



INSTITUTE FOR BIOPHYSICAL DYNAMICS

Presents

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***Reversing
aberrant phase transitions of
RNA-binding proteins
connected to ALS and FTD***

RNA-binding proteins (RBPs) with prion-like domains (PrLDs) phase transition to functional liquids, which can mature into aberrant hydrogels composed of pathological fibrils that underpin fatal neurodegenerative disorders such as amyotrophic lateral sclerosis (ALS) and frontotemporal dementia (FTD). Several nuclear RBPs with PrLDs including TDP-43, FUS, hnRNPA1, and hnRNPA2 mislocalize to cytoplasmic inclusions in ALS and FTD and mutations in their PrLDs can accelerate fibrillization and cause disease. Here, I will discuss our latest endeavors to uncover and engineer therapeutic protein disaggregases to reverse these aberrant phase transitions and restore functional RBPs to the nucleus to counter ALS and FTD disease phenotypes.

Tuesday, 14 November 2017

12:00, noon

**Ellen & Melvin Gordon Center for Integrative Science
W301/303**

Host: Allan Drummond

Lunch will be provided at 11:45

If you need assistance, please contact Julie Feder 4-2846.