I received a B.S. degree in applied mathematics from Metropolitan State University in St. Paul, MN, an M.A. degree in mathematics from Minnesota State University in Mankato, MN, and a Ph.D. degree in mathematics from Utah State University in Logan, UT in 2006, 2010, and 2016, respectively. I have been an Assistant Professor in the Department of Mathematics and Computer Science at St. Mary’s College – Notre Dame since 2016. While at St. Mary’s, I developed the course *Mathematics for Sustainability* which focuses on quantitative approaches to real-world, topical problems pertaining to environmental sustainability (such as renewable energy, organic agriculture, and climate change) and social justice (such as equitable distribution of resources, implicit bias, and gerrymandering).

As a mathematical biologist, I study host-pest interactions involving population growth and spread using integrodifference equation (IDE) models. Using periodic traveling wave theory and asymptotic techniques, I derive analytic predictions of outbreak severity, frequency, and invasion speed in variable landscapes. Recently, I have adapted these techniques to predict addiction relapse frequency by exploiting multiple time scales in fast-slow dynamical system models of the neurobiology of addictive disorders.

My time at St. Mary’s, a women’s college, has had a profound impact on my teaching/research/mentoring philosophy with regard to inclusion of underrepresented groups in STEM fields. One of my most rewarding experiences was helping with Hypatia Day – an outreach program aimed at encouraging middle school girls to pursue STEM. I also lead a *Mathematics of Social Justice* workshop in a Diversity and Leadership Conference workshop at St. Mary’s that explored how personal biases can lead to major societal consequences such as segregation, which subsequently enables gerrymandering schemes.