

Obituary

John Webster Kirklin, 1917–2004



AS SHAKESPEARE WROTE OF JULIUS CAESAR, “he did bestride his narrow world like a colossus”. The epigram is a perfect description of John Kirklin, who sadly passed away on April 21, 2004. He was the first cardiac surgeon routinely to use open heart procedures in the repair of children with congenitally malformed hearts, and did more than anyone to introduce scientific rigour into the surgical procedures.

Born in Muncie, Indiana, in 1917, he undertook his undergraduate training at the University of Minnesota, graduating in 1938. During this period, he demonstrated his all-round skills, since he was the student manager of the football team that won the American title. He then undertook his medical training at Harvard University, graduating during a period of war. Entering the armed services, he served as a neurosurgeon in the Pacific Theatre. When he returned to civilian life, having worked as an intern in Philadelphia, he soon became appointed as attending surgeon at the Mayo Clinic, where his father had been chief of the Department of Radiology. When first appointed, he was repairing hernias day after day, but with his restless mind, he was not content to spend the remainder of his career in this fashion. His superior intellect pointed to the conjunction of his own future with the future of cardiac surgery. It is no exaggeration to state that, in a short time, he and his colleagues revolutionised the practice of cardiac surgery. Lillehei, not more than 100 miles distant from

the Mayo Clinic, was promoting the concept of cross-circulation for open heart surgery. Kirklin was much more inclined to use the heart-lung machine that had been pioneered by Gibbon in Philadelphia. The problem was in making the machine work, and here Kirklin revealed his true skills, employing the machine first in the experimental setting before introducing it to clinical use. The late 1950s were a golden period at the Mayo Clinic, and Kirklin, together with colleagues such as Jesse Edwards and Howard Burchell, virtually established the specialty of paediatric cardiac surgery, contributing hugely also to the surgical repair of acquired cardiac disease.

It was a major surprise, therefore, when Kirklin, in 1968, chose to leave the Mayo Clinic, recognised by now as the Mecca for cardiac surgery, and to transfer to the University of Birmingham in Alabama. It was not long, however, before Birmingham itself became an essential stopping place on the tour of all cardiac surgeons visiting the United States of America. More than that, Birmingham became the place to undertake training. The quality of training established by Kirklin became the gold standard throughout the World, with all centres seeking to replicate the magical recipes contained in the “Blue Book”. He also recognised the huge opportunities made possible by using the computer as the true therapeutic partner of the cardiac surgeon, first in the postoperative arena, but then in the analysis and interpretation of results. Both conceptually and ethically, this was an intellectual breath-taking process, and encapsulated all the attributes of the man.

From 1966 until 1982, Kirklin was surgeon in chief at the University Hospital in Birmingham, and also Chairman of the Department of Surgery. Stepping down as Chairman in 1982, he continued to practise his surgical skills until retiring in 1989. Even after retiring, he continued to travel widely, fulfilling multiple invitations to symposiums held all round the World.

It is impossible in a short appreciation to acknowledge all his contributions. He published over 700 papers in peer-reviewed journals, but he considered that his greatest achievement was the monumental textbook written in collaboration with Sir Brian Barratt-Boyes. Now edited by several of his former

students, this work is still recognised as the “bible” of cardiac surgery.

One of us has already written a review of his contributions when we inducted him as the first surgical member of our Paediatric Cardiology “Hall of Fame”.¹ We all were fortunate to count him as our mentor and friend. His intellect was unsurpassed amongst those practising in our field, yet he was always sufficiently humble to ask the most simplest of questions, making it obvious to the entire audience in any meeting that there was no such thing as a silly question. He was remarkably efficient, but daunting, as a Chairman in these settings, and could be cruel in some of his questioning, even to those who considered him their friend. This was because he always sought to establish the truth. It was for this same reason that he changed the means of analysing and presenting surgical results. Although not universally accepted when first introduced, all eventually came to appreciate the wisdom and foresight of his concepts.

Although formidable in the lecture and operating rooms, he was also wonderful company away from the Hospital, where he shared his love of horses and wine with his friends. Conversation would be wide-ranging, and there were few areas in which he was not suitably informed, and more than able to hold

his own. Throughout his life, he was ably supported by his wife, Peggy, and we extend our deepest sympathy to her and to his family. His legacy is his publications and his students. It is noteworthy that his son chose to follow his father into the daunting world of cardiac surgery. He is currently Chief of Cardiac Transplantation at the University of Alabama in Birmingham, and is now able to practise in the Kirklin Clinic. His grandson is also following in the family footsteps, currently being a medical student in Birmingham. In addition to the clinic named in his honour, his tradition and commitment to education is continued at the J.W. Kirklin International School, which continues its activities in Bergamo. It is our privilege to make this all-too-brief summary of his achievements, and to have benefited from his friendship and advice. We will not see his like again.

*Robert H. Anderson
Francis Fontan
Lucio Parenzan*

Reference

1. Fontan F. John Webster Kirklin: consummate cardiac surgeon and scientist. *Cardiol Young* 2000; 10: 332–339.