EXCEPTIONAL motivation, a high order of intelligence, and self-discipline were the special qualities which made Loyal Davis one of the most singular and distinguished of our neurological surgeons. A strong and independent personality often made him uncompromising and controversial, but beneath the austere exterior was a keen sensitivity and benevolence, as well as a kindly understanding of others. There was fierce loyalty to his family, friends, students, and the surgeons whose training and education he shaped over many years. A devotion to the highest principles of surgery was translated into neurophysiological investigation and teaching. It was obvious in his care of patients. He was a splendid technical surgeon whose fastidious and compulsive techniques were patterned after those of Harvey Cushing. Unstinting service to the Northwestern University Medical School and its hospitals, to the American College of Surgeons, and 55 years of editorial experience with *Surgery, Gynecology and Obstetrics* comprised a separate career in itself. The long odyssey of this surgeon began in Galesburg, Illinois, 86 years ago, and his journey ended in Scottsdale, Arizona, in August, 1982.

Early Years. Future work patterns and the desire to excel were established in childhood, and the exemplar was his father, a railroad engineer. The basic virtues were taught early and never forgotten. After attending public school and Knox College, he was graduated from the Northwestern University Medical School in 1918 at the top of his class. His surgical education was with Allen B. Kanavel who stimulated his interest in nervous system anatomy and physiology, which led to graduate work with Stephen Walter Ranson. An anatomical study of the inferior longitudinal fasciculus and the deep sensibility of the face were the research projects for which he was awarded the degrees of Master of Science and Doctor of Philosophy. With this background in surgery and the neurological sciences, he received an appointment as Junior Assistant in Surgery to Harvey Cushing, whose impact was lasting and profound. Cushing's style and manner pervaded Dr. Davis' approach to the care of patients, resident training and education, preparation of manuscripts, and his efforts as a biographer, author, and editor. Throughout his life, he spoke of the Cushing years with obvious admiration, pride, and gratitude. He returned to Chicago in 1925 to pursue clinical neurosurgery, research, and teaching.

The Laboratory and Lewis J. Pollock. The young neurosurgeon sought the clinical and investigative competence of Lewis Pollock, and the two men became life-long friends and clinical-scientific collaborators. Both were intrigued by Sherrington's experiments on decerebrate rigidity and they first developed the technique of anemic decerebration. There followed a series of eight papers between 1923 and 1931, which explored all aspects of this physiological problem. There were differences between the animal with traumatic midbrain transection and the one with an anemic infarct of the midbrain, pons, and anterior lobe of the cerebellum. The two preparations became known almost 30 years later as the gamma and alpha animals, respectively, because of the effects of posterior rhizotomy on the decerebrate posture. This ideal combination of the imaginative neurologist and the more technically oriented neurosurgeon authored together an early textbook on peripheral nerve injuries. Later, Dr. Davis and his neurosurgical fellows further refined the stereotaxic technique of Clarke and Horlesy, and studied the effects of hypothalamic lesions on control of carbohydrate metabolism and central sympathetic regulation. Davis' laboratory commitment spanned a 20-year period prior to World War II with only university and private research funding. In retrospect, the studies on decerebrate rigidity were exhaustive, but the stereotaxic method could have been pursued further with the possibility of applica-
tion of this technique to nervous system disorders in man.

Professor and Chairman. Loyal Davis became the Chairman of the Department of Surgery at Northwestern in 1932, at the age of 36 years, an age when the present generation of neurosurgeons have just completed their residencies. His years of dedicated laboratory and clinical work gave him unusual confidence and assurance which were assets in overcoming the difficulties inherent in establishing the first neurosurgical service in Chicago. He organized the Department of Surgery, which was composed of nonsalaried faculty who practiced surgery and generously gave time and effort to teaching medical students and residents; some were also active in the surgical research laboratory. The esprit de corps of the department was high, and Dr. Davis was proud of the voluntary efforts of his departmental members. These same men were later called upon to serve in the surgical division of 12th General Hospital, organized by Northwestern during World War II. Every medical student for over 30 years remembers vividly the Thursday afternoon "hour of charm." It was almost a survival course in which the student was required to apply basic science facts and knowledge to determine diagnosis and management. The same tactic was carried into clerkships, internships, and residencies along with a graduation of responsibilities. Dr. Davis became Professor Emeritus in 1963.

A Surgeon at War. In July, 1942, Dr. Davis was chosen by the Surgeon General's Office to be the Senior Neurosurgical Consultant to the European Theatre of Operations. The next 2½ years were probably the most difficult and frustrating of his professional life. He was not accustomed to loose lines of authority, and the inevitable "hurry up and wait" concept was foreign to his way of getting the job done. In his many tours of various hospital units and airfields in England, he recognized and solved the problem of high altitude frostbite, and later designed a plastic headgear for airmen. In these endeavors he had a strong ally in John Scarff, and their joint effort resulted in a lasting friendship. In organizing head-injury centers for the eventuality of D-Day, his request for neurosurgical instruments and suction units was answered by, "If it's not an all-day sucker, we are not sure what the Colonel wants." He unwisey leaked this bit of information to the press in London, and narrowly avoided court martial.

In July, 1943, he was a member of the first Surgical Mission to Russia, the purpose of which was to exchange information on the treatment of war injuries. His unconcealed skepticism about the merits of transfused cadaver blood, spinal cord regeneration, and efficacy of grafts for peripheral nerve injuries embarrassed the members of the Allied mission. He returned to civilian life in 1944, and was awarded the Legion of Merit in 1945.

American College of Surgeons. Except for the founders, it would be difficult to name one whose association with the American College of Surgeons has been so vital. After serving as an Associate Editor under Dr. Kanavel, starting in 1927, he edited Surgery, Gynecology and Obstetrics from 1938 to 1981. He became a regent in 1950, and Chairman of the Board of Regents in 1960. He was President of the College in 1963. His deep interest in enhancing surgical care and ethical standards found expression through his roles in the College and its journal. He was certainly the logical choice to write the Fellowship of Surgeons, the authoritative history of the College.

Later Years. Loyal Davis retired gradually and with considerable grace, continuing to write and maintain his active role with the College of Surgeons. The Principles of Neurological Surgery appeared in 1936, and was later published in several editions. He later edited Christopher's Surgery for a period of almost 20 years. The Stormy Petrel of Surgery, a biography of John B. Murphy, appeared in 1938, and was followed by an autobiography, the Odyssey of a Surgeon and From One Surgeon's Notebook. He was made an Honorary Fellow of the Royal College of Surgeons of England and Edinburgh. Recently, he was made a