

Santiago Schnell, DPhil (Oxon), FRSC

Dr. Santiago Schnell earned his undergraduate degree in biology from Universidad Simón Bolívar (Venezuela), and then his doctorate degree in mathematical biology from the University of Oxford (United Kingdom) in 2002. Dr. Schnell held two prestigious research positions at the University of Oxford between 2002-2004: Junior Research Fellow at Christ Church (a college of Oxford) and Senior Research Fellow of the Wellcome Trust at the Wolfson Centre for Mathematical Biology. He was appointed as an assistant professor at Indiana University in 2004, and joined the faculty at the University of Michigan in 2008 as an associate professor in the Department of Molecular & Integrative Physiology, and a William K. Brehm Investigator at the Michigan Comprehensive Diabetes Center. In 2013, he was jointly appointed as associate professor in the Department of Computational Medicine and Bioinformatics. He was promoted to professor in both departments in 2015, appointed as the John A. Jacques Collegiate Professor of Physiology in 2016, and interim chair of the Department of Molecular & Integrative Physiology in 2017.

In Dr. Schnell's research group, they combine chemical kinetics with mathematical, statistical and computation methods to develop rigorous approaches to measure the rates of biochemical reactions and distinguish their molecular mechanisms under physiological conditions. His primary focus is developing standard-based approaches to investigate and measure the rates of enzyme catalyzed reactions. His work has substantially altered the view of measuring and modeling enzyme-catalyzed reactions within cells, where the environment is heterogeneous and characterized by high macromolecular content.

An internationally renowned theoretical biophysical chemist and mathematical biologist, Dr. Schnell has published over 125 peer-reviewed publications, one book and has received multiple awards in recognition of his research and teaching endeavors. He is Fellow of the Royal Society of Chemistry, the American Association for the Advancement of Science, the Society for Mathematical Biology, and the Latin American Academy of Sciences. He is also a US National Academy of Medicine Emerging Leader in Health and Medicine. Dr. Schnell has remained funded by external and internal sources throughout his career. He is Editor-in-Chief of Mathematical Biosciences, and served as associate director of the Indiana University Biocomplexity Institute and President of the Society for Mathematical Biology.