

CHEMISTRY DEPARTMENT SEMINAR

Biochemistry and Synthetic Biology of Peptide Biosynthesis

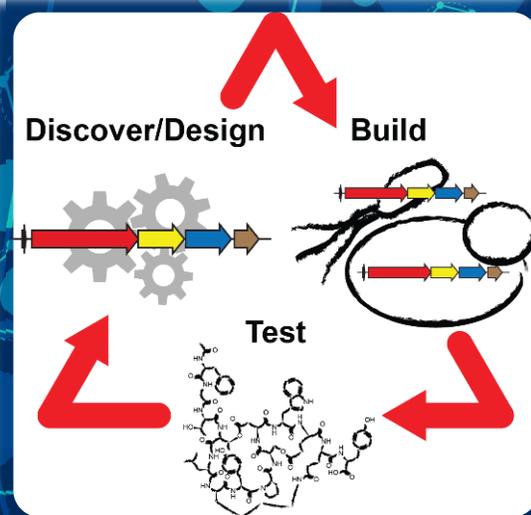
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Compounds made by living systems, or natural products, have had a tremendous impact on society, with applications ranging from materials to medicine. Despite over a century of extensive efforts to identify and characterize new natural products, the explosion in genome sequence information over the past two

decades has revealed that we have characterized the products of only a small fraction of biosynthetic pathways that exist in nature. These findings highlight that the majority of natural product chemical space remains to be explored. Furthermore, nature has likely not evolved a natural product with every activity society may desire from a natural product-like compound. The research in my group focuses on developing a deeper understanding of how peptide-based natural products are biosynthesized, with the goal of harnessing this biosynthetic machinery to produce new chemicals that are beneficial to society. This talk will focus on our efforts in a number of these areas.



February 27th @2 pm – Lopez 106