

Monday, October 19, 2020 4:00 PM Zoom Registration



Systematic discovery of molecular and cellular functions of RNA binding proteins

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Abstract

The life-cycle of RNA from transcription to translational regulation is mediated by a diverse (>2000) set of proteins called RNA binding proteins. My lab studies the many roles that RNA binding proteins have in affecting RNA expression, splicing, transport and translation. Through our studies on RNA processing, we have introduced therapeutic strategies to treat neurodegenerative and muscular diseases, built cellular models of neurodevelopmental and neurodegenerative diseases and developed experimental and computational tools that enable the community to probe RNA binding protein-RNA interactions at scale. I will discuss (1) our established and new technologies to identify RNA targets of human RBPs at scale, (2) systematic assays to assign molecular roles to RBPs and (2) functional screens to identify RBPs implicated in cancer / RNA granule formation.

CENTER FOR RNA BIOMEDICINE 💱