



Department of
Biomedical Engineering
UNIVERSITY OF WISCONSIN-MADISON

McClellan Lab

PhD and Postdoctoral Positions

The McClellan lab works at the interface of engineering, cell biology, and genetics to understand how cells convert information about the environment into the activity of intracellular effectors, such as transcription factors or metabolic enzymes, in order to generate an appropriate cellular response. A cell “knows” only so much about an external signal as is transmitted through the appropriate signaling pathway to a downstream effector. Our lab builds and uses optogenetic tools to manipulate these signaling pathways and effectors to understand how information is transmitted and interpreted within and between cells. Heterogeneity in this signaling or the decisions of individual cells can have important implications for downstream cellular processes. *These questions represent critical gaps in our understanding of how healthy and diseased cells respond, or make decisions, in response to stimuli and the effects of these responses on disease progression.*

Our lab focuses on pathogenic fungi and fungal communities as important organisms in which to address these questions in biological signal processing.

Application Process:

Potential PhD students and postdoctoral candidates can find more information on research in the McClellan Lab at mcclellanlab.bme.wisc.edu or contact Prof. McClellan directly at mmcclellan@wisc.edu