

HIGHLANDS IN CHEMISTRY SEMINAR SERIES



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“Synthetic Chemistry at the Interface of Biology: Reactions, Natural Products and Drugs”

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HAHN HALL NORTH 140

FACULTY HOST:
WEBSTER SANTOS

Marine natural products often have complex structures and potent biological activities; however, little is understood regarding how their molecular structure correlates with function or what biological targets or pathways are involved. Through rapid and efficient chemical syntheses of bioactive marine natural products we are able to prepare ample quantities of material to explore both structure-activity relationships as well as target identification studies. In all our efforts, a key focus is the development of short, scalable and selective synthetic approaches, accomplished by new reaction development, extensions to related medicinal chemistry projects and in-house chemical biology studies to advance projects from curiosities to validated leads. This talk will focus on our efforts to develop novel approaches to nitrogen heterocycles in the context of bioactive natural products relevant to cancer and infectious disease and their advancement as leads for the treatment of human disease.

