
Seminar 2016



Ned Wingreen

Professor of Molecular Biology
Associate Director Lewis-Sigler
Institute for Integrative Genomics
Princeton University

Why so many feedbacks in *Vibrio harveyi* quorum sensing?

Bacteria are social organisms - they communicate in a process called "quorum sensing" to orchestrate group behaviors. Quorum sensing relies on the production, detection, and response to the extracellular accumulation of signaling molecules called autoinducers. We speculate that the use of multiple autoinducers and feedbacks allows a growing population of cells to synchronize gene expression during a series of distinct developmental stages.

Getting together: What can enzyme clustering do for metabolism?

Metabolism is the set of enzymatic reactions that cells use to generate energy and biomass. Interestingly, recent studies suggest that many metabolic enzymes assemble into large clusters, often in response to environmental conditions. Our studies establish a quantitative framework to understand coclustering-mediated metabolic channeling and its application to both efficiency improvement and metabolic regulation.

Full abstract.

<http://laufercenter.stonybrook.edu/>

Friday May 20, 2016

2:30 PM

Laufer Center Lecture Hall 101

Host: Jin Wang

Refreshments following seminar

