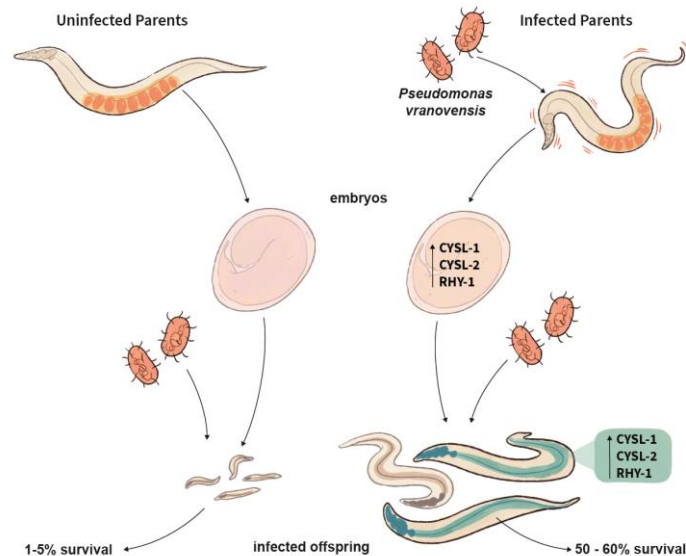




Laboratory of Genetics Faculty Candidate



Maternal Forewarning: Mechanisms and Evolution of Intergenerational Plasticity

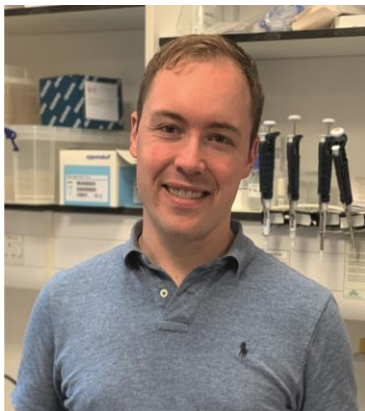


Thursday, March 5, 2020 @ 10:30 AM

Room 1111 Genetics/Biotech, 425 Henry Mall

Nick Burton

Research fellow in the Centre for Trophoblast Research at the University of Cambridge



Dr. Burton received his BS in Biology from the University of Wisconsin-Madison in 2009 and a PhD in Biology from MIT in 2017. He is currently an independent research fellow in the Centre for Trophoblast Research at the University of Cambridge. Nick is interested in how a mother's environment can affect the development, physiology, and behavior of her offspring. In particular, he is interested in how maternal exposure to specific environmental stresses, such as osmotic stress and pathogen infections, can lead to programmed adaptations in offspring in diverse species, also known as predictive adaptive responses. Using *C. elegans* and other nematodes, his research aims to (1) identify new models of the effects of maternal environment on offspring, (2) use genetic and systems biology approaches to determine the molecular mechanisms by which maternal environment affects offspring, and (3) investigate whether the molecular

mechanisms identified in nematodes also mediate the effects of maternal environment on offspring in mammals, such as observations of fetal programming in humans and mice.

Host: David Wassarman