

## Poster Presentation

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*Investigation of potential drug targets involved in antibiotic sensing and cell wall modification*

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The emergence of an increasing number of broad-spectrum antibiotic resistant bacteria such as MRSA over the last decade has made the understanding of the mechanisms underlying resistance critical. Resistance very often involves enzymes associated with the cell wall, a common target of antibiotics. Here we investigate the structure and function of enzymes involved in antibiotic sensing and cell wall modification, while using a customized “cell-free” protein synthesis approach to obtain sufficient yields of promising but difficult-to-express antibacterial drug targets.

**Keywords:** Cell wall, enzymes, resistance