Rational Design, Synthesis, and Chemical Biology Studies of Selective Inhibitors for Protein–Protein Interactions

Haitao (Mark) Ji Ph.D.

Associate Member
H. Lee Moffitt Cancer Center & Research Institute

Hot spot residues at the protein–protein interaction (PPI) interfaces might provide the key for designing PPI inhibitors. However, how to achieve an efficient conversion of hot spot knowledge to small-molecule inhibitors has been an unsolved task. I will discuss our experience in developing new tools and techniques to design and characterize selective inhibitors for PPIs. Two key downstream effectors of the canonical Wnt signaling pathway, the β-catenin/T-cell factor (Tcf) and β-catenin/B-cell lymphoma 9 (BCL9) PPIs, are used for case studies.