## The Krogan Lab continues working on ARSACS

## “Discovery of new targets for therapeutic interventions in ARSACS disease” Summary of Recent findings

“Our affinity purification mass spectrometry studies on sacsin have revealed a protein-protein interaction with DAPK (Death-associated protein kinase)1/3, a positive mediator of gamma-interferon induced programmed cell death. Additionally, our analysis of the phosphorylation landscape of WT and SACS-/- cell lines followed by bioinformatics analysis revealed that tau, a known DAPK1 substrate, is differentially phosphorylated. To understand the role of sacsin in DAPK1-mediated tau phosphorylation, we are currently overexpressing or inhibiting DAPK1. In addition, to identify which region of the multi-domain protein sacsin is required to regulate tau phosphorylation, we are expressing individual domains separately followed by analysis of tau phosphorylation”.

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