

Biofilms and *Enterococcus faecalis* biology

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NNIN Facility utilized: Characterization Facility

SPECIFIC AIMS

- 1. Identify important genetic determinants of biofilm formation
- 2. Use genes identified in 1 as reporters to set up screens to ID their regulators.
- 3. Characterize biofilm architecture by SEM, other microscopic techniques.
- 4. Examine virulence of selected biofilm mutants in endocarditis model.

Publications

Kristich, C.J., Nguyen, V.T., Le, T, Grindle, S., and Dunny, G.M. 2008. Development of an efficient system for random mariner transposon mutagenesis of the *Enterococcus faecalis* chromosome: isolation of insertion mutants affecting biofilm formation. *Appl. Environ. Microbiol.* 74: 3377-3386.

Ballering, K.S. Kristich, C.J., Grindle, S. M., Oromendia, A., Beattie, D.T. and Dunny, G.M. 2009. Functional genomics of *Enterococcus Faecalis*: multiple novel genetic determinants for biofilm formation in the core genome. *J. Bacteriol.* 191: 2806-2814.

