Obituary

**Henry (Harry) Vernon Crock** AO MD MS FRCS FRACS FRCS Ed(Hon) D. Sc (Honoris causa) Melb

**1929-2018**

Henry (Harry) Crock, who died on April 21st at the age of 88, was one of Australia’s pioneer spinal surgeons with a worldwide reputation for innovative surgical techniques and a gift for teaching and mentoring young surgeons. Having trained in orthopaedics, he specialised as a spinal surgeon, researcher, anatomist and lecturer. He was Senior Orthopaedic Surgeon at St. Vincent’s Hospital, Melbourne from 1961 – 1986 and then practised in London until his retirement in 2000.

Henry Vernon Crock was an identical twin son of Vernon and Annie Crock (Doyle) born in Perth Western Australia in 1929. His twin brother, Gerard William Crock, was Australia’s first Professor of Ophthalmology. As there was no medical school in Western Australia at that time, the twins enrolled in the Faculty of Medicine at Melbourne University. They graduated in Medicine in 1953, both winning prizes in Medicine and Surgery in their final year of the course.

In 1957, Harry was awarded a Nuffield Scholarship, a Clinical Assistantship in Orthopaedic Surgery, to Oxford, and there, in March 1958, he married Carmel Shorten, newly graduated in Medicine in Melbourne.

Harry undertook training at the Nuffield Orthopaedic Centre, and began research, investigating and describing the blood supply of the bones of the skeleton, whilst lecturing in Orthopaedics at the University of Oxford. However, the bulk of this research was carried out on his return to Australia. Privately funded and performed in a laboratory that was set up in a small building adjacent to St. Vincent’s Hospital in Melbourne, the painstaking anatomical studies, preparation of specimens and photography were carried out by Harry over many years, ably assisted and supported by Carmel and various research fellows.

His work was published in three key anatomical textbooks: ‘The Blood Supply of the Lower Limb Bones in Man’, ‘The Conus Medullaris and Cauda Equina in Man’ and later ‘An Atlas of the
Vascular Anatomy of the Skeleton and Spinal Cord’. His beautifully illustrated anatomical studies on the blood supply of the spinal cord, cauda equina and vertebral column are widely acknowledged by clinicians as the most authoritative reference works on this subject, leading to changes in surgical techniques to improve safety. Of particular importance was the demonstration that the blood supply of the thoracic spinal cord is segmental and not tenuous, through the Artery of Adamkiewicz, as was previously believed.

In 1961, Harry and Carmel returned to Australia where he took up the position of Senior Honorary Orthopaedic Surgeon and Professorial Associate at St. Vincent’s Hospital, Melbourne.

Harry became known for performing complex surgical procedures with precision and for his outstanding results. Fundamental to his practice was an intimate knowledge of anatomy, meticulous surgical skill and special attention to preservation of the blood supply. His diagnostic skills, together with his careful surgical approach, helped many of his patients from around the world who consulted with him after having had previous failed spine surgery elsewhere.

In 1967, he obtained an MD and in 1977 an MS at the University of Melbourne and in 1984 he was made an Officer of the Order of Australia.

After 25 years at St Vincent’s, Harry and Carmel moved to London in 1986 where he took up the position of Consultant Spinal Surgeon at the Hammersmith Hospital - a position he held until 2000.

Harry was the recipient of many awards: from the Australian Orthopaedic Association, the Royal College of Surgeons, the Royal Australasian College of Surgeons, an Honorary Fellowship from the Royal College of Surgeons of Edinburgh and an Honorary Doctorate of Science (Honoris Causa) from the University of Melbourne for his contributions to research and the scientific literature.

In 1968, Professor Torai Iwahara, the so-called “Emperor” of Japanese Orthopaedics, recommended Dr Hidezo Yoshizawa to work and research under Harry, as his first Japanese trainee. Harry subsequently developed life-long connections with Japanese orthopedic surgeons, as students, colleagues and as friends, and his international reputation led to collaborations and friendships with European, African, Indian, North American and Singaporean orthopaedic surgeons who came to learn from him.
Throughout his career, Harry was active in professional surgical organisations. In 1974 he was a Foundation Executive Member of the International Society for the Study of the Lumbar Spine (I.S.S.L.S) and its President in 1984-5. In 1977-9, he served as President of the Facet Club of Australia (now the Spine Society of Australia) and in 1990, he was a Foundation Member of the European Spine Society. In London, he and his friend and former patient, Philip Clayton established DISCS Charitable Trust, and Harry remained its President until his death.

Early in his career, Harry heard Joseph Barr from Massachusetts state that, in his opinion, it may have been better if he (Barr) had not described prolapsed intervertebral disc, “as this is the only condition most people considered as a cause of low back pain.” This stimulated Harry to investigate other likely causes of back pain and sciatica. He summarised his ideas in a paper published in the Medical Journal of Australia in 1970, entitled “A Reappraisal of Intervertebral Disc Lesions”. He was able to demonstrate other causes arising from the discs and vertebrae and to offer alternative management to that of simple disc excision. These causes included isolated disc resorption, in which one disc space is narrowed with resultant narrowing of the nerve root canal, internal disc disruption, in which the structure of the disc is disorganized, often producing generalized symptoms, and intervertebral disc calcification, a cause of severe and acute back pain.

In Australia, many of his patients were poor migrant workers, with little English and scant knowledge of the Australian legal system, who performed heavy manual labour and sustained serious work-related injuries. He treated them with kindness, understanding and care, and, having diagnosed and managed their conditions, supported them in their claims, often during unfriendly court proceedings. Harry was particularly skilled in providing expert witness evidence for this group of patients. In 1991, he made history in a Victorian Supreme Court trial, when he became the first witness to use video conferencing to give evidence from overseas in an Australian court.

Harry Crock has left a remarkable and profound legacy to Australian and international orthopaedics and research. He will be remembered fondly by colleagues and patients alike.

Harry Crock was predeceased by his twin brother Gerard in 2007. He is survived by Carmel, his wife of 60 years, their 5 children - Catherine, Elizabeth, Carmel, Vernon and Damian and their partners, and 15 grandchildren.