

Filippo Pacini and the discovery of the lamellar corpuscles

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The anatomist and pathologist Filippo Pacini (1812-1883) was born in Pistoia, where he worked until 1840, then he moved to Pisa (1840-1846), and Florence (since 1847). When he was still a student in Pistoia, he described the presence of corpuscles along the digital nerves of the hand. Already observed in previous works, Pacini also provided a functional role for the organelles. The presentation of the research at the Società Medico-Fisica of Florence (1835) and at the Prima Riunione degli Scienziati Italiani in Pisa (1839), and its publication in the *Nuovo Giornale de' Letterati* (1836) were quite ignored. Then, just arrived in Pisa, Pacini decided to publish a book entirely dedicated to history, anatomy, and physiology of the nuovi organi, with experimental procedures adopted during dissection [1]. Finally, in 1843 Henle sent a letter to the Quinta Unione degli Scienziati Italiani in Lucca, where he firmly praised the Pacini's discovery. Indeed, in 1844 Henle and Kölliker published a book with further observations about the new organs, now called Pacinischen Körperchen [2]. The right tribute to Pacini's merit was accomplished. Pacini described large ovoid corpuscles consisting of concentric layers or lamellae of connective tissue surrounding a nerve ending, their microscopic structure and distribution in the body, and their function as being concerned with the sensation of touch and deep pressure. He also compared the corpuscles to the electrical organs of the torpedo, almost formed like a voltaic pile, and interpreted them as animal magneto-motors, as organs for that peculiar vital energy known as animal magnetism or mesmerism. In this respect, Pacini's discovery was also highly considered by mediums to explain some paranormal phenomena. Some interesting preparations of lamellar corpuscles were left by Pacini in the anatomical museums of Pisa and Florence.

References

- [1] Pacini F. (1840) *Nuovi organi scoperti nel corpo umano*. Tipografia Cino, Pistoia.
- [2] Henle J, Kölliker A (1844) *Ueber die Pacinischen Körperchen an den Nerven des Menschen und der Säugethiere*. Verlag von Meyer & Zeller, Zürich.

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