Modes of Control of RNA-Protein Condensates

Friday, November 19th, 2021

12:30 PM

Virtual

MAE Seminar Series

Amy Gladfelter

University of North Carolina

Biomolecular condensates are a major mechanism of compartmentalization in cells. While intensive effort has determined the driving forces for condensate formation, the focus of this talk will be on mechanisms that control and limit the formation of condensates to ensure regulated assembly at specific time, places and temperatures.

Amy Gladfelter is a quantitative cell biologist interested in fundamental mechanisms of cell organization. She is a Professor and Associate Chair in the Biology department at the University of North Carolina at Chapel Hill. She is also affiliated with the Lineberger Comprehensive Cancer Center and a fellow of the Marine Biological Laboratory in Woods Hole, MA. In her research program, she use microscopy, biophysical and genetic approaches to study syncytial cells. Syncytia are cells with many nuclei sharing a common cytoplasm such as muscle, placenta and fungi. Her program addresses how cytoplasm is spatially organized and how large cells sense their shape. She trained at Princeton University (AB) with Bonnie Bassler, Duke University (Ph.D.) with Danny Lew and UniBasel Biozentrum (post-doc) with Peter Philippsen before starting her independent career at Dartmouth in the Biological Sciences department in 2006, where she was until 2016. She has been honored with the 2014 Graduate Mentoring Award from Dartmouth, the 2015 Mid-Career Award for Excellence in Research from the American Society of Cell Biology, the 2020 Graduate school mentoring award from UNC and is a Howard Hughes Medical Institute Faculty Scholar.

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