



In Memoriam: Kenneth (Ken) C. Armstrong, PhD



Ken Armstrong was an Ontario boy, having grown up in the southwest corner of that province in Canada. He obtained his B.S.A. from the University of Guelph and his Ph.D. from Pennsylvania State University.

He joined the Cytogenetics Section of the Ottawa Research Station of Canada's Department of Agriculture (now Ottawa RDC, AAFC) in 1968. His first challenge was the cytogenetic analysis of *Bromus* spp.. He made major advances in the understanding of species relationships in that complex genus.

It then became clear that emerging problems in the cereals, primarily wheat and oats, required his expertise and he spent the rest of his career focused on those crops.

During that time, Ken mentored numerous visiting scientists, post docs, and students, many of whom went on to make significant contributions internationally. For example, Dr. Chiharu Nakamura became a Dean at Kobe University in Japan and Dr. Nam-Soo Kim became a Dean at Kangwon National University in South Korea.

Over time, Ken's research moved more into using molecular techniques. He achieved a number of "firsts" in this capacity. For example, his paper on the application of FISH (fluorescence *in situ* hybridization) technology to describe the 1B/1R translocation in wheat remains a classic.

In another example, Ken and Dr. Qianfa Chen (then a PDF) used *in situ* hybridization to show for the first time that the D genome of the genus *Avena* was actually a modified A genome. Through the 1990's, Ken was a part of the long-lasting and fruitful Quaker Oats Consortium, which funded that particular work and more at AAFC, USDA-ARS, Cornell University, the University of Minnesota, and Iowa State University.

Towards the end of his career, Ken used genomics to investigate *Fusarium* spp. resistance in wheat. He [retired in 2003](#).