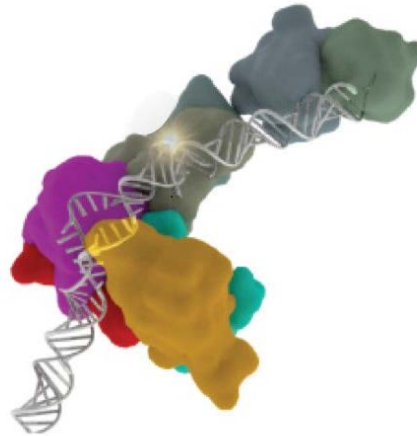




## ADARs, Dicer, and the dsRNAome



Viruses produce double-stranded RNA (dsRNA) during infection, and long dsRNA is also encoded and expressed in animal cells. dsRNA-binding proteins (dsRBPs) are not sequence specific, and we are interested in how cells discriminate cellular from viral dsRNA. Ongoing studies are focused on the mechanisms by which two dsRBPs, ADAR and Dicer, mediate "self" versus "non-self" discrimination. Our studies indicate that in *C. elegans*, the ADAR RNA editing enzyme marks cellular long dsRNA as "self". Studies of *D. melanogaster* Dicer-2 indicate its helicase domain is specialized for cleavage of viral, or "non-self", dsRNA.

### Dr. Brenda L. Bass

Distinguished Professor & H.A. and Edna Benning Presidential Endowed Chair  
Department of Biochemistry  
University of Utah

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Host: Dr. Julie Claycomb

**Date:** Monday November 20<sup>th</sup>, 2017  
**Time:** 4PM  
**Place:** Room 103, Fitzgerald Building,  
150 College Street