On February 13, 1995, three months before his 98th birthday, our "Rock of Ages" Carl Tolman, 11th chancellor and one of the great people of Washington University left us.

Carl was a remarkable man, and until he had a severe stroke in January 1995, he retained his vibrancy and keen intellect. He had deep affection for Washington University. During his 68-year association, he served the university well in academic and administrative posts, including professor and chair of geology (earth and planetary sciences), dean of graduate school of arts and sciences, vice chancellor of faculties, and chancellor.

Born in 1897 to American parents in the Northwest Territories of Canada, Carl was one of eight children. His father and mother were both from Mormon families. In fact, Carl's grandfather and uncle took part in the trek from the old Mormon settlement in Nauvoo, Illinois, to Utah. Carl's folks were ranchers and emigrated to Canada in 1892 from Salt Lake City in search of more abundant range for their horses and cattle.

Carl's early schooling was at the Tolman School, which was established in their region after the land was surveyed and opened for homesteading. In 1910, he passed the public school learning examination, and his schooling was presumed over. He stayed and worked on the ranch until World War I, when, restless and seeking adventure, he enlisted in the Canadian Expeditionary Force.

In 1917, he was sent directly to the front line in France with the 50th Battalion of the 4th Brigade. Casualties were high in his battalion, and Carl sustained serious injuries from a grenade. He managed to survive and was taken as a prisoner of war. In 1919, he was finally released from Germany, but with serious residual health problems.

Nevertheless, his determination to "become a college man" motivated him to prepare for the Government University Matriculation examination. Because Carl had never attended high school, he had to first master subjects like algebra, geometry, and trigonometry. It was a daunting year for him, but in April 1920 he was one of the few to pass the entrance exam. Carl was on his way to his dream of a college education.

Carl attended the University of British Columbia, Vancouver, and while there he became fascinated with geology and met the woman who became his lifelong partner, Irene Robertson. During his undergraduate years, he began his association with the Geological Survey of Canada, working in their field parties during the summers. His work with them ignited and focused his interests (in Precambrian geology).

Carl graduated from the University of British Columbia in 1924 with first-class honors and went on to Yale University as a fellow and graduate assistant in geology. His research at Yale in the Chilco Lake District, eastern Coast Ranges of British Columbia, for his master's degree was an outgrowth of his field experience at the University of British Columbia. Carl continued on at
Yale and worked on the Sudbury district of Ontario, a world-class ore deposit. He was awarded his Ph.D. in 1927.

Immediately after receiving his doctorate, Carl embarked on the commitments, personal and professional, that shaped his life. He was appointed assistant professor of geology at Washington University and married Irene Robertson.

He now broadened his field geological investigations to include not only the Canadian Survey, but also the Quebec Bureau of Mines, the Missouri Geological Survey, and the U.S. Geological Survey. He concentrated his teaching activities during the winter and spent the summer months conducting field research. One summer, surveying in the Chibougamau District deep in the wilds of northern Quebec, he discovered a beautiful lake, several miles in length, which he named “Lake Irene”—and which he proudly pointed out to us “is now on the map.”

Carl's specialty was Precambrian and economic geology, so Washington University was a suitable location for him, situated so close to the St. François Mountains and some of the oldest terranes in the United States. His principal research contributions relate to investigations done on these rocks and mineral deposits, and in recognition in 1962 he was awarded an honorary Doctor of Science degree by the Missouri School of Mines (now University of Missouri, Rolla).

During World War II, Carl took a leave of absence from Washington University to work with the U.S. Geological Survey in South Dakota, Montana, and Colorado. He was then asked to serve in Washington, D.C., as a mineral specialist with the Foreign Economic Administration, a government organization involved with obtaining strategic foreign mineral resources.

At the end of the war in 1946, Carl was urged to accept an appointment with the U.S. Geological Survey, but fortunately for us he chose to stay on at Washington University. He was appointed chairman of the department and, shortly after that, dean of the graduate school. He served in both capacities until 1954, when he was appointed vice chancellor Dean of Faculties. In 1961, he was appointed chancellor and served until he reached 65, mandatory retirement age. Under his one-year stewardship as chancellor, he successfully steered the university through a time of transition and ended the year with a budget that was $30,000 in the black, after beginning with a deficit of $1.5 million.

In 1963, he accepted a senior foreign service position with the U.S. State Department as science attaché in Tokyo, where he had the responsibility of reporting on science and related matters in Japan and the Far East. When he finished this assignment in 1965, he transferred to the United Nations to manage a program in the Philippines designed to train mining engineers in modern mineral exploration methods and to establish a graduate geology program at the University of the Philippines.

When he returned to the United States in 1969, Washington University conferred upon him an honorary doctor of Science degree, which he added to the one he received from the University of Missouri.

In 1981, Carl's contributions to the field of geology were recognized with the Carl Tolman Symposium on Geology and Mineral Resources of the Precambrian St. François Terranes, Southeastern Missouri, sponsored by the Missouri Geological Survey in conjunction with the Geological Society of America annual meeting.

Carl's life, from early childhood on a cattle ranch through university chancellor to foreign government service, exemplifies his indomitable spirit, will, and determination to achieve his dreams and to be of service. He was a gentleman and a scholar pursuing his goals with kindness, affection, and respect.

Two quotes, one from a young student who had read a profile of the Tolmans in the Washington University Magazine (1994), the other from a tribute the current dean of faculties presented at Carl’s memorial service summarize much of what we remember about Carl.
"I want Mr. and Mrs. Tolman to know how their charming, humble, and affectionately humorous personalities made me smile. Sixty-seven years of marriage, their photograph, and 'Lake Irene' revealed to me the beauty in love and commitment." "I will always remember Carl Tolman as a man of experience and accomplishment, a man with a keen mind and an eagerness to be helpful, and also as a man with the wisdom to know when a bit of gentle humor was better than a stern lecture. His memory will be an inspiration for me, and for all of us who had the privilege of knowing him."

Carl, who is listed in past editions of Who's Who in America and Canadian Who's Who, was a Fellow of the Geological Society of America (councilor 1960–1963); the American Association for the Advancement of Science (vice president, chairman, Section E, 1995); the Mineralogical Society of America (councilor 1939–1942, vice president, 1946); and a member of Sigma Xi, the scientific honorary; Beta Phi, the engineering honorary; the Society of Economic Geologists; the American Association of Mining and Metallurgical Engineers; the National and the Missouri Society of Professional Engineers; Clayton Rotary Club; and Engineers Club of St. Louis.

Carl is survived by his wife, Irene Robertson Tolman; two daughters, Lexie Snyder of Severna Park, Maryland, and Joan Mayer of St. Louis, Missouri; seven grandchildren; four great-grandchildren; and scores of young and old friends who will dearly miss him.

Countless reports and some 40 publications resulted from Carl's geological work. A few selected publications are listed.

SELECTED BIBLIOGRAPHY OF C. TOLMAN


