ORGANIC SEMINAR

Disruption of c-di-AMP Signaling in Bacteria

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c-di-AMP is a second messenger molecule used by many different types of bacteria which are of clinical interest. The Sintim lab has long been interested in the disruption of c-di-AMP signaling in bacteria to mitigate infections. Specifically, I will discuss efforts towards developing small molecule inhibitors of c-di-AMP degrading enzymes in both Borrelia burgdorferi (Bb) which causes Lyme disease and Mycobacterium tuberculosis (Mtb) which causes tuberculosis. Small molecules which inhibit these targets of interest were discovered utilizing a high-throughput screening assay developed by our group and then further optimized through the synthesis of structural analogs of the Hit(s).



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