

In Memoriam

John Alexander McCulloch

1938–2002

Only rarely can it be truly said that an individual passes from this world at the absolute “top of his game.” Nevertheless, this statement unquestionably applies to our colleague, mentor and friend, Dr. John A. McCulloch. John died March 14, 2002, from a head injury sustained 13 days earlier from a fall while skiing at Breckenridge, Colorado. He had enjoyed a family home there for more than a decade. He was wearing a helmet at the time of the accident.

John was well known as an astute clinician, diligent researcher and outstanding teacher and mentor. However, in my view, the quality that set John apart was his remarkable aptitude for conceptual thinking. He was trained in this regard by a master, – Dr. Ian Macnab, with whom both John and I were privileged to have done a spine surgery fellowship. Ian and John both had the uncanny ability to view the spine and its myriad pathology from a perspective overlooked by other observers. Macnab systematized analysis of zones in the spinal canal from medial to lateral (central, lateral recess and foraminal stenosis, far lateral disc herniation). McCulloch built on this framework and promulgated his “three story house” analogy (first story, disc level; second story, lower vertebral body and foramen; third story, upper body, pedicle and transverse process) to further define the location of spine pathology within each motion segment from inferior to superior. This system established key anatomic landmarks critical to microsurgery.

John was intellectually happiest when participating in the scientific and clinical analysis of patient-care questions.

Many of the initial safety principles for chymopapain resulted from a McCulloch review. For a number of years, John had been a spirited proponent of use of the operating microscope in spinal surgery. The authoritative text *Essentials of Spinal Microsurgery* was coauthored by John and his longtime friend and neurosurgical collaborator, Dr. Paul Young. This pair also permanently changed the face of

graduate training in surgical skills by introducing the first hands-on cadaver course sponsored by the American Academy of Orthopedic Surgeons. More recently, John was involved with the Food and Drug Administration pivotal study on bone morphogenic protein 7 (OP-1) for spinal fusions and was looking forward to revising the *Macnab’s Backache* textbook.

Many honors, including a Volvo award came John’s way. Recognition of his lifetime achievements culminated last year when the North American Spine Society awarded to him the Leon Wiltse Award for Outstanding Contributions to the Field of Spine Surgery.

John was devoted to his family. He and his wife Barb relocated to Denver last year to be closer to his daughters, son-in-law and first grandson.

In the days and weeks after John’s accident and subsequent death, I have had the opportunity to talk to many of his colleagues, friends and patients.

One recurring theme has permeated these conversations. Everyone has expressed profound gratitude that John McCulloch touched his or her life. I can think of no more fitting tribute.

– David A. Wong

