Dr. Roberta Fulthorpe Biography

Dr. Fulthorpe is a Full Professor at the University of Toronto Scarborough, where she has been researching the genetics and metabolic capabilities of bacteria associated with soils, water and plants since 1994. Between 2012 and 2017 she was Graduate Chair in the Department of Physical and Environmental Sciences of University of Toronto Scarborough. Dr. Fulthorpe has published over 83 articles in peer reviewed journals, contributing new knowledge of the importance of bacteria to the breakdown of toxic organic chemicals in soils, natural water and waste water treatment systems, with a focus on understanding the evolution and dissemination of bacterial catabolic genes.

Much of this work centered on a global collection of catabolic bacteria in the Burkholderiacea – their geographic patterns and mechanisms of gene exchange, studying bacterial genome features and of proving the highly transferable nature of beneficial genes. In delving deeper into their capabilities, she realized that these highly versatile bacteria were naturally occurring endophytes, and that plants play an important role in their adaptations. Since that time, she has developed expertise on the study of endophytic bacteria in several different habitats, from the contaminated vegetation of Oil Springs Ontario to endemic tropical species found in isolated parts of the Caribbean.

Dr. Fulthorpe has supervised more than 60 graduate and undergraduate students throughout her career, held a position of Chair Graduate Chair of the Department of Physical and Environmental Sciences of University of Toronto Scarborough (2012-2017). In 2002, she was awarded the Fisher Award for Outstanding Contributions to Research in Microbiology by the Canadian Society of Microbiology.