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## Abstract

**"Hunting for new biofilm regulators in *P. aeruginosa*"**

Biofilms formed by *Pseudomonas aeruginosa* often resist antimicrobial therapies and remain a substantial therapeutic challenge. The development of effective anti-biofilm strategies requires a greater understanding of the pathways by which biofilm formation and disintegration are regulated within cells. However, many of these pathways remain uncovered. We are seeking additional components of the *P. aeruginosa* biofilm signaling network by deploying visual transposon screens that use colony wrinkling as a proxy for biofilm formation. I will describe these screens, which have identified and continue to identify genes with previously unappreciated roles in biofilm formation. The proteins encoded by these genes appear to represent a diversity of mechanisms, highlighting the breadth of the biofilm signaling network in this versatile pathogen.

## Bio-Summary

**Matthew Cabeen** is interested in the fundamental biology of bacteria. He earned B.S. degrees from the University of Connecticut in Molecular Cell Biology and Diagnostic Genetic Sciences. He completed his PhD in Molecular, Cellular and Developmental Biology at Yale University with Christine Jacobs-Wagner and his postdoctoral work at Harvard University with Rich Losick. He opened his lab at Oklahoma State University in 2017 in the department of Microbiology and Molecular Genetics and is a member of the Oklahoma Center for Respiratory and Infectious Diseases (OCRID). He teaches

Introductory Microbiology and a course in antibiotic mechanisms and resistance. He presently mentors three graduate students and eleven undergraduates. Please visit cabeenlab.okstate.edu or follow us on Twitter @CabeenLab for more information.