To survive catastrophic external challenges, bacterial populations exploit phenotypic diversity – a strategy known as “bet hedging.” Cancer cells may employ a similar strategy to survive the initial onslaught of anticancer therapeutics. Here, I describe the biochemical basis for phenotypic plasticity within the framework of “Waddington landscapes,” present evidence for its role in anticancer drug resistance, and discuss initial work toward constructing a computational model of the biochemical machinery underlying cellular responses to external perturbations.

Wednesday
October 10, 2018
4:00 p.m.
512 Light Hall

This lecture series features the most promising young scientists who are making notable discoveries as postdoctoral fellows or early career faculty.