

## Assistant Professor Chris Sham's Representative Publications

Chamakura KR, Sham LT, Davis RM, Min L, Cho H, Ruiz N, Bernhardt TG, Young R (2017). A viral protein antibiotic inhibits lipid II flippase activity. **Nature Microbiology**, 2:1480-84.

Meeske AJ, Sham LT, Kimsey H, Koo BM, Gross CA, Bernhardt TG, Rudner DZ. 2015. MurJ and a novel lipid II flippase are required for cell wall biogenesis in *Bacillus subtilis*. **PNAS**. 112:6437-42.

Sham LT, Butler EK, Lebar MD, Kahne D, Bernhardt TG, Ruiz N. 2014. Bacterial cell wall. MurJ is the flippase of lipid-linked precursors of peptidoglycan biogenesis. **Science**. 345:220-2.

Sham LT, Jensen KR, Bruce KE, Winkler ME. 2013. Involvement of FtsE ATPase and FtsX extracellular loops 1 and 2 in FtsEX-PcsB complex function in cell division of *Streptococcus pneumoniae* D39. **mBio**. 16:e00431-13.

Kocaoglu O, Calvo RA, Sham LT, Cozy LM, Francis S, Lanning BR, Winkler ME, Kearns DB, Carlson EE. 2012. Selective penicillin binding protein imaging probes reveal substructure in bacterial cell division. **ACS Chem Biol**. 7:1746-53.

Sham LT, Tsui HCT, Land AD, Barendt SM, Winkler ME. 2011. Recent advances in pneumococcal peptidoglycan biosynthesis suggest vaccine and antimicrobial targets. **Curr Opin Microbiol**. 15: 194-203.

Sham LT, Barendt SM, Kopecky KE, Winkler ME. 2011. Essential PcsB putative peptidoglycan hydrolase interacts with the essential FtsX<sub>Spn</sub> cell division protein in *Streptococcus pneumoniae*. **PNAS**. 108:E1061-1069.

Barendt SM, Sham LT, Winkler ME. 2011. Characterization of mutants deficient in the L,D-carboxypeptidase (DacB) and WalRK<sub>Spn</sub> (VicRK) regulon involved in peptidoglycan maturation of *Streptococcus pneumoniae* serotype 2 strain D39. **J Bacteriol** 193: 2290-2300.

Barendt SM, Land AD, Sham LT, Ng WL, Tsui HC, Arnold RJ, Winkler ME. 2009. Influences of capsule on cell shape and chain formation of wild-type and *pcsB* mutants of serotype 2 *Streptococcus pneumoniae*. **J Bacteriol** 191: 3024-3040.