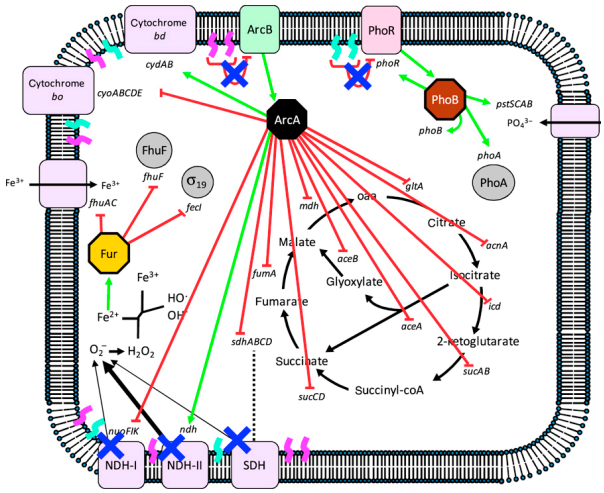
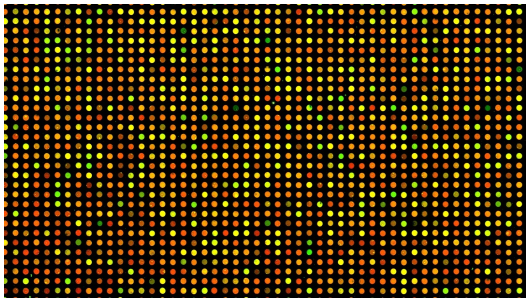
Genetics: Bacterial regulatory networks
HMC Biology 164 Spring 2011

This course is an **upper-division seminar** focusing on current concepts and approaches in the study of how bacteria regulate the expression of their genes. We will read and discuss papers from the primary scientific literature, identify important unanswered questions in this field, and propose approaches to answer those questions. Activities will include student-led discussions, presentations, and writing assignments based on research in the primary literature.

Topics may include:

Regulation of virulence gene expression
Microarrays, ChIP-chip and RNA-seq
Two-component regulatory systems
Alternative sigma factors
Regulatory RNAs
Quorum sensing
Small molecule regulators
Nucleoid-associated proteins
Regulation of horizontally acquired genes
Modeling of regulatory networks





Details:

Tuesday and Thursday, 1:15-2:30
Prof: Dan Stoebel, HMC
Prerequisites: Biology 54 and 113 or permission of the instructor