

Identification of Small Molecule Inhibitors of Anthrax Lethal Factor

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Anthrax, an infectious disease resulting from exposure to the Gram positive bacteria *Bacillus anthracis*, has been known since antiquity. The recent use of anthrax spores in the US mail attacks in 2001 clearly demonstrated a new threat of this old disease as an agent of bioterrorism. Although vaccination prior to infection, or treatment with antibiotics immediately after exposure can be effective in minimizing fatalities, treatment of late-stage infection remains an unmet challenge. As a result, we have been working towards the identification of small molecule inhibitors of anthrax lethal factor as a means to combat the toxemia believed to be responsible for the deaths due to anthrax exposure. This presentation highlights our approach to this problem and some of the results of our recent work.