## Exploitable research results of the OH-C $_{\alpha}$ project

## Presently, due to IP issues, we cannot provide in-depth information about the exploitable results of the project

Our work which was provides strong evidence for a novel class of inhibitors which affect both hydroxylation and catalysis. Crystallographic, enzymatic and *in silico* studies reveal that the closely intertwined self-hydroxylation and deacetylation mechanisms that provide convenient targets for the new inhibitors. Hydroxylation levels and the deacetylation activity of peptidoglycan deacetylases are both significantly reduced by this new inhibitor class. These inhibitors can thus provide a basis for novel antibacterial agents against pathogens such as *B. anthracis*, *B. cereus* etc that depend on peptidoglycan deacetylases (PDAs) in various critical mechanisms, including the evasion of the host innate immune system.



Co-crystals grown from a complex between one of the PDAs studied and one PDA inhibitor discovered in the  $OH-C_{\alpha}$  project