

Synthesis of PI Analogs and Mechanism of PI-specific Phospholipase C (1992-2005). Studies of PI-PLC require syntheses of various PI analogs, which were only scarcely available at the time. Tsai's lab was one of the earliest to develop a systematic synthetic approach that allows synthesis of various natural and unnatural analogs of phosphatidylinositides and inositol phosphates. His recent work on the comparison between the catalytic mechanisms of PI-PLC and a seemingly unrelated enzyme ribonuclease A is particularly insightful. He and collaborator Karol Bruzik recently reported discovery a novel catalytic triad Arg...Asp...His in the mechanism of PI-PLC. This work has been featured as a "Highlight" by *Angew. Chem. Int. Ed.* [38, 2348-2351, (1999)].

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