

# The deaths of the Alexander Monros, distinguished Scottish anatomists

This year sees an unusual double anniversary, that of Alexander Monro primus, a founder of the Edinburgh Medical School, who died 250 years ago, and also of his son, Alexander Monro secundus, who succeeded him and who died 50 years later.

Alexander Monro primus was born in London in 1697. His father, John, was an army surgeon. In 1700 John Monro resigned from the army and moved to Edinburgh, where he was admitted to the Incorporation of Surgeons and set up in practice. Young Alexander attended the University of Edinburgh from 1710 to 1713, before becoming apprenticed to his father. In 1717, Alexander travelled to London to attend the anatomy course of that distinguished surgeon William Cheselden, then on to Paris in 1718, followed by a year at Leiden, studying clinical medicine under the great Herman Boerhaave. During this time he also visited Frederick Ruysch in Amsterdam, from whom he learned the art of the preparation of anatomical specimens.

In passing, it is interesting that in those days keen postgraduates and students often undertook considerable difficult and expensive journeys abroad to study under the great teachers of the time. Latin was the lingua franca which made communication easy.

Monro returned to Edinburgh in 1719 and in January 1720 was appointed to the vacant chair of anatomy, now defined as a University chair. This appointment is now regarded as marking the beginning of the Edinburgh Medical School.

Monro's lecture courses ran from October to April each year – the summer months made teaching on unpreserved cadavers too odoriferous and dangerous. The course commenced with the history of anatomy, then went on to human anatomy, comparative anatomy, physiology and operative surgery.

As well as human dissections, animals and wax models were used. By 1751 the class numbers had grown from 57 students to an annual entry of 200.

In 1726, Monro published his only textbook *The Anatomy of the Human Bones*. The second edition added material on the nerves, heart and the lacteals. It remained a popular book for the next 100 years.

In 1729, Monro rented a house with six beds for the sick poor to provide clinical training for medical students. It was chartered by King George II as The Royal Infirmary in 1736 – the beginning of today's famous institution.

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In 1762, Monro developed the early signs of rectal cancer, which caused his death in July 1767, 250 years ago.

Monro primus had married and had five daughters, all of whom died young, and three sons. The eldest boy became an advocate, the second became a physician at St. George's Hospital, London and the third, Alexander, born in 1733, followed his father into anatomy and became known as Monro secundus.

Monro secundus began attending his father's anatomy classes at the tender age of 11 years, commenced his medical studies in 1750, took over his father's summer classes in 1753, was named joint professor of medicine and anatomy in 1754 and the following year, now aged all of 22 years, graduated Doctor of Medicine! The young Monro then went on to further study of anatomy in London under William Hunter (the elder brother of John Hunter), and then with Johann Meckel (he of Meckel's diverticulum fame) in Leiden.

In 1757, his father's poor health brought Monro secundus back to Edinburgh to take

over the teaching duties of Monro primus. For the next 50 years Monro secundus taught at the University of Edinburgh, probably the most popular and influential teacher of anatomy in the English-speaking world of the time.

In 1764, Monro secundus recorded his discovery of the foramen between the lateral ventricles and the third ventricle of the brain (in the dissection of a hydrocephalic brain), which he reported in a paper read to the Edinburgh Philosophical Society and which earned him the eponym of 'the foramen of Monro'. He noted that he had made this observation 'so far back as the year 1753, soon after I began the study of Anatomy'.

In the 50 years that Monro taught in Edinburgh University, he lectured each day from 1–3 pm during the 6-month winter season, spending the mornings in the preparation of his anatomical material. In addition, he carried out an extensive medical practice. Although he had a country estate, he always spent his nights in his town house to be available for emergency calls.

In 1813 Monro secundus had an attack of apoplexy (a stroke) and died in 1817. This year marks the 200th anniversary of his death.

But this is not the end of the Monro saga. Alexander Monro secundus had a son, Alexander Monro tertius, born in 1773. He graduated Doctor of Medicine in Edinburgh in 1797 and was appointed conjoined Professor of Medicine, Surgery and Anatomy with his dying father in 1817. Monro tertius held the position until 1846 and died in 1859. Monro tertius carried out his teaching duties perfectly adequately but suffered badly by comparison with his distinguished grandfather and still more eminent father. He retired in 1846 and died in 1859. There is apparently no truth in the story (which I first heard when I did a summer vacation anatomy course as an Oxford medical student in Edinburgh in 1944) that Monro tertius lectured from the notes of Monro primus. [BJHM](#)

*Conflict of interest: none.*

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