"From interaction maps to dynamical models with Cell Collective: A hands-on tutorial"

Tomas Helikar¹

University of Nebraska-Lincoln, Lincoln, United States¹

The tutorial will be hands-on throughout. The first part will comprise of an overview of logical modeling and Cell Collective (and its previous applications). The second (larger) part will be spent by having attendees construct and simulate their own models in Cell Collective. Ideally, attendees come with a disease or biological process that they would like to model -- this way they can leave the tutorial with a starting point of a model. For those who just want to learn about the technology (and don't have a biological system in mind), we have a curriculum that will enable them to get familiar with the technology by constructing and analyzing the dynamics of a model of the lac operon regulatory system.