

Chia-Chi Peng

## Structure elucidation of natural products inducing morphogenesis in marine organisms and analysis of their biosynthesis

This project focuses on the chemical analysis of interkingdom interactions and the identification of key secondary metabolites involved in the communication process. Similar to many benthic marine invertebrate populations, free-swimming *Hydractinia* larvae recognize natural products secreted by surface-bound bacteria to settle and metamorphose into the sessile life form. However the structures of bacterial-derived settling cues are mostly unknown.

## **Publications**

Leichnitz D, Peng CC, Raguz L, Rutaganira F, Jautzus T, Regestein L, King N, Beemelmanns C (2021) Structural and functional analysis of bacterial sulfonosphingolipids and rosette-inducing factor 2 (RIF-2) by mass spectrometry-guided isolation and total synthesis. *Chemistry*, <u>Details PubMed</u>

Raguž L, Peng CC, Kaiser M, Görls H, Beemelmanns C (2021) A Modular Approach to the Antifungal Sphingofungin Family: Concise Total Synthesis of Sphingofungin A and C. *Angew Chem Int Ed Engl*,

## <u>Details PubMed</u>

## Supervisor

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Start of PhD

July 1, 2018