

THE CREATORS OF THE VETERINARY SCHOOL IN FERRARA: TWO MEMBERS OF THE CAMPANA FAMILY

OSNIVAČI VETERINARSKÉ ŠKOLE U FERRARI: DVA ČLANA OBITELJI CAMPANA

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SUMMARY

In the second half of the 18th century, a new awareness in education started to rise, placing greater importance on veterinary science. We are talking about a hundred years of history. Antonio Campana and Tommaso Bonaccioli, grandsons of Barbara Campana, were the creators of the Veterinary School of Ferrara in their own right. Among the teachers, we especially remember the first, Luigi Le Roy of the Lyon school. This Veterinary School, founded in 1762, was the place to train teachers for the upcoming schools around Europe. Antonio Campana was an eclectic scientist who also stood out in this discipline. Tommaso Bonaccioli, who studied at the School of Milan during the Napoleonic era, was highly regarded among foreign researchers for being a pioneer in this field. This can be proven by numerous publications and lectures at the Academy of Sciences in Ferrara, where he also served as president. His collaborators were able to keep the highest standards by continuing the founder's work. Unfortunately, despite the appreciation of the students, the Veterinary School of Ferrara was closed in 1880 due to a lack of funding. The search for unpublished original documentation was conducted in the Historical Archives (Municipal, Ariostea Municipal Library, Academy of Sciences and University of Ferrara).

Keywords: Antonio Campana, Tommaso Bonaccioli, Veterinary School, Ferrara

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INTRODUCTION AND CONTEXT

Filippo Maria Deliries, in his eulogy for Antonio Campana, describes the birth of the Veterinary School in Ferrara by focusing on the two scientists who were its creators (Deliries, 1833, pp. 10-11). On Campana's advice, Cardinal Carafa founded a Veterinary School in Ferrara in 1785.

Following the suspension of the school because of political changes, several young people were sent to Milan to study veterinary medicine. Among these, in addition to Giovanni Monti-Sansilvestri and Domenico Armari, we can also find Tommaso Bonaccioli, a young relative of Campana, who established a new course of Veterinary Medicine in Ferrara in 1814 and then in 1820.

Campana, a multitasking scientist, addressed aspects related to animal care, such as epizootic fevers—a contagious fever affecting oxen that originated in Hungary in 1798. On the advice of *zojatro Leroij* and *professor Remondini*, he proposed the killing of all sick and suspected oxen, successfully stemming the epidemic. The same was done in 1814.

Thus, we see as the creators of the Veterinary School in Ferrara: Antonio Campana, attentive to the care of the earth (as a professor of Agriculture) and of animals, and a young “relative”, Tommaso Bonaccioli, endowed with genius, aptitude, and a natural inclination towards these studies. Campana was the institution's first promoter in 1785, while Bonaccioli, educated at the School of Milan, would lead the School in Ferrara for decades, remaining scientifically active even after his retirement.

Veterinary Medicine in Italy and Europe

Veterinary Medicine started to be taught academically by Claude Bourgelat in Lyon (1762), and afterwards, the School of Paris/Alfort (1765) was established. Everyone in Europe was admiring France for these pioneering efforts. The main goal for many foreigners was to study there, so they could bring back their knowledge to their native countries and establish new schools. One such school was founded in Vienna in 1767. In 1769, King Carlo Emanuele III of Sardinia opened a school at the Castle of Venaria Reale (Galloni, 2014, p. 8). In England, the Veterinary College of London was established in 1791, whereas the Royal Veterinary College of Edinburgh was founded in 1818 (Benassi, 2010, p. 40).

The teaching of Veterinary Medicine, which was already present in France, emerged on the Italian scene in the second half of the eighteenth century, initially as professorships, with courses often taught by the same professor, and later also offered in schools. In the eighteenth and nineteenth centuries, veterinary medi-

cine universities were: Padua (1765/1773), Turin (1769), Bologna (1783), Milan (1791), Modena (1791), Naples (1798), Rome (1806), Parma (1814), Pisa (1818), and Camerino, Perugia, Macerata, Urbino in 1826 (Table 1). Ferrara was the fourth atheneum to introduce veterinary courses, starting in 1785, following Padua, Turin, and Bologna, and it closed in 1880 (Castagnaro & Cozzi, 2014, p. 17).

Table 1. Teaching of Veterinary Medicine in the Eighteenth and Nineteenth Centuries.

18 th century		19 th century	
Year	City	Year	City
1762	<i>Lyon</i>	1806	Roma
1765	<i>Paris/Alfort</i>	1814	Parma
1767	<i>Vienna</i>	1818	Pisa
1765 [1773]	Padua	1818	<i>Edinburgh</i>
1769	Turin	1826	Camerino
1783	Bologna	1826	Perugia
1785	Ferrara	1826	Macerata
1791	<i>London</i>	1826	Urbino
1791	Milano		
1791	Modena		
1798	Napoli		

The schools gradually began to be divided into High and Low Veterinary, the first with a prevalence of medical practice and the second with a prevalence of *mascalcia* (farriery).

According to various States, the minimum entry requirements to access Lower Veterinary could simply be a lower literacy level. High Veterinary could even be considered as a specialisation of the degree in Medicine. (Milan/Pavia 1834–1837) (Castagnaro & Cozzi, 2014).

The subjects, apart from the specific topics, were closely aligned with those taught to students of Medicine and Pharmacy. Education in Pharmacy and Veterinary Medicine would easily allow access to the profession.

THE ESTABLISHMENT OF THE VETERINARY SCHOOL IN FERRARA IN 1785

A high and low veterinary school was established in Ferrara in 1768 under the papal government, but it did not begin operations until 1785. Teacher Luigi Le Roy was engaged at the School of Lyon since its inception.



Figure 1. *Notificazione*, 30 July 1785, Municipal Historical Archive of Ferrara.

A notification dated 30 July 1785 (*Ferrara Dalla Residenza dell'Ilmo Magistrato, Antonio Frizzi, Segretario*) reads as follows (Figure 1): “By the Decree of Cardinal Francesco Carafa dated 26 June 1785, the office of Public Veterinarian was established, and the city Magistrate was given instructions to elect the Professor who would hold that position.”

By order of Count Stefano Graziadei, Judge *de'Savj*, and the *Savj* of the city *Magistrato*, the requirements for holding the position of public veterinary surgeon were declared, including the stipulation that an annual salary should amount to 150 *scudi*.

The minimum requirements for candidates were: completion of anatomy and veterinary courses at a public university or school (with teacher's name and profit indicated in the curriculum), and at least three years of practical experience in veterinary medicine. Only candidates under the age of thirty were accepted. The selection process was based on qualifications and exams.

In the event that a foreigner (*Estero*) won the competition, the candidate would still have to be examined by the "Illustrissimo Magistrato". The examination consisted of at least two practical questions.

City residency was mandatory. Lessons were held both at home and in a public place, accompanied by a practical part. The appointment was for a term of three years and was renewable. Applications had to be presented by the month of October 1785 (ASCFe a).

Luigi Le Roy was ultimately assigned the position of public veterinary surgeon. The "*Fascicolo a*") of *Busta 70* reports that the period during which he was active in Ferrara was between 1785 and 1804. He was assigned a residence on *Strada San Francesco* (ASCFe b).

Luigi Le Roy (1760–1820) was an anatomist and veterinary historian, and a former adjunct professor at the School of Lyon. He first taught in Ferrara, and from 1807 onward, in Modena and Milan (Paltrinieri, 1947).

TOMMASO BONACCIOLI

Biographical Notes – Education

After Luigi Le Roy, who played a vital role in the veterinary field, another very talented young man, Tommaso Bonaccioli, appeared on the Ferrara scene.

He was born in Melara on 31 October 1790 and died in Ferrara on 31 January 1865 (Cerioli, 2018, p. 84).

Elena Raimondi (1750–1814), his mother, was the daughter of Barbara Campana, as shown by the certificate issued by Archpriest G. Ferrarese on 21 June 1855. Lodovico Raimondi *da Cremona* and Barbara Campana had two children: Elena, who was born on 21 June 1750, married Luigi Bonaccioli on 21 January 1771 (Archivio Centro Servizi alla Persona, Congregazione di Carità, Protocollo (1862–1927), categoria IX, classe 3, f. 11).

Governor of Melara (1740–1804), his father, belonged to an ancient Ferrarese family. In 1797, he returned to Ferrara as a person in charge of compiling the registers of births and marriages for that year (Cerioli, 2018, p. 66).

Francesco Bonaccioli (1780–1855), a wealthy lawyer, elderly and infirm, managed to maintain only a relationship with his brother Tommaso, who took care of him (Cerioli, 2018, p. 84).

The controversial inheritance (one million Roman scudi, valued at approximately 120 billion old lire in 1998) did not go to Tommaso, but to the foundation of the *Opera Pia Bonaccioli* instead (Cerioli, 2018, p. 90).

Antonio Campana used to esteem the young Tommaso highly, as he showed a particular interest in veterinary medicine.

The course of study and training underwent substantial changes during those years.

One of the first reforms authorised by Napoleon after the establishment of the Kingdom of Italy was that of a Milanese veterinary school, which was, in fact, organised on the model of the French ones.

A decree dated 25 May 1807, established that the new order was to apply from the beginning of the following year and that the number of pupils to be admitted was regulated on a territorial basis: one for each department of Lombardy, plus one for each of the large cities (Milan, Bologna, Ferrara, Brescia, Mantua, Verona, and Padua), plus four designated by the Ministry of War.

Among the first professors appointed by the aforementioned decree of 25 May 1807, Luigi Le Roy was a former French teacher in Lyon, Ferrara, and Modena, and a professor of Anatomy (Mandelli, 2010, p. 2). Few Ferrara citizens, therefore, could aspire to study veterinary medicine.

Accurate documentation (ASCFc c) describes Tommaso Bonaccioli's admission to veterinary studies in Milan. Ferrara could send any new student supported by the Municipality. The Prefect of the Basso Po Department to the Podestà of Ferrara gave precise instructions for the choice of each student sent to the Royal Veterinary School of Milan.

Tommaso submitted an application to the Podestà, including documentation, civil conduct, morals, and course of study, excluding the baptismal record, which was already in possession of the secretariat.

On 6 November 1810, a commission was formed comprising Antonio Sacchetti (Podestà), Vincenzo Ferrarini, Bartolomeo Maji, Antonio Travagli, Alberto

Cremona, and Francesco Bellani (Savji). Having acknowledged that Domenico Armari had already been sent to Milan, a new position was opened for a vote by secret ballot.

The results were as follows: Francesco Cavriani received 3 NO votes and 3 YES votes and Tommaso Bonaccioli received 0 NO votes and 6 YES votes.

Tommaso, “giovane di ottime speranze”, was introduced to the Director of the Veterinary School of Milan.

On 26 January 1813, his brother Francesco thanked the Podestà for sharing the report from Milan on his brother’s progress.

Busta 70 (Repertorio XIX Secolo, Istruzione Pubblica Universitaria, 19th Century Directory, University Public Education) used to collect documentation related to the establishment of the Veterinary School in 1820 and the teaching staff: Luigi Le Roy (1785–1804), Tommaso Bonaccioli (1815–1855), Giovanni Valdrè (1845–1848), Michelangelo Maffei (1850[56]–1876), Angelo Balboni (1851–1857), Ercole Ferriani (1848–1880), Federico Zuffi (1857–1880), as well as the attendant staff: Pasquale and Francesco Bergonzoni, Ignazio and Ercole Zanca, Giovanni Accorsi, Gaetano Zagatti, and Vincenzo Armò (ASCFe d).

As we can see, Bonaccioli was the key figure in the Ferrara veterinary profession and education.

L. H. J. Hurtrel d’Arboval, in *Dizionario di medicina, chirurgia ed igiene veterinaria*, discusses Le Roy, but also praises Bonaccioli (Hurtrel d’Arboval, 1846, pp. 710, 711) (ASCFe e).

Praise came in 1818 from Sante Carnevali—future professor of the detached chair in Lugo di Romagna at the “Trisi” Institute (1839–1853)—who dedicated a publication to him (Carnevali, 1818).

The Works

Bonaccioli was President of the *Accademia Medico-Chirurgica* di Ferrara during the 1840–1841 academic year.

There are numerous reports of which we find evidence in the Proceedings of the Academy. They cover various diseases, including foot-and-mouth disease, petechial fevers, pleuropneumonia, enteritis, and treatments for oxen, horses, lambs, and dogs, as well as veterinary jurisprudence. There are also reports regarding *Amphistoma conicum*, a parasite, which he found several times in the rumen of the oxen in the province of Ferrara (AMCFe, 1831, pp. 70-79; 1838, pp. 67-69; 1840, pp. 9-20; 1843, pp. 18-21, 56-59, 60; 1844a, pp. 19-21, 60-63; 1844b, pp. 6-11; 1846,

pp. 63-68; 1850, pp. 9-15, 63-66, 70-77; 1853, pp. 5-9, 37-42, 83, 85-89, 102-107, 118-119; 1858, pp. 5-7).

Themes of communication and research gave rise to articles. Other works were retrieved from the Online Public Access Catalogue of the National Library Service (OPAC SBN).

Luigi Borsari, who presided as the Municipal Magistrate of the examining Committee of the Territorial School of Veterinary Medicine in June 1849, along with Professor Francesco Iacchelli, commissioner, invited Tommaso Bonaccioli to write two works dealing with treatments and remedies for various diseases (una che trattasse dei più comuni e principali rimedi [...] una che fosse una istruzione intorno alle malattie).

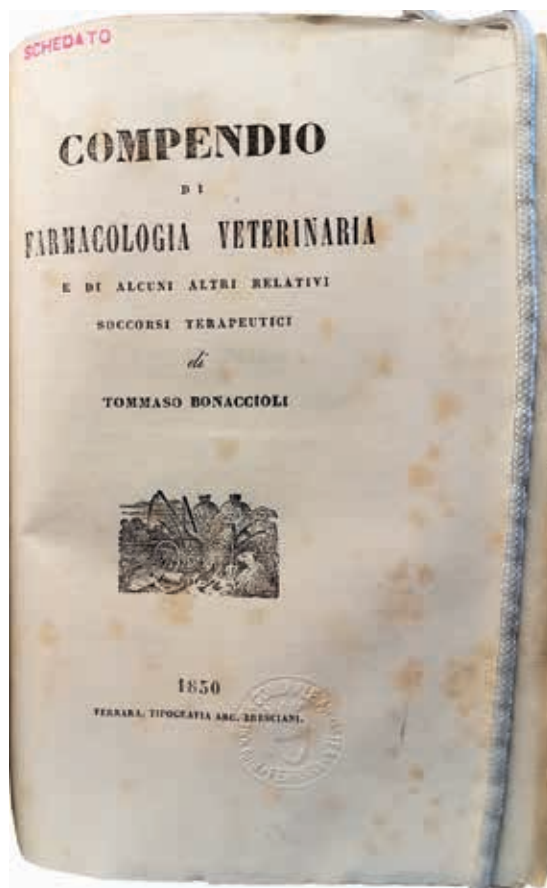


Figure 2. Bonaccioli, T. (1850). *Compendio di farmacologia veterinaria e di alcuni relativi soccorsi terapeutici*. Ariostea Municipal Library of Ferrara.

This proposal was approved and solicited by the Municipal Administration: (*si invitava il Sig. T. Bonaccioli per la più pronta e sollecita esecuzione*) (Recensione, 1851).

In 1850, Bonaccioli published a work, *Compendio di farmacologia veterinaria e di alcuni relativi soccorsi terapeutici* (Bonaccioli, 1850), which was purchased by the Municipality (B. 77, f. 4). The work comprised 136 pages.

In the opening address, *Al lettore*, Bonaccioli refers to the order he received from Municipal President Eugenio Righini, to draw up a manual of animal care remedies, with particular attention to *sostanze indigene* (substitutes). In fact, at the time, research was also aimed at identifying “substitutes” for imported raw materials.

The remedies were classified according to their pharmacological action.

Eccitanti (stimulants): cardiaco-vascolari, ammonia, ammonia subcarbonate, ether; cefalici, opium, morphine; rachidiani or spinali, alcohol, wine, rum; gastro-enterici, cinnamon, cloves, nutmeg, essential oils.

Depressanti o controstimolanti (depressants or counter-stimulants) (to be administered with caution, as they are poisons): walnut vomica, St. Ignatius broad bean, henbane, aconite, belladonna, stramonium, etc. and their extracts and alkaloids, such as strychnine. Most notably, *acqua coobata* (double-distilled water) of cherry laurel and the water of bitter almonds, which contain hydrocyanic acid as their active principle.

Antispasmodici (antispasmodics): valerian, camphor, asafoetida, chloroform.

Narcotici (narcotics): anodines, sleeping remedies more for man than for animals, opium, hemlock, solanae.

Catartici or *Purganti* (cathartic or purgative): aloe, scammonia, rubber gum.

Diuretici (diuretics): digitalis, scilla, colchicum.

Diaphoretici (diaphoretics): antimonials, chamomile, elderberry, sulphur.

Stranutatori (sneezers): euphorbium, tobacco, asaro, ammonia, chlorine.

Salivari (salivation-inducing): mercurials.

Emmenagoghi (emmenagogues): saffron, matricaria; *Ostetrici* (uterine contractions): ergot, rue and sabina.

Antielmintici and *vermifughi* (anthelmintics and vermifuges): pomegranate bark, male fern root, calomel, holy seed, santonin.

Emostatici (hemostatics): spider web, agaric powder.

The author was more focused on the health conditions of the stables and animal shelters. A chapter describes disinfection by mentioning: ventilation, disinfectant fumigation, floor washing (with lye or lime water), scraping, whitening (with lime), washing (with boiling water), fire, and fumigation (with juniper berries, aromatic resins, gum resins, sugar, and vinegar). Fumigation with chlorine (Morveau fumigation), nitric or sulphurous acid, with chlorides or lime, antimony, and ammonia.

Bonacciolì's ideas brought significant innovation to the field of zootechnical hygiene at the end of the nineteenth century. The construction of stables provided animals with hygienic and more comfortable living conditions, including better lighting, fresh air, and improved cleanliness (Brizzi, 2014, p. 110).

The End of the Career

In 1850, Bonacciolì requested retirement (ASCFef) (Council meeting, 28 September 1850). However, he had no choice but to continue the activity (*Letters* dated 25 October 1853 and 5 November 1853). He nevertheless retained the Directorship, with the collaboration of Maffei, Balboni, and Ferriani. The approval of the teaching staff by the Archbishopric of Ferrara dates back to 7 November 1853.

THE POST-UNIFICATION PERIOD

The Governatore Generale of Emilia expanded the courses and increased the salaries of professors at the Universities of Bologna, Modena, and Parma. With his dictatorial decree of 14 February 1860, he declared the University of Ferrara a Libera University, leaving the Municipality responsible for all necessary expenses. This move elevated the importance of this institute to the same level as those in Germany, enabling it to compete with modern government universities.

The Medical-Surgical Faculty included the theoretical courses in Medicine and Surgery, limited only to the first two years; the Schools of Veterinary Medicine and Pharmacy; and a theoretical-practical course in Obstetrics for midwives.

At the schools of Pharmacy and Veterinary Medicine, education concluded at the end of the fourth year, and students were awarded the Diploma of Free Practice, in accordance with Article 96 of the new University Statute (Scelsi, 1875). The first university statute, dated 26 September 1861, was replaced by another approved by the Ministry of Public Education on 11 October 1872. The Director of the Veterinary School had a deliberative vote, just like the deans of the faculties.

The Order of Studies – The Teaching Staff

The organisation of Studies was outlined by Rector Cugusi-Persi in a Report from 1873, as shown in Figure 3 (Cugusi-Persi, 1873).

Figure 3. Veterinary Study plan, University of Ferrara. Cugusi-Persi, E. (1873).

Per il Corso di Veterinaria			
<i>Anno primo</i>	Botanica Chimica organica Chimica Inorganica Zootomia comparata	<i>Anno terzo</i>	Patologia generale Patologia speciale Esterna conformazione Ferratura teor. prat. Materia medica Chirurgia teor. prat.
<i>Anno secondo</i>	Istologia Zoofisiologia Zootomia comparata Zoologia Anatomia umana	<i>Anno quarto</i>	Giurisprudenza Vet. Igiene Chirurgia teor. prat. Clinica veterinaria Ostetricia

Cugusi-Persi stated: “Experimental schools and schools for observation had all the necessary establishments; each one had its own Gabinetto or Laboratorio, equipped with scientific furnishings to be able to serve [...] (both for the practical exercises of the students and for the experiences in the lessons). Veterinary clinics directed by eminent professors could contain a large number of patients. The place had to be in the required hygienic condition.” (Palazzo delle Martiri: Gugusi-Persi, 1873, p. 33).

Based on the Report by Cugusi-Persi in 1873 (Cugusi-Persi, 1873) and the *Annuari della Pubblica Istruzione* for the years 1867–1868 (*Annuario*, 1868), 1868–1869 (*Annuario*, 1869), and 1873–1874 (*Annuario*, 1874), it is possible to outline the teaching staff, subjects taught, and academic roles.

Busta 70 (ASCFe g) from the Municipal Historical Archive covers the entire period of services (also in other areas).

The main figures emerge from the pages of the *Ruolo dei Professori* of the University Historical Archive (ASUFe): Michelangelo Maffei (1856–1876), Director of the School until his death in 1876; Ercole Ferriani (1848[56]–1880), Director of the Veterinary Clinic and the School from 1876 (his assistant was Antonio Poli); and Federico Zuffi (1855[62]–1880), Director of the *Gabinetto di Anatomia Veterinaria* (with Giovanni Magri as collaborator) (Table 2).

Table 2. Documentation of Selected Teaching Staff (18th–19th Century).

Teacher	Years
Le Roy Luigi	1785–1804
Bonaccioli Tommaso	1815–1855
Valdrè Giovanni	1845–48
Maffei Michelangelo	1850[56]–1876
Ferriani Ercole	1848[56]–1880
Balboni Angelo	1851–1857
Zuffi Federico	1855[62]–1880

Source: ASCFe d; ASUFe

Teachers and courses: Domenico Jacchelli (Botany), Efisio Cugusi-Persi (Inorganic and Organic Chemistry), Federico Zuffi (Zoophysiology, Zootomy, External conformation), Galdino Gardini (Zoology), Carlo Grillenzoni (Human Anatomy), Ercole Ferriani (General Pathology, Special Pathology, Veterinary Clinic, Medical-Surgical Clinic, Health Police), and Michelangelo Maffei (Materia Medica, Theoretical Practical Surgery, Obstetrics, Theor. Prat. Ferratura).

Veterinary Jurisprudence and Hygiene: Gaetano Magri, Giovanni Baraldi, and Antonio Poli. The most prominent personalities attended the meeting of the Accademia Medico-Chirurgica di Ferrara, presented reports on veterinary topics, and published in sector journals. Among them were Michel'Angelo Maffei, Giovanni Magri, and Federico Zuffi.

Traces of Michel'Angelo Maffei's reports remain in the *Resiconti*. They deal with various diseases and remedies, in particular for glanders (AMCFe, 1861, pp. 22-26, 64-69; 1864, pp. 41-46).

Giovanni Magri published in the journal, "Il Medico Veterinario", which was printed in Turin (Cugusi-Persi, 1873). He was also very active in the *Accademia*, contributing several memoirs. His reports cover horse diseases, an interesting, suspended bed for large animals, and cases of blackleg in Ferrara (AMCFe s.d. a, pp. 103-124, 183-190); (ASCFe, s.d. b, pp. 101-114, 1-20).

Federico Zuffi reported on observations regarding particular pathologies (AMCFe, 1862, pp. 85-86; 1864, p. 38).

The scientific environment was lively at the time. In the *Bull. De la Soc. Centr. De Méd. Vet.*, (1884, p. 397), scholar R. Ciucci, dealing with *vertigine idatiginosa nei bovini*, claimed he had already anticipated the results of this research at the Medical-Veterinary Congress held in Ferrara in May 1875 (IV. Riviste, 1885, p. 83).

The Spaces

In the documents contained in *Busta 76, fasc. 1, Scuola Veterinaria Locali e Suppellettili*, of the Municipal Historical Archive, we can find evidence of the locations that housed the school over time: 1820–1842, the *Consolato*; 1842–1843, the *Conciera* (a building on *via Ripagrande* later used as the *Casa del Ricovero*); 1844–1869, the *Ateneo* (*Palazzo Villa* (possibly *Diamanti*) – the *Ateneo Civico*); 1868–1880, the *Convento delle Martiri* (a building called the *Ex Convento di S. Caterina Martire*) (ASCFe h).



Figure 4. Archival Documents. Municipal Historical Archive of Ferrara.

In 1875, Giacinto Scelsi reported that the veterinary school was housed in a separate establishment, in the ancient *Convento delle Martiri*, and that the entire four-year course in veterinary medicine was carried out there, as in the high schools annexed to the universities of Pisa and Bologna [...]. The university had important scientific establishments [...] (Scelsi, 1875).

In 1877, F. Barbi-Cinti described the *Gabinetti di Anatomia e Chirurgia Veterinaria*, and also focused his attention on the members of the academic staff.

In a few years, the Municipality and the Province had taken the proper steps to enrich these *Gabinetti* with highly valuable anatomical preparations in paper-mâché (made by a Bolognese) and *preparati a secco* of various animals. The *Gabinetto* of Surgery had a collection of ordinary, corrective, and pathological horseshoeing (*ferrature*).

He then describes the *Gabinetto di Bromatologia* and *Zootecnia*:

“In this *Gabinetto* you can admire collections of plants, including harmful ones (according *Jussieu – Notansi*) and species of grains, seeds, flours, and brans used in animal feed, a series of jaws distributed according to the various dental stages with the appropriate tables for studying the age of other domestic animals” (Barbi-Cinti, 1877, p. 100).

The Closure of the School in 1880

As also stated a few years earlier by Busi (Busi, 1867), according to Scelsi (Scelsi, 1875), Ferrara was the most popular among the four *Libere* Universities (Urbino, Camerino, Perugia), and compared to government ones (Siena, Messina, Macerata, Cagliari, Sassari), Ferrara was in fourteenth place.

However, Ferrara could not compete with the nearby universities of Padua and Bologna. For veterinary medicine (not present in Padua) in the academic year 1873–1874, there were 83 students in Bologna and 24 in Ferrara. [In Ferrara, in the mid-nineteenth century, the Veterinary Course was among the most popular when compared to the Faculty of Medicine and the School of Pharmacy. Student enrolment by academic year was as follows: 1859–60 (20 students), 1860–61 (12), 1861–62 (15) (Busi, 1867); 1862–63 (24), 1863–64 (24), 1864–65 (21), 1865–66 (28), 1866–67 (24), 1867–68 (12), 1868–69 (16), 1869–70 (20), 1870–71 (29), and 1871–72 (21) (Cugusi-Persi, 1873, p. 93)].

However, despite the large number of students, the Veterinary School closed in 1880. A note specifies: “From a correspondence in the *Gazzetta dell’Emilia*, we note that the *Consiglio Provinciale di Ferrara* has suppressed the 24,000 L. allowance to that School, establishing four annual subsidies instead, each of 600 L., for those young people who intended to follow the Veterinary Medicine elsewhere” (La clinica veterinaria, 1880, p. 142).

One hundred glorious years of history came to an end. Other locations were closed during the 19th century. Modena was closed later, in 1925. Still, others have remained the same to this day. Over time, new courses have also been opened. Nowadays, Veterinary Medicine remains a vital field in both education and research. Indeed, it is taught in 12 universities across Italy: Bari, Bologna, Camerino, Messina, Milan, Naples Federico II, Padua, Teramo, Turin, Parma, Perugia, Pisa, and Sassari.

CONCLUSION

Antonio Campana was well-known as a pharmaceutical chemist, botanist, and physicist. He was less known for the aspects we discussed in this paper. Surprisingly, he pursued them with the same accuracy as he pursued other disciplines. His relative Tommaso Bonaccioli was equally innovative. He also showed a great passion for the discipline from a very young age. The French School of Lyon set an example for every other school in Europe, and the Ferrara School was lucky enough to have Le Roy as the first teacher. Bonaccioli gained great recognition among the scientists of his time, including L. H. J. Hurtrel d'Arboval. His visionary ideas were fundamental to the development of this science. However, it was not until the end of the century that they became common knowledge. In addition to the development of teaching methods for the young, Bonaccioli also focused on veterinary pharmacology research and the remedies in the field (as substitutes as well). He was surely a pioneer in the field of hygiene in his time.

The present research drew upon valuable information from recent academic discussions (Cabassi & Liuzzo, 1995; Benassi, 2010; Brizzi, 2014; Castagnaro & Cozzi, 2014; Galloni, 2014). Furthermore, thorough research was also carried out in the Historical Archives: Municipal, Ariostea Municipal Library, University of Ferrara, and the Academy of Sciences (of which Campana and Bonaccioli were members and presidents).

A final concluding note aims to highlight the importance of studying the history of veterinary medicine. You cannot be a good professional without knowing your roots. This has been felt since ancient times. In the nineteenth century, courses in the history of veterinary medicine were established in numerous locations. Starting in 1833, the Imperial Royal School of Veterinary Medicine in Milan, for example, offered courses in the history and literature of zoology. Today, the history of veterinary medicine is a subject that needs to be valorised (Galloni, 2014, p. 7).

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ARCHIVAL SOURCES

LEGEND:

AMCFe – *Accademia Medico-Chirurgica di Ferrara*, Academy of Sciences of Ferrara

ASCFe – *Archivio Storico Comunale di Ferrara*, Municipal Historical Archive of Ferrara

ASUFe – *Archivio Storico Università di Ferrara*, Historical Archive of University of Ferrara

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SAŽETAK

U drugoj polovici 18. stoljeća počela se razvijati nova svijest u obrazovanju, pridajući veću važnost veterinarskoj znanosti. Govorimo o stogodišnjoj povijesti. Antonio Campana i Tommaso Bonaccioli, unuci Barbare Campana, bili su i sami osnivači Veterinarske škole u Ferrari. Među učiteljima posebno se sjećamo prvog, Luigija Le Roya iz lyonske škole. Lyonska Veterinarska škola, osnovana 1762., bila je mjesto za obuku učitelja za nadolazeće škole diljem Europe. Antonio Campana bio je eklektični znanstvenik koji se isticao i u ovoj disciplini. Tommaso Bonaccioli, koji je studirao u milanskoj školi tijekom Napoleonove ere, bio je visoko cijenjen među stranim istraživačima kao pionir u ovom području. To se može dokazati brojnim publikacijama i predavanjima na Akademiji znanosti u Ferrari, gdje je obnašao i dužnost predsjednika. Njegovi suradnici uspjeli su održati najviše standarde nastavljajući rad osnivača. No unatoč priznanju studenata, Veterinarska škola u Ferrari zatvorena je 1880. zbog nedostatka financiranja. Potraga za neobjavljenom originalnom dokumentacijom provedena je u povijesnim arhivima (Općinskom arhivu, Općinskoj knjižnici Ariostea, Akademiji znanosti i Sveučilištu u Ferrari).

Ključne riječi: Antonio Campana, Tommaso Bonaccioli, Veterinarska škola, Ferrara