

Industrial & Physical Pharmacy Seminar

IPPH 69600

Wednesday, October 5, 2022
3:30 PM in RHPH 164

**“We are not “DON” yet! Targeted delivery of a
glutamine antagonist via prodrug approach”**



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6-Diazo-5-oxo-L-norleucine(DON) is a glutamine-antagonist that suppresses cancer cell metabolism but concurrently enhances the metabolic fitness of tumor CD8⁺ T-cells. DON showed promising efficacy in clinical trials; however, its development was halted by dose-limiting gastrointestinal(GI) toxicities. Given its clinical potential, we designed DON peptide prodrugs and discovered a lead compound that is currently in clinical trials (*NCT04471415*) for the treatment of advanced-stage solid tumors as a single agent and in combination with immunotherapy. The presentation will be focused on drug discovery and its preclinical characterization *in vitro* and in animal models.