

ASPB Pioneer Member

Sharon R. Long

Sharon R. Long is the William C. Steere, Jr. - Pfizer Inc. Professor in Biological Sciences in the School of Humanities and Sciences at Stanford University. She was a pioneer in the study of plant-microbe interactions, especially in using molecular biology and other methods to dissect the molecular communication underlying the symbiotic relationship between nitrogen-fixing bacteria and their plant hosts. This communication results in plant organogenesis, creating the novel root nodules where efficient nutrient exchange and nitrogen fixation can occur. Her pioneering work has implications for agricultural sustainability since biological nitrogen fixation is a major input to agricultural ecosystems.

The breadth of her curiosity and intellect has been demonstrated throughout her academic career. Long graduated from the California Institute of Technology (CIT) with a double major in Biochemistry and French literature, being one of the first undergraduate women at CIT. She has been honored often for



her research in both plant biology and microbiology, including the Charles Albert Shull Award from the American Society for Plant Physiology and the Selman A. Waksman Award in Microbiology from the National Academy of Sciences. She has received a McArthur Fellowship, is a member of the National Academy of Sciences, and was an Investigator of the Howard Hughes Medical Institute.

Professor Long's strength and impact as a leader have been seen

not just in pioneering science but also in service on numerous advisory boards and on editorial boards for both plant and microbe-oriented journals. She served as the Dean of the School of Humanities and Sciences at Stanford University for six years. Long's leadership and commitment to excellence in teaching were recognized having received the Dean's Award for Teaching Excellence in the School of Humanities and Sciences on more than one occasion.

Long's enthusiasm and love of science has been inspirational and engaging. Many who studied under her are amazed at her ability to recall details from obscure decades old research or the plot to an opera. She asks questions and is constantly wondering how to move to the next step but is also exploring how the person she is talking to might help shape that next step. Notably, she was a leader of the international collaboration that determined the genome sequence of her favorite microorganism, at a time when this technical challenge was really a challenge.