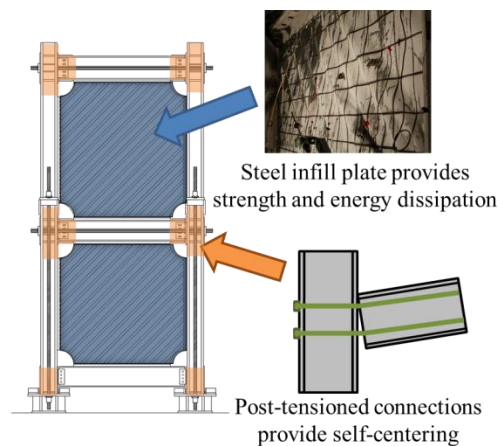


## **“Self-centering structures: the answer to enhanced seismic resilience?”**

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### *Abstract:*

Damage-resistant and self-centering structures developed in recent years have shown tremendous promise in reducing structural damage and repair costs after earthquakes. While these self-centering structural systems have the potential to reduce post-earthquake downtime and contribute to development of more resilient communities, there are certain design and detailing considerations that are critical to achieving their intended seismic performance, which may present challenges in practice. This presentation will discuss recent research on self-centering systems and specific design challenges that must be addressed. The discussion will provide a critical evaluation of the seismic performance of self-centering systems and will motivate future research needs.



Self-centering steel plate shear wall (Clayton et al., 2013)

### *Bio:*

Patricia Clayton got her B.S. in civil engineering from North Carolina State University. She attended University of Washington for her Masters and PhD in civil engineering, where her graduate research was on the new self-centering steel plate shear wall system for enhanced seismic resilience. She is now an Assistant Professor at University of Texas at Austin. Her research interests include design and behavior of steel structures, performance-based earthquake engineering, and seismic vulnerability assessment.