The rapid development of metabolomics and genomic sequencing technologies has enabled a renaissance of natural product research. In particular, the detailed chemical analysis of complex symbiotic systems has attracted substantial attention amongst natural product chemists as many structurally diverse microbial metabolites were found to be important regulators of these interactions, thus making them promising pharmaceutical drug candidates. Here, I will present our recent discoveries in the field of ecology-driven natural product chemistry and our synthetic approaches to elucidate the absolute structures and bioactivities.\[1-3\] Our recent findings highlight that symbiotic microbes present prolific sources of secondary metabolites and that we can use the chemical and genomic information to increase the structural diversity of natural products.

