

C3 / Pedal the Cause 2013

"Small molecule screen for inhibitors of the GOLPH3 pathway"

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Abstract:

To more effectively combat cancer we need new therapies directed at new targets. The Field Lab discovered a new signaling pathway involving a protein called GOLPH3 that drives a high fraction of cancers that together account for the majority of cancer deaths. This GOLPH3 pathway is unlike other pathways that drive cancer, and so inhibitors of the pathway provide a unique approach to cancer treatment. Published data suggests that inhibition of the GOLPH3 pathway is likely to have therapeutic benefit. The Field lab has developed and validated a screening assay to test compounds for their ability to inhibit the GOLPH3 pathway. In this project, researchers propose to team up with the Chemical Library Screening C3 Shared Core Facility to further develop the assay for use in a high throughput screen to identify a set of potent inhibitors targeting different steps in the GOLPH3 pathway to serve as lead compounds for novel cancer therapeutics.