

Micro 201:
Bernhardt Lecture 8 - Bacteria vs Bacteria
February 21, 2019

Overview:

For this class period we will shift gears from the battle between bacteria and phages to systems designed to help bacteria compete with each other for nutrients. Many types of competitive system have been discovered over the years, from the classical colicin toxins secreted by some *E. coli* species to kill others, to the more recently discovered molecular speargun encoded by the Type VI secretion system. Some of these systems will be discussed in our short lecture, while our paper discussion will focus on contact-dependent inhibition (CDI) systems.

Papers for discussion:

- 1) Aoki, S.K. (2005) **Contact-Dependent Inhibition of Growth in Escherichia coli**. *Science* **309**: 1245–1248.
- 2) Ruhe, Z.C., Subramanian, P., Song, K., Nguyen, J.Y., Stevens, T.A., Low, D.A., Jensen, G.J., Hayes, C.S. (2018) **Programmed Secretion Arrest and Receptor-Triggered Toxin Export during Antibacterial Contact-Dependent Growth Inhibition**. *Cell* **175**: 921–933.e14.