

Mighty biosynthetic chemistry of bacterial small molecules

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Pathogenic bacteria make bioactive small molecules that possess unique structures and activities, including antibiotics, toxins, and signaling molecules. These molecules serve important functions in the physiology and virulence of the bacteria, but most remain uncharacterized and thus overlooked. This talk describes the biosynthesis of bioactive small molecules, including a copper-containing antibiotic, in the opportunistic human pathogen *Pseudomonas aeruginosa*. Identification of novel small molecules by means of synthetic biology and chemical elicitation will also be discussed.