



Member Profile

Dr. Connell McCluskey, Affiliated Member

Dr. Connell McCluskey, affiliated member of the Institute, advances research within two priority research themes of the Institute. He is involved with the Tecton 2: Life Sciences, Biotechnology and Bioinformatics as well as Tecton 5: Ecology, Climate and Environmental Sciences.

Dr. McCluskey joined the Institute in 2014. In 2005 he came to Laurier where he is now an Associate Professor in the Department of Mathematics. He received his PhD in Mathematics and his MSc in Applied Math from the University of Alberta. In 2002 Dr. McCluskey won the Doctoral Dissertation Award from the Canadian Applied and Industrial Mathematics Society. He also has a highly cited paper titled Complete global stability for an SIR epidemic model with delay – Distributed or discrete.

His research interests lie in functional differential equations, delayed differential equations as well as global stability models. He also has an interest in Lyapunov functionals and mathematical epidemiology. Some examples of past and present projects include using Lyapunov functions to build Lyapunov functionals. He also has experience modelling the spread of diseases, in particular tuberculosis and nosocomial infections.

Dr. McCluskey's research is funded by a National Science and Engineering Research Council Discovery Grant. He primarily teaches differential equations and multivariable calculus at Wilfrid Laurier University. At the Master's level, he is focused on mathematical biology. Dr. McCluskey welcomes inquiries from potential students. Positions exist at the senior undergraduate level with topics in differential equations, mathematical biology or the history of math. At a Master's of Science level opportunities exist in differential equations, mathematical biology and stability analysis. He is also the Graduate Officer for the Mathematics Department at Wilfrid Laurier University.

