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Marco Cambiaghi
Department of Neuroscience, University of Turin, C.so Raffaello, 30, 10125 Turin, Italy

Correspondence to Marco Cambiaghi, marco.cambiaghi@unito.it

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The current way of thinking in neuroanatomy, and also in neurology, owes much to a Renaissance physician who literally shook up the world of anatomy and broke centuries-old dogma that crippled the evolution of medicine. It was indeed during the first half of the 16th century when Vesalius introduced the modern concept of studying and teaching anatomy, centering his anatomical descriptions on personal and direct observation. The brain and the nervous system were fascinating to Vesalius, whose functional unit, however, he did not totally grasp, in particular with regard to the role of the ventricles as compared with grey and white matter.

Andreas Vesalius (the latin name of Andries Wytinck van Wesel) was born on December 31, 1514 in Rue de Minimes, in the neighbourhood of Sablon, an area just south of the ramparts of Brussels, Belgium, then part of the Holy Roman Empire. His father Andries, as at least the four generations preceding him, was at the service of the Roman royalty, so it was his mother Isabella Crabbe that tended to Andreas's early education [3-5]. Close to the house where he lived, on Gallows Hill, the young Vesalius often had the opportunity to approach the dead bodies of executed criminals. This was probably one of the reasons that influenced his decision to study medicine.
After elementary studies in Brussels, at 15 years old he matriculated at the University of Louvain on February 25, 1530. The Castle College was the same where his father studied before and his brother Franciscus after him [3]. Here, he had the possibility to study not only Latin but also Greek and Hebrew, which later allowed him to access and compare original anatomical texts [3]. Vesalius completed his studies within three years and in the summer of 1533 he moved at the University of Paris. Most of the texts, here, were based on the works of Galen of Pergamon (129/130 AD-210/216 AD), who represented the undisputed authority in anatomical teaching. However, due to the Roman law which prohibited corpse dissection (*lex de sepulcris*), Galen could perform his observations only in animals [2, 3]. Among his teachers, Vesalius had Jacobus Sylvius (1478-1555) and Johann Guenther von Andernach (1505-1574), who adopted the traditional way of teaching anatomy during dissection: the *lector* (reader) seated on an elevated chair was the professor reading Galen's texts, the *ostensor* (demonstrator) indicated the anatomical structures mentioned by the reader, and finally the *sector* (dissector) was the barber-surgeon who performed the dissection at the anatomical table. Thanks to his enthusiasm Vesalius was often asked to act as the barber-surgeon, a great privilege for a 18-year old student. This helped him training in the art of dissection, learning directly and not just reading old texts [1, 3].
Being the son of the Emperor's apothecary, at the outbreak of the war in France in July 1536, Vesalius was forced to escape from Paris before graduating. He completed his dissertation in Leuven in 1537 and thanks to his connections with influential officials he was authorized to

perform public dissections [3, 5]. In the summer of 1537 Vesalius moved to "the true nurse of talents", as he described Italy, at the University of Padua, where he graduated with the highest distinction on December 5, as a doctor in medicine [2]. Here, the myth says that the day afterwards he was appointed Professor of Surgery, although it is much more likely to have been as demonstrator, while giving lectures on surgery too [4]. His unrivaled skills at dissections rapidly made him popular, along with his way of conducting them: no longer a three-person approach but a 'one-man show' [3]. A new method of teaching had been created. Concerned about plagiarism "since many in vain have sought to copy what I have done" [7] Vesalius printed the Tabulae anatomicae sex (Six anatomical tables) in April 1538. Although ostracized by academics, they became very popular among students promoting Vesalius' idea of a new editorial project [3]. His new approach to knowledge, based on direct observation, prompted him to write his masterpiece. In June 1543 Vesalius published the *De Humani Corporis Fabrica* (On the Fabric of the Human Body), a new atlas of the human body [8]. Seven books, with almost 700 pages and – this is the real breakthrough – more than 200 illustrations [6]. So far, books of anatomy comprised purely text, while Vesalius worked together with artists to obtain the first modern human anatomical atlas. His firm belief that images were essential to learn and teach anatomy was a revolution within the revolution. Among the people that worked with him, there was Jan Stephen van Calcar, a young Flemish artist working in the Venice workshop of the great Renaissance artist Titian [3, 4].
The 7th book is totally addressed to the human brain (Figure 1): here, Vesalius described the brain in great detail, giving it higher importance than other organs, in contrast to previous conceptions. Vesalius accepted the hypothesis, dating at least to Galen, that the ventricles were the source of 'psychic pneuma' but he was sceptical about the possibility that psychological functions originate in the ventricles, hence anticipating Thomas Willis's views on the primacy of the cortex [3, 8]. Moreover, he meticulously explained and illustrated how to prepare the head and skull for "inspection of the brain", remove the membranes and examine the tissue [8].
In the same year that Vesalius published his book, the Polish Nicholas Copernicus published his *De revolutionibus orbium coelestium* (On the Revolution of the Heavenly Spheres) where he described his revolutionary view of the Solar system. Both works break the conventional theories of their time, putting an end to dogmatic traditions and revealing the strength of a new exploratory method. After the publication of the *Fabrica*, Vesalius dominated anatomical thought for the next 100 years, including the one concerning the nervous system. Indeed, while some refused and deplored his ideas – Sylvius described him as "very ignorant and arrogant" –, many other anatomists embraced them, especially in Italy. Vesalius travelled to perform public dissections in many Italian cities and in January 1544 he was received by the Duke of Florence, Cosimo I De Medici, who declared January 30 a public holiday, so to allow more people to attend Vesalius' dissections [3]. Within few months he returned to Brussels and married Anne van Hamme; one year later they had Anne, their only daughter [1, 5]. Meanwhile, in winter 1544, Vesalius' father died.
At the age of 28, Vesalius gave up his chair and took up service as a court physician starting his career as a surgeon [1]. Among his patients, he numbered Lucrezia Borgia, the daughter of Pope Alexander VI, and Maximilian of Egmont, a commander of the Holy Roman Emperor.
In August 1555 a second edition of the Fabrica was published, with new details and observations [5]. Charles V abdicated in 1556 and his son Philip II took his place. Philip II, however, preferred to trust Spanish physicians, who still believed in classical texts, and in 1559 moved his court to Madrid. Vesalius followed the Emperor but his medical services and the possibility to perform further anatomical studies were highly restricted [3]. For reasons that have never been clarified, in the spring of 1564 Vesalius left Madrid for Jerusalem, where he collected herbs and toured for months. During the summer of 1564 Vesalius decided to go back to Italy, but instead of waiting for the Venetian fleet, he opted for a pilgrim's ship. He died, probably in October, during a port of call on the Greek island of Zakynthos, struck down by illness, although the real cause of his death is unknown [5].

His home in Brussels became a convent in the 17th century and later a church,which still stands in the same place.

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