

## **TWO LITTLE OLD MEN**

*By David A. Watson, Ph.D.*

Two old men died recently, many miles apart both literally and figuratively, and with no apparent connection to each other. The obituary for one of the two appeared in the Washington Post (and many other major newspapers), and the other was printed only in the Mattoon (IL) Journal-Gazette (a typical mid-western farm community daily of modest circulation). One of these gentlemen was a Nobel prize-winning scientist, and the other was a simple farmer. Both were human beings with many flaws, to be sure, but both were gentle souls, each possessing great intellectual curiosity and real concern for his fellow man. While on the surface they may seem to have had nothing in common, their lives both impacted mine. Let me tell you how and why.

The first of the two, Dr. Max Perutz, was awarded the Nobel Prize in Chemistry in 1962 for his pioneering work using a technique called X-ray crystallography to determine the three-dimensional structure of a vitally important protein of the blood known as hemoglobin. The work was slow, even tedious, but nonetheless groundbreaking. Professor Perutz was often quoted as saying that had he been required by his doctoral committee to solve the structure of the entire molecule as a condition of graduation, completing his dissertation would have been a 25-year task. The clear message for me as a budding scientist was that persistence pays off in science, just as it so often does in life. Also, that even a scientist as great in my eyes as he could be so humble was a profound revelation to me. Max also possessed intellectual curiosity in abundance, and admired it greatly in others. Consider, for example, the professor's best-known graduate student, Francis Crick (one half of the famous duo of Watson & Crick,

co-discoverers of the structure of DNA—for which they too won the Nobel Prize). It was my great privilege to have the opportunity, at a scientific seminar, to ask Dr. Perutz whether, on meeting Francis for the first time, he was as impressed with his future student as Crick was with him (as Dr. Crick has written in his own autobiography). “Yes—absolutely,” Max told me. Francis, he said, could generally be found sitting on the edge of his seat in the front row at lectures and seminars, always hungry for knowledge and never satisfied, and with a curiosity the likes of which Perutz had not seen before or since. For me, at that time a lowly graduate student, it was a strategy to live by. Then and now, I sit in front and ask lots of questions. How else can I fill the ever-present (and constantly re-appearing) gaps in my knowledge base?

The second little old man to whom I referred earlier was my Great Uncle, Mr. Millard Goodwin (named, by his mother, after President Fillmore). He was a dirt farmer who grew Illinois corn and raised Hereford cattle. My uncle never married, but was always a grandfather (in fact, if not in biology) to my brothers and me. We shared with him the upstairs of a drafty old farmhouse, hot in summer and cold in winter. For many years we barely tolerated his truly terrible squawking on the violin (but oh, to hear that racket one more time). Uncle Millard loved music but by his own admission was never an accomplished musician. One of his greatest traits, like Professor Perutz (and unappreciated by me as a child), was his genuine humility. He managed only an eighth-grade education, and considered himself a country bumpkin; my uncle was in fact insatiably curious about the world around him. Millard read ceaselessly and could converse authoritatively on a host of subjects, as diverse as e.g. plant grafting methods of commercial fruit-growers and violin-making techniques of the Renaissance masters.

From him I acquired an appreciation for the notion that it isn't necessary to hold a Ph.D. to desire to keep learning one's whole life. To Uncle Millard no amount of knowledge was ever sufficient, and no reason to acquire it was too trivial. Though he never accumulated wealth, he was rich in curiosity and he left me with an inheritance of inquisitiveness of inestimable value (which I am determined to pass on to my children).

This is my belated thank you card to both gentlemen for the elan with which they lived their lives. They will be missed, but their examples live on. The passing of each was sad, and perhaps the connection between the two was mine alone, but their legacies are strikingly similar, and joyous indeed!