



## Donald James Armstrong

March 14, 1937 - June 13, 2019

Donald J. Armstrong passed away at his home in Corvallis, Oregon on June 13, 2019 at age 82 after a prolonged battle with metastatic colon cancer. He is survived by his wife, Mary E. Kentula, and his son from an earlier marriage, J. West Armstrong.

Don was born at home, on a farm in Marshall County, West Virginia, in 1937. He was the third of four children born to Wiley Vernard Armstrong and Ethel M. Junkins Armstrong. After abandoning farming when Don was 5 years old, his father worked as a blue-collar laborer, primarily in a lumber yard, until his retirement. Don's mother had been a school teacher in a one-room school in Marshall County prior to her marriage, after which she became a full-time house-wife. Both parents placed a high value on education, although his father had received only an 8th grade education, and his mother had only enough normal school training beyond the 8th grade to enable her to pass an exam that qualified her for a teaching certificate.

Don graduated from Sherrard High School, a small rural school located near Wheeling, West Virginia, in 1954. His interest in science was fostered and supported by Stanley Ash, his high school science teacher, who became a long-time friend. It was Mr. Ash who turned Don's innate interest in science to biological problems. Don was the first of his family to attend college, entering Marshall University (then Marshall College), in Huntington, West Virginia, in the fall of 1954. This was the first year that Marshall became racially integrated, and Don commented that this transition occurred without any notable incident on campus other than Coach Cam Henderson's successful recruitment of Hal Greer, a future NBA Hall of Fame player, to join the basketball team. Unfortunately, it took much longer for the City of Huntington to integrate. At Marshall, Don majored in secondary education with teaching fields in both biological and physical science and came under the influence of Dr. Howard Mills, who focused Don's attention on plant physiology. After a semester break to work in the analytic chemistry laboratory at Wheeling Steel Corporation, Don graduated from Marshall in January, 1959. He taught at Peterstown High School in the southern part of West Virginia for the remainder of that academic year. In the fall of 1959, he accepted a position as a part-time instructor at the Marshall University

Laboratory School (an elementary and secondary school used in Marshall's teacher training program) and began work on a master's degree in biological science, which he completed at Marshall University in 1961. In the fall of that year, he began work on a Ph.D. program in the Department of Botany at the University of Wisconsin, Madison. He married Judith McComas in 1961, and they were subsequently divorced in 1977.

At Wisconsin, Don majored in plant physiology and conducted his Ph.D. thesis research under the direction of Dr. Folke Skoog, who was a pioneer in plant hormone and tissue culture research. Don had enormous respect and affection for Dr. Skoog, who became a lifelong mentor and friend. Don's thesis research focused primarily on an examination of the occurrence and distribution of hyper-modified bases that occur in transfer RNA. After completing his Ph.D. in 1967, he remained at Wisconsin as a post-doctoral associate in Skoog's lab for an additional year, and then secured a National Science Foundation Post-Doctoral Fellowship to join the laboratory of Dr. Gordon Tener at the University of British Columbia in Vancouver, Canada. Dr. Tener was well known for his pioneering work in developing chromatographic methods for the fractionation and purification of oligonucleotides and transfer RNA species. Tener's work played a key role in facilitating early successes in nucleic acid sequencing. After two years in British Columbia, Don returned to the University of Wisconsin as a post-doctoral associate in Dr. Skoog's laboratory. At that time, the laboratory had just been severely damaged by the truck-bomb explosion that destroyed the nearby Army Math Center. The bombing was carried out by activists opposed to the Vietnam War. However, the laboratory was soon back in operation, and Don continued there until accepting a faculty position in the Department of Botany and Plant Pathology at Oregon State University (OSU) in 1974.

At OSU, Don was responsible for the undergraduate course in plant physiology, as well as participating in the introductory biology course, and serving as an undergraduate advisor. His research program at OSU focused on the metabolism and mechanism of action of the group of plant hormones known as cytokinins. In 1984, he married Mary Kentula and shortly thereafter obtained a National Institutes of Health Senior Fellowship to support a year of sabbatical leave in Dr. Richard Firtel's laboratory at the University of California La Jolla Campus in San Diego. In Firtel's laboratory, he investigated a cytokinin-active compound produced by the cellular slime mold, *Dictyostelium discoideum*, that is used by the organism to regulate spore germination. During this period, Mary conducted post-doctoral research in wetland ecology under the direction of Dr. Joy Zedler, then at San Diego State University. Returning to Corvallis in the fall of 1985, Don resumed his teaching and research responsibilities at OSU, and Mary was subsequently hired as a wetland research ecologist at the Environmental Protection Agency's laboratory in Corvallis, where she continues to work. In 1997, Don accepted a part-time administrative

post as Associate Chairperson in the Department of Botany and Plant Pathology, and he continued in this position until his retirement in 2003.

After retirement, Don remained active in research for another dozen or so years, working on an interdisciplinary project involving the purification and characterization of unusual amino acid analogs that are produced and secreted by certain plant-associated soil bacteria. This research was carried out in close collaboration with Mark Azevedo in Dr. Gary Banowitz's laboratory at the US Department of Agriculture's Crop and Forage Seed Production Research Unit on campus. It also involved colleagues in both the College of Science and the College of Pharmacy at OSU, particularly Dr. Dallice Mills and Dr. Kerry McPhail, respectively.

Don was an omnivorous reader and collector of both fiction and non-fiction books, a trait which he shared with his father, and he leaves behind a considerable library. He also had a long time interest in sports and followed closely the fortunes of the OSU football, basketball, and baseball teams. He loved the Oregon coast, particularly the region around Yachats, and he and Mary were frequent visitors there. Most of all, he enjoyed attempting to solve the puzzles presented to him by the organisms he studied in his laboratory, and it was with regret that he had to abandon some of the problems on which he was working shortly before his cancer diagnosis.

Memorial contributions may be made to the Samaritan Evergreen Hospice House at 4600 Evergreen Street SE, Albany, OR 97322.

# Tribute Wall

JA

“ Don and I originally met in the 1990s through our involvement in local neighborhood and land use issues. He was always thoughtful and ready with a smile. His wife Mary Kentula helped me out at an early community wetland conference. Over the years I'd run into Don at the co-op and it was always a pleasure to see him. He was a wonderful guy. I send my condolences to Mary and his family. Jenny Ayotte

---

**Jennifer Ayotte** - June 24, 2019 at 09:59 AM

BB

“ I am so sorry to hear of Dr. Armstrong's death. He was such a good person. I was a student in his plant physiology class in the late 1980's. Dr. Armstrong hired me as a work study student in his lab. He encouraged me to go to graduate school. Without his encouragement I would never have considered continuing on after finishing my bachelor's degree. Dr. Armstrong wrote a letter of recommendation for me and I went on to get a PhD in toxicology. He was such a kind and caring person and a great mentor to me. He never lost his West Virginia accent and never forgot his humble upbringing. He will be missed.  
-Bonnie Bailey

---

**Bonnie Bailey** - June 21, 2019 at 09:31 AM

 Barbara Reed

“ So sorry to hear of Don's passing. I worked in his lab in the 1980' and greatly admired his scientific expertise and wry humor.

*Barbara Reed*

---

**Barbara Reed** - June 18, 2019 at 02:36 PM