



## BiophysTO Lunchtime Talks

# Elizabeth Rhoades

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### Order from disorder: Defining structure in disordered proteins

In contrast to globular proteins, intrinsically disordered proteins do not form stable, compact structures under physiological conditions. Rather, often their functions are derived from their properties as extended, flexible polymers. It has recently been recognized that intrinsically disordered proteins are involved in a range of functional roles in the cell, as well as being associated with a number of diverse diseases, including cancers, neurodegenerative disorders, and cardiac myopathies. We use single molecule fluorescence approaches to characterize both the 'structures' and dynamics of disordered proteins implicated in the progression of Parkinson's and Alzheimer's diseases. Our goal is to understand how disease-associated modifications to these proteins alter their conformational and dynamic properties and to relate these changes to disease pathology.

(Refreshments will be provided)

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Thursday, March 10, 2016 – 12:00 pm, noon  
Davis Building 3129 at UTM

(and via streaming to Davenport Room, Chemistry Building)