

Abstract: Biofilms represent an important mode of life for the human pathogen *Vibrio cholerae*, providing protection from environmental stressors and enhancing colonization in the human host. We utilized transcriptome profiling, tissue clearing methods, and microscopy to demonstrate that biofilm grown cells upregulate virulence genes and have different spatial colonization patterns in the gut when compared to non-biofilm grown cells. These differences contribute to the biofilm's ability to cause more severe disease. We also present our current work investigating how bacteria compete with one another within biofilms, demonstrating that key regulators, biofilm components, and initial seeding dynamics all influence the competition dynamics within biofilms.

Teschler JK, Singh PK, Jiménez-Siebert E, Drescher K, and Yildiz FH. VxrB modulates T6SS-mediated competition within *V. cholerae* biofilms. In preparation for submission to PNAS. 2021.

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