

I'm fascinated by fungi – their life cycles, their regulatory mechanisms, and their impact on human health and society. I channel my fascination by fungi into my investigation of *Cryptococcus neoformans*. This environmental basidiomycete is evolutionarily close to mushrooms. This fungus enters the host through inhalation, and it can stay dormant in the human lungs for decades. However, in immunocompromised patients, *Cryptococcus* disseminates and invariably causes fatal meningitis, claiming ~200,000 people's lives each year. In this seminar, I will talk about our discoveries of a novel mode of sexual cycle and how it might lead to better understanding of cryptococcal latency and reactivation. I will also present our finding on the regulation of cryptococcal morphogenesis and how it might help us identify potential vaccine candidates against cryptococcosis.