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**Award Abstract #0548785****Examining Changes in Earthquake Triggering Behavior Across the Ocean-Continent Transition, Gulf of California**

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**Sponsor:** Woods Hole Oceanographic Institution  
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**ABSTRACT**

0548785 McGuire Abstract The PI will study seismicity in the Gulf of California to determine which rheological model applies to this region. The analysis will be based on observing the clustering of aftershocks and foreshocks, and relating these patterns to spatial variations in heat flow, stress transients, and geology. The PI has previously studied both ends of this system and views the Gulf of California as the best place to look for the transition from oceanic to continental

environments. As a prelude to the study the PI will assemble an earthquake catalog for the region, which would also be useful to other researchers in the region. Broader impacts include contributing to education of a graduate student. This study also contributes to understanding the physics of earthquake nucleation and understanding the likely magnitude sequence in earthquakes will improve real-time hazard analysis in the study area.

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