

BEER 2016 Abstract for Education Minisymposium

Title: Adventures in Teaching Agent-Based Modeling

Abstract: As agent-based modeling has become more prominent in mathematical biology research, many math and life-science professors are experimenting with introducing agent-based modeling into the classroom. Agent-based modeling can be a powerful tool for introducing the concepts of mathematical and computational modeling and demonstrating how to link models to data. This talk will present the incorporation of agent-based modeling into a discrete math modeling class at Rhodes College including getting students started with NetLogo, common student difficulties with model implementation and thinking in terms of algorithms instead of equations, how to keep your grading load manageable, and how to assess student learning. Additionally, this talk will review the insights gained from participating in the QUBES Hub Mentoring Network on Teaching Quantitative Biology with Agent-Based Models and NetLogo.