiduous.

Suffice it to recall that Giulio Bizzozero, one of the major protagonists of the advancement of medical studies in the second half of the nineteenth century, in 1884 discussed the new organisation to be given to the Milan Veterinary School with Lanzillotti-Buonsanti²⁰. Likewise, in a later period, the great bacteriologist Serafino Belfanti, director of the Serum Therapy Institute in Milan since its foundation in 1895, was a "libero docente" (assistant lecturer) in bacteriology at the School²¹; and the hygienist Camillo Terni, who in 1912 was to become co-director (together with Pietro Stazzi) of the Experimental Station for infectious livestock diseases in Milan and then from 1926 director of the Serum Therapy Institute in Naples, had two degrees, the first in medicine and surgery and the second in veterinary medicine, this latter obtained at the Milan School²².

Once the filing is completed (not before September 2023), the corresponding Excel spreadsheet will be exported to a special database on the WordPress platform, in preparation

notes for each veterinarian with a licence or diploma, with information about their professional career after graduation: this information, which the editors of the volume probably gathered between 1890 and 1891 thanks to the direct testimony of veterinarians still alive or from their relatives, must be supplemented and verified with data taken from the School's official documents.

¹⁸ It should be remembered that until 1926, when the State examination qualifying the practice of the profession was introduced, the "diploma" (degree certificate, previously a licence, "patente") was both a qualification and a license to practise the profession. In addition, going back in time, we must remember that until 1874, with the exception of employment in the public sector, it was also possible to exercise the profession of veterinarian without a diploma, but with special authorisation from the prefect on condition of demonstrating "at least ten years' practice".

¹⁹ On this aspect, see A. LONNI, *I professionisti della salute. Monopolio professionale e nascita dell'Ordine dei medici (XIX e XX secolo)*, Milan, Franco Angeli, 1994.

²⁰ Archive of the R. Superior School of Veterinary Medicine of Milan, bundle 106, file 227. We must also remember the case of Edoardo Perroncito, veterinary surgeon and lecturer at the Turin School, who in 1880 discovered the pathogenic agent of so-called miners' anaemia; and the experiments with the so-called Pasteur vaccine against anthrax conducted in 1882-1883 on horses at the Milan Veterinary School, of which we have evidence in the School's archives: bundle 96, file 158.

²¹ Archive of the R. Superior School of Veterinary Medicine of Milan, bundle 121, file 31.

²² In fact, the School's archive preserves his student file: bundle 185, file 6316.

for its subsequent release on the web. The decision to use the simple Excel program as a container for the data, instead of a true relational database, thus delegating to a special WordPress plug-in the phase of realising the database, depended on a number of considerations: the Excel sheet is certainly a rudimentary tool, but it allows a speed of data insertion and modification that other, more sophisticated programs cannot achieve; it is certainly adequate for the management of a not excessive number of records²³; moreover, it is substantially free and its very wide diffusion makes up for its being a proprietary format; last but not least, the structure of the Excel data, if entered in a uniform (and orthographically correct) manner, is easily and rapidly exportable to other applications, and so also to a WordPress database plug-in. The database will therefore consist of a specific module which extends the application functionality of the WordPress content management system: as the most widespread open source platform for the creation of websites, WordPress has the undoubted advantage of allowing the updating and insertion of new content independently by the staff of the commissioning body, once the configuration of the site by a web designer has been completed.

THE PUBLICATION OF THE DATABASE AND FUTURE IN-DEPTH STUDIES

Simultaneously with the creation of the database, using the same WordPress platform, a website will be designed, which we would like to publish - using a domain of the University of Milan - in the spring of 2024. From the site it will be possible to browse and query the information in the underlying database using search filters. In the online view, this will present itself to the user in tabular form, with the complete list of graduates present in the database; by selecting an individual name, it will be possible to view a detailed sheet containing all the data available relating to the selected name.

The website will therefore focus on the publication of the database. However, it will also contain other sections, in which will be made available research into the social history of the profession and its contribution to the economic development of Italy, and in particular of Lombardy, which owed a great deal to relations with Northern Europe. The history and evolution of the Milan School will thus be placed in a European dimension. The activities of the School and the investigation into the various areas in which the graduates trained here found employment, will thus make it possible to better illustrate the nature and characteristics of the veterinary profession in its relations with the military, with local institutions and elites, with city services, and with the business community in urban centres and in the local area.

For example, studies and documents will be collected on the contribution of veterinarians to the health and hygiene controls exercised at municipal level, which were intensified in the course of the century, and which, also making use of the development of veterinary medicine (and of legal veterinary medicine), aimed at ascertaining both the healthiness of livestock brought to market and the wholesomeness of meat destined for slaughter, sale and processing. This process went hand in hand with the introduction of laws and regulations which affected many services and sectors of urban life.

For centuries, Milan had been one of the most important livestock trading centres. Fraud and poor hygiene conditions in the numerous private slaughterhouses led the City Council, in 1860, to decide to concentrate them in a single establishment, which was built in 1863 at the expense of the joint stock company which brought together the city's butchers. But already

²³ In the case in point, this is about 1,850 records, corresponding to the number of licensees/graduates of the School. If we had had to manage much higher numbers (as for the database of the University of Bologna), the choice of Excel would probably not have been appropriate.

in 1856 Lorenzo Corvini, who was working with the Veterinary School (and a few years later would be appointed professor there), had been advocating its creation²⁴. In 1875, the Slaughterhouse was joined by the Livestock Market and in 1896 by the Livestock Yard. The service was brought under municipal control in 1906, coinciding with a rapidly growing trade which saw the number of animals slaughtered rise from 170,595 in 1904 to 240,352 in 1913²⁵. This was in response to the increase in the urban population and in urban meat consumption, which rose from 50 kg per capita per year in the period from 1875 to 1889, to 75 kg in 1904, and up to an estimated 80 kg in 1914, against a much lower average for Italy of 21 kg in 1904, at a time when consumption was estimated at 38 kg for France and 43 kg for England.

The city of Milan was becoming the most important economic and financial centre of the peninsula. Between the 19th and 20th century, Lombardy played a leading role in Italian economic development, passing from an economy based on agriculture and trade to an increasingly industrial economy. However, this was a gradual transition which accelerated from the 1880s, and especially between 1896 and 1914. In this process, industry did not develop to the detriment of the region's agricultural system, which, in the Po valley, was one of the most advanced in Italy and Europe. In fact, the primary sector, traditionally strongly market-oriented and a source of important income before the unification of Italy, continued to make a decisive contribution to regional growth afterwards²⁶.

In particular, agriculture in Lombardy, a source of wheat, maize and rice - as well as precious silk - was at the centre of a rich production of milk and dairy products (butter, cheese such as Grana Padano and Gorgonzola), the export of which grew during the century, and which was complemented by the processing of meat from pigs increasingly reared by large cheese-making concerns, where they were fed with whey, the waste from the process of turning milk into cheese. Cow milk production and meat-processing businesses were present in the various provinces of Lombardy. After 1870, in a context of strong growth in the production and consumption of dairy products at domestic and international level, the Lombardy dairy industry witnessed more rapid development and improvement, combining process modernisation with product diversification. Progress intensified considerably from the 1880s until the First World War, with particular acceleration from the mid-1890s. In the second half of the 19th century, Lombardy thus established itself as the area of greatest production in Italy and in the 1890s it accounted for almost one third of all Italian cheese production and export²⁷.

As regards cured meat, numerous establishments had sprung up for preserving and processing pork. The local market had long been supplied by pork butchers who slaughtered

²⁴ L. CORVINI, *Igiene pubblica considerata nell'uso alimentare delle carni. Difetti che in essa tuttora sussistono proposte di mezzi tendenti a migliorarla. Memoria*, Milan, Tipografia Giuseppe Redaelli, 1856. Corvini was a Milanese physician and veterinarian, first assistant and then professor at the Veterinary School and its director from 1875 to 1880; he was also a member of the Milan Board of Health. See also, by the same author: *La R. Scuola superiore di medicina veterinaria di Milano: Considerazioni intorno alla speciale importanza di questa scuola, alla benefica influenza che esercita sulle industrie agricole della Lombardia, ed alle annessioni e tributi che varrebbero ad accrescerne i vantaggi: memoria, Milan, Tipografia Bernardoni, 1865.*

²⁵ G. D'Amia, Il Macello di Porta Vittoria: un'attrezzatura urbana nella Milano del primo Novecento. Territorio, 74 (3): 173-181, 2015.

 $^{^{26}}$ See Leading the Economic Risorgimento. Lombardy in the 19^{th} Century, S. A. Conca Messina (ed.), London, Routledge, 2021.

²⁷ For information on breeding and dairy farming in Lombardy, see S. A. Conca Messina, *La produzione casearia in Lombardia: prodotti, mercati, imprese nell'Ottocento* and the bibliography contained there in *Le vie del cibo: Italia settentrionale* (secc. 16.-20.) M. Cavallera, S. A. Conca Messina, B. A. Raviola (Eds.), Carocci, Rome, 2019, pp. 301-324.

a few pigs a week and produced cold meats or sausages to sell in their shops. But when demand from abroad was added to growing local demand, mechanised factories sprang up. In the province of Milan there were 47 of these around 1900, working more for export than for the local market: Milanese salami was already famous abroad. The processing of pork products (salami, cotechino, ham hock) was also particularly widespread in the provinces of Mantua and Cremona²⁸.

As a result, the region had one of the highest densities of livestock in Italy and Europe. and grazing land and the number of livestock were constantly increasing. While pigs were increasingly reared on a large scale, in 1867 the area was one of the richest in Europe in rearing horses and cattle, according to one School brochure²⁹. It can thus be understood how the School in Milan was able to examine, from 1857 to 1867, an average of 2,200 animals per year, 1,200 of which by means of a travelling clinic³⁰. For dairy cows it was calculated that in 1854 there were about 246,000 in Lombardy, with a concentration in the provinces of Como (more than 50,000), Bergamo (44,700 approx.), Milan (43,000 approx.), followed by Lodi-Crema (27,200 approx.) and Pavia (26,700 approx.). In these decades, Lombardy aimed at a further extension of the area under fodder crops (which increased by almost 60% from the 1870s to the end of the century) and an increase in the productivity of the land, which was accompanied by an intensification of livestock breeding: from 1854 to the mid-1870s, the number of dairy cows in the region rose from 246,000 to almost 350,000, increasing to 464,200 in 1881 and 675,000 in 1908. At the same time, just as breed selection was being refined, an increasing number of cattle better suited for animal husbandry and milk production were imported from Switzerland.

Accordingly, the livestock in the countryside, cattle and pigs, but also draught and work horses, was from the very beginning the object of particular attention from the public authorities and the School: while recurrent epizootic diseases could cause the death of hundreds of animals and serious economic damage, the advancement of knowledge and the practical applications of zoology, zootechnics, and veterinary hygiene assumed considerable importance for the economy of the region. It will thus be of great interest to verify the contribution of veterinary medicine and the graduates of the School in this area too, and to collect documents, studies and works on the dedicated website.

In conclusion, we believe that the *Register of Graduates of the School of Veterinary Medicine of Milan (1812-1933)* will contribute to the advancement of our knowledge of the birth and consolidation of the veterinary profession, and consequently of the history of one the main training centres and of the history of this discipline, during a period crucial for the development of the life sciences as was the second half of the 19th century and the first decade of the 20th century. At the same time, the research will contribute to enriching our knowledge of the economic and social development of the region, and of the contribution made to it by veterinary medicine and the Veterinary School of Milan.

²⁸ In the case in point, this is about 1,850 records, corresponding to the number of licensees/graduates of the School. If we had had to manage much higher numbers (as for the database of the University of Bologna), the choice of Excel would probably not have been appropriate. Although competing with the more famous cured meats from Modena and Bologna.

²⁹ Regia Scuola Superiore di Medicina Veterinaria di Milano, *Cenni storico-statistici riguardanti la Regia Scuola Superiore di Medicina Veterinaria di Milano*, Milano, Tipografia Albertari Francesco, 1867.

³⁰ *Ibidem*, p. 10.

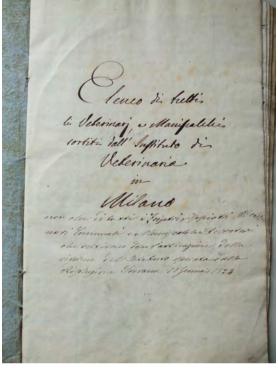


Fig. 1 - The register of veterinarians licensed at the Milan School-1812-1851

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Fig. 2 - The register of veterinarians licensed at the Milan School-1812-1851: some of internal pages