# Deciphering and Engineering of the Biosynthetic Pathways of Microbial Small Molecules for Drug Discovery

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Natural small moelcules derived form micobes have been a major source for drug-discovery. Structural modification and generation of chemical diversity of microbial natural products through characterization and engineering of their biosynthetic pathways provides great opportunities to develop natural product analogs with improved/altered biological activities. In this presentation, I will discuss some successful examples of the pathway characterization and engineering for the discovery of new drug leads. Although traditional chemical methods will still play an indispensable role in drug discovey, engineered biosynthesis reinvigorated with synthetic biology tools can be an efficient alternative approach to provide new lead compounds that would be impractical to access by chemical methods alone.

**References**

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