

2006 ASNR GOLD MEDAL AWARD WINNER

Despite coming from a poor rural farming background in Western Pennsylvania, *Charles W. (Chuck) Kerber* was able to avoid the coal mines to the south and the steel mills to the north by means of a full academic scholarship at the University of Pittsburgh. The scholarship was given by the Western Pennsylvania Golf Association to the caddie with the most outstanding academic achievement.

Chuck majored in physical chemistry at Pittsburgh, was selected to the Alpha Epsilon Delta honors premedical society, and lettered in gymnastics. He then attended, and was an A.O.A. graduate, of the University of Pittsburgh Medical School, where he spent summers working in a surgical research laboratory, co-authoring his first scientific paper. Prophetically it investigated then evolving techniques of clot lysis.

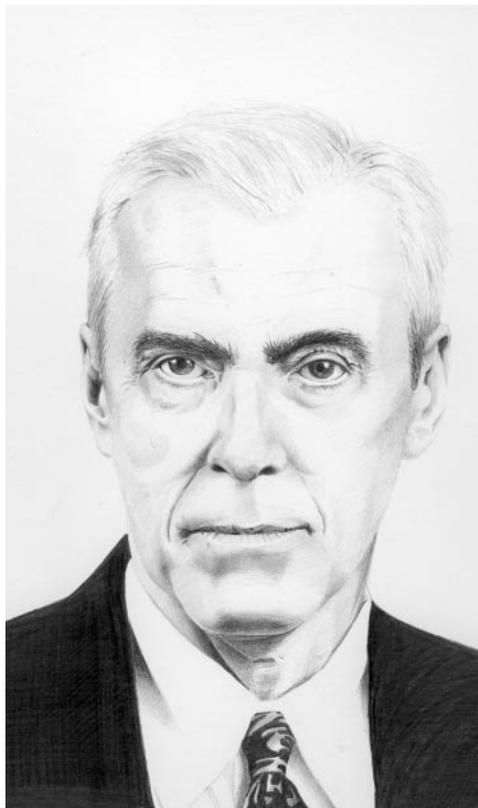
After a surgical internship, Chuck volunteered for training as a Navy flight surgeon. This training included the same basic flight training given to all naval aviators and instilled a lifelong love for flying that continues to this day. During his tour of duty with the Marines, while flying in the back seat of a jet fighter, the pilot crashed on takeoff and Chuck, although able to eject, still suffered near fatal burns and other injuries requiring hospitalization for 20 months. The experience, he says, taught him compassion, humility, and “just how short life can be.”

During that hospitalization, he decided upon a career in radiology, completing his residency under Elliot Lasser at the University of Pittsburgh. Chuck cites Helen Redman, an early pioneer in angiography, as his particular mentor during residency. It was she who kindled his interest in interventional work.

After a year in the private practice of radiology, Chuck was awarded an NIH Research Fellowship in neuroradiology under Hans Newton at the University of California at San Francisco. Here he began to enjoy teaching and writing, contributing scientific papers and the book chapter on angiographic techniques in the classic Newton and Potts neuroradiology textbook.

Chuck then joined the faculty at the University of Oregon. While at Oregon in the early 1970s, and with the encouragement of his neurosurgical colleagues, Chuck developed flow-directed silicon catheters, a calibrated leak balloon catheter system, and a small gauge guidewire. At this time, in the early 1970s, Chuck also performed intracranial embolizations using liquid adhesive material and performed the first angioplasty of the carotid artery (by the Dotter Catheter Technique) with 2 colleagues. During these years Chuck also developed polyvinyl alcohol particles for therapeutic embolization.

Chuck was the 79th member to join the American Society of Neuroradiology. In 1974, he invited 15 American and French interventionalists to meet in Santa Barbara. The group began to grow and met annually, eventually becoming known as the World Federation of Interventional and Therapeutic Neuroradiology. Chuck has also been very active in, and is a



Charles W. Kerber, MD

past-president of, the American Society of Interventional and Therapeutic Neuroradiology.

Chuck came to the University of California at San Diego (UCSD), in 1980 and does not plan to ever retire from that institution or from neuroradiology. At age 67, he became one of the very first neuroradiologists to take and pass the C.A.Q. recertification exam. He expects to be among the first to take and pass the exam in 2014 as well.

Chuck Kerber has been awarded the Outstanding Paper of the Year award at the 1977 ASNR meeting. He has mentored his fellows and co-authored the ASNR Dyke award-winning papers in 1978 and 1998. He has been awarded the Gabriel Wilson award for the outstanding paper at the Western Neuroradiology Society in 1991 and 1998.

At UCSD, Chuck continued his investigations into flow dynamics to try to understand the pathophysiology of aneurysms and arteriovenous malformations and to plan how to treat them. He has devised techniques to make physical and computer replicas of cadaver vascular malformations and aneurysms by taking the diseased vessels from fresh cadavers and making synthetic molds of them. Chuck developed a closed pulsatile flow system so he could study the flow dynamics of these lesions in both clear tubing with dyes as well as with MRI and CT contrast-enhanced imaging. Chuck has also developed a safe effective method for intra-arterial chemotherapy delivery to head and neck cancers.

Though a devoted teacher of residents and fellows, and a stickler for clear, concise thinking and writing, he makes it clear to all that he feels he has learned more from his fellows and residents than he has taught.