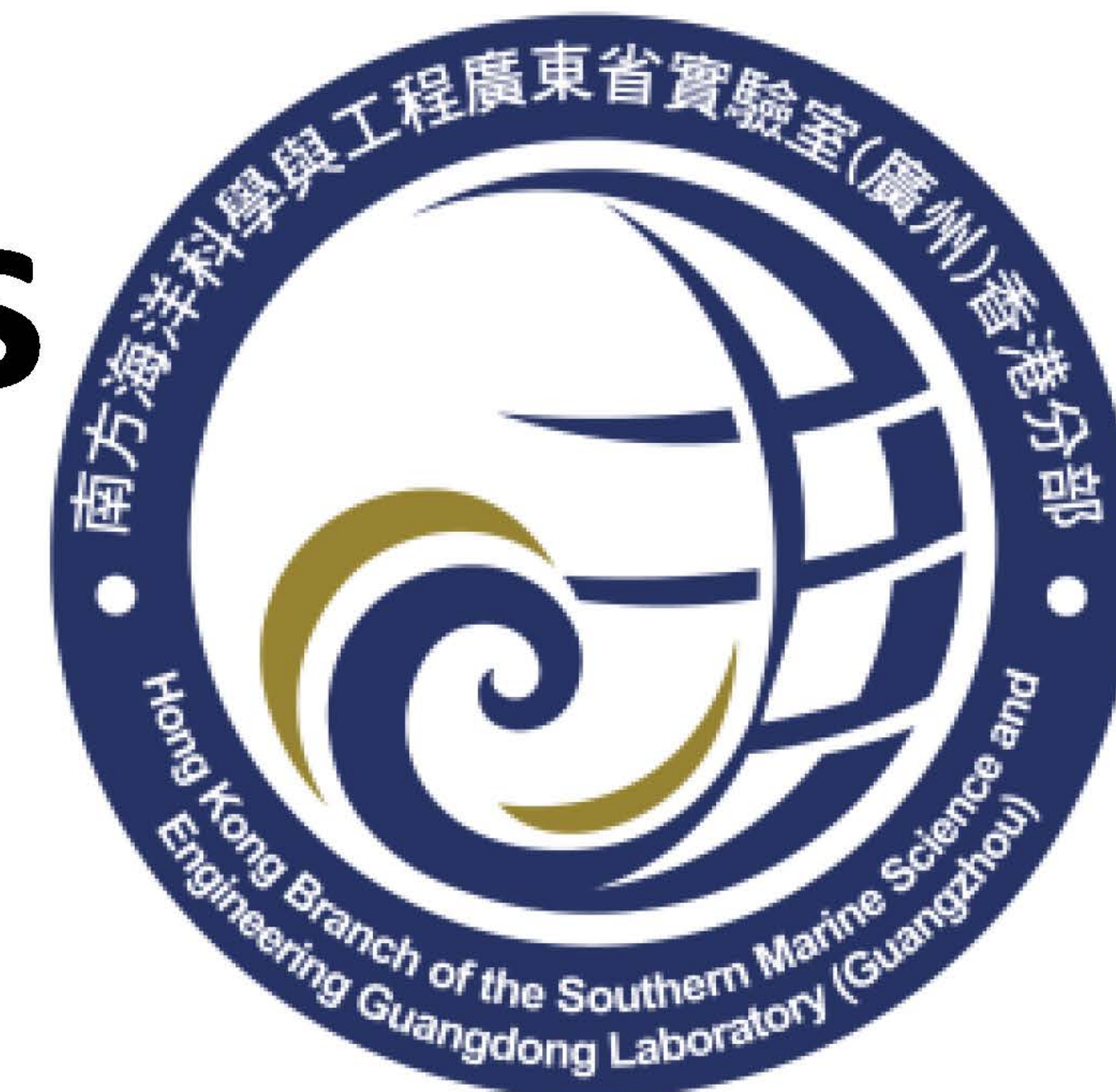




Hong Kong Branch Seminar Series

Natural products and chemical synthesis



Prof. Bradley S. Moore
University of California San Diego

**Title: Emerging Platforms and
Opportunities in Marine Natural Product
Biosynthesis**

Abstract

Marine organisms continue to amaze for their capacity to produce chemically unique and biologically important small molecules. Marine natural products mediate key interactions between ocean dwelling organisms, have improved human health as medicines, and helped illuminate many foundational cellular processes germane to life. Despite the remarkably diverse biological origins and chemical structures of marine natural product molecules, they all have one thing in common – they are all DNA-encoded chemicals. With advances in DNA sequencing, the ability to connect genes to chemistry and function has transformed many fields of science that study the chemistry of the sea and its inhabitants. This presentation will focus on the development of genetic platforms that have enabled the rapid growth in natural product biosynthesis and synthetic biology, highlighting recent examples specific to the marine realm. Methods such as genome mining, gene cluster editing, and heterologous expression will be discussed in relation to bioactive marine natural products from bacteria, invertebrates, and algae studied in the Moore laboratory at UC San Diego.



30 September 2020 (Wednesday) | 09:00-10:00 am (GMT +8)

<https://hkust.zoom.us/j/99503348785>

General Inquiry: hkb@ust.hk

