HIV can withstand therapy in a "latent state" in patient cells. Understanding what controls latency may be the basis for an HIV cure. In collaboration with Eric Verdin's lab at the Gladstone institute, we conducted a genome-wide screen for factors in human cells that control HIV latency. We found that the mTOR complex, a key regulator of protein homeostasis, also controls the exit of HIV from latency. In primary human blood cells, drugs that target the mTOR complex blocked HIV from exiting latency.


*Equal contribution