

Departmental Seminar Announcement

Natural product-inspired novel antibacterial agents

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The continuing emergence and prevalence of multidrug resistant bacterial pathogens, including extensively drug resistant tuberculosis, methicillin resistant *Staphylococcus aureus*, fluoroquinolone resistant *Pseudomonas aeruginosa*, and hypervirulent and recurrent *Clostridium difficile*, have become a serious public health threat. Therefore, new chemotype antibacterial agents with novel targets and mode of action are highly needed to combat pathogenic and drug resistant microorganisms. Historically, the majority of clinically used antimicrobial agents originate from natural products or are semisynthetic derivatives; therefore, natural products such as phytochemicals provide invaluable molecular skeletons for novel chemotype antibiotics and are being actively pursued for their antimicrobial properties. As part of our ongoing effort to discover new antitubercular and antibacterial agents and to exploit natural product as scaffolds for chemical diversity in drug discovery, we have been interested in following up emerging and underexplored natural products showing good antimicrobial activities. These promising natural product leads may provide a valuable medicinal chemistry starting point for the design and synthesis of novel antibiotics, followed by phenotypic whole cell and/or target-based screens. In this talk, we will describe our recent efforts towards the discovery and development of novel antibacterial agents inspired by emerging natural product scaffolds.

Date: Friday, September 30, 2016

Time: 11:00 am to 12:00 pm

Location: GL-100 MMC (Live)

Marine Sciences Building Room 105 (MSB-105) – BBC (via Polycom)