

# William Hunter: obstetrician and anatomist

This year marks the 300th anniversary of the birth of William Hunter, in 1718. He was not only the leading obstetrician of the time, but was also an influential teacher of anatomy. Today, he is probably better known as the elder brother of John Hunter, who was William's protégé, and who was brought to London as William's assistant and prosector before himself becoming famous as one of the founders of modern scientific surgery.

William Hunter was born in 1718 in Long Calderwood, East Kilbride in Lanarkshire, Scotland. His father was a farmer and his mother, unusual in those days for a farmer's wife, was a woman of wide education. Initially intended for the church, William attended the local Latin school before entering the University of Glasgow in 1731. However, deciding against an ecclesiastical career, he left the university in 1736 and became apprenticed to William Cullen, a medical practitioner in Hamilton. In 1739, Hunter attended the lectures in Edinburgh of the leading teacher of anatomy of the day, Alexander Monro primus. (Monro primus was to be succeeded by his son, Alexander Monro secundus to the chair and, in his turn, by his own son, Alexander Monro tertius in what was to be a remarkable dynasty of anatomy teachers, which featured in the anniversaries series in 2017 (Ellis, 2017).)

In 1740, William Hunter turned to his other great lifetime interest and travelled to London, to study under the leading 'man midwife' of his day, William Smellie, a pioneer in the use of the obstetrical forceps. While in London, Hunter also became a surgical pupil at St George's Hospital, then situated on the edge of Hyde Park, as well as travelling to Paris to attend classes in

both anatomy and surgery. (In passing, one can only admire the enthusiasm of medical students in those days, when travelling was difficult, uncomfortable and not without danger. Latin was the lingua franca, the language that crossed national boundaries in science and medicine.)

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William's career as a teacher of anatomy in London commenced in October 1746, when he advertised that 'Gentlemen may have the opportunity of learning the Art of Dissecting during the whole winter season in the same manner as in Paris'. This meant that teaching would involve human cadaver dissection by the students themselves and not merely lectures given with the aid of a skeleton and some rather unsatisfactory prosections. Both the course and its teacher were an immediate success. William was described as 'the most perfect demonstrator and dissector the world has ever known'; students came to his classes from continental Europe and from north America.

In 1748, William was joined by his brother John, whose first duty was to prepare the dissected specimens. This he did with immense skill. The following year, the brothers moved to a house in Covent Garden, which provided excellent facilities for dissection, lecturing and the establishment of a museum. At the same time, William was appointed man-midwife at the Middlesex Hospital.

In 1750, William had his first opportunity to dissect a full-term human gravid uterus. At that time, Alexander Monro primus, in

Edinburgh, held that no maternal blood supply reached the fetus. Hunter, by an injection study of his precious specimen, was able to prove that maternal blood did indeed pass to the placenta but did not reach the fetus itself. Note that the hypodermic syringe did not exist in those days. The injection fluid, commonly mercury, was held in the mouth and then blown through a cannula inserted into the blood vessel or other tube to be studied.

This injected specimen, together with other dissections were beautifully drawn by the Dutch artist, Jan van Rymdyk and form the first ten plates of Hunter's magnificent 'Anatomia uteri humani gravidi tabuli illustrata', which was published in 1774 and which covered all stages of human pregnancy. You will find these plates reproduced in the textbooks of the history of obstetrics.

Meantime, Hunter's obstetrical practice was becoming extensive. In 1762, he attended Queen Charlotte, the wife of George III, in the safe birth of a son and Hunter was appointed physician extraordinary to the Queen. Hunter attended all her subsequent pregnancies. Hunter was now a wealthy man. His house contained a large museum to hold his vast collection of anatomical specimens and a library of over 10 000 books.

William Hunter never married. He died at his home on 30 March 1783. For years he had suffered from kidney stones and gout and it is probable that he died of renal failure. In his will, Hunter bequeathed his museum and library to Glasgow University, together with £8000, a large sum in those days. The Hunterian Museum in Glasgow is today a splendid memorial to this remarkable man. **BJHM**

*Conflict of interest: none.*

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