The Al-Sady lab at UCSF

Welcome to the Al-Sady lab site!

Our lab is located at the University of California, San Francisco, on the Parnassus campus.

Our research interests reside in uncovering the mechanisms that underlie the assembly and fidelity of inheritance of heterochromatin, a specialized protein-nucleic acid composite. Unraveling these mechanisms is key to understanding the manner in which large stretches of the genome can be precisely and heritably partitioned into active and inactive regions. The heterochromatin system presents some unique and unusual features for a cellular self-assembly, such as nucleated, template-guided polymerization to a precise positional extent that have remained difficult to study. Addressing these features requires a multidisciplinary framework integrating biochemical and novel single cell genetic approaches.