

11am – noon **Nov. 10th** NC 1130

Fall 2023 SEMINAR SERIES

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Imaging the Life Cycle of Proteins In Situ In Real Time

Maintaining intracellular protein homeostasis is essential for human health. The dysregulation of proteins often leads to diseases and is related to the aging process. The dysregulation could happen during each step of the protein life cycle. However, due to technological hurdles, the full life cycle of proteins has never been visualized at the single-molecule level in real time, which makes it challenging to fully understand the protein regulation mechanisms. My lab focuses on developing technologies that enable tracking the full life cycle of proteins in real time with high spatiotemporal resolution in their native intracellular environments. This will help us understand when, where, and how proteins are synthesized, folded, modified, and degraded in both healthy and diseased cells.