

The Anatomical Legacy of Dr Sömmerring

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The present-day classification system of 12 cranial nerves is essentially that of Samuel Thomas von Sömmerring (1755–1830), as summarized in his 1778 thesis on the brain and the origin of the cranial nerves.

Sömmerring was born in Thorn, Prussia, on January 18, 1755, to a city physician. His interest in medicine was aroused during childhood, as his father took him along to autopsies. From an early age, he also demonstrated two other characteristics: an extraordinary literary skill and an enthusiasm for collecting various things. At age 11, Sömmerring prepared a little book, *Flowers and Plants from Life*, which contained his drawings of plants and butterflies. The literary and artistic skills shown in this book were evident later in his medical career.

After matriculating in 1774, Sömmerring entered the University of Göttingen. He was fascinated with anatomy, which he studied under Heinrich Wrisberg. Throughout his medical training and his pursuit of anatomy, Sömmerring implored his frugal father to support him.

Sömmerring's doctoral thesis discussed the subject of cranial nerves. Before Sömmerring, several systems for classifying cranial nerves had emerged. Marinus, Galen and Vesalius described 7 pairs of cranial nerves, and Fallopius described 8 pairs. Eustachius completed his illustrations of 10 cranial nerves by 1552, anticipating many of Willis' later discoveries, but his plates were not published until 1714. Willis described 10 pairs of cranial nerves. The seventh and eighth cranial nerves of today had been considered 1 pair from the time of Galen until Sömmerring listed them separately. Sömmerring distinguished the facial from the vestibulocochlear nerve, separated the glossopharyngeal, vagus, and accessory nerves, and removed cervical 1, which was Willis' 10th nerve, from his classification system.

Sömmerring's diverse works also included descriptions of the optic chiasm, the pineal body, brain and spinal anat-



Dr Samuel Thomas von Sömmerring. Illustration by Venita Jay, MD, FRCPC.

omy, skeletal anatomy, the lungs, the ear, the senses of smell and taste, and embryonic and developmental defects. Sömmerring's encyclopedic anatomical treatise in 5 volumes (1791–1796) and his exquisite atlas of the female skeleton are legendary. His 1788 paper, "Injurious Effects of Tight Lacing," created intense public interest, and the fad of tight lacing began to subside. Sömmerring also constructed a 5-wire telegraph. This indefatigable man of science died on March 3, 1830.

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The author acknowledges that the general biographical overview presented does not necessarily include all of the accomplishments or achievements associated with the person discussed. Dr Jay welcomes comments from readers concerning the "A Portrait in History" section.

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