

## Fat and happy: The interactive effects of food and thermal history on temperature tolerance in intertidal mussels



**Dr. Melissa May**

Assistant Professor, Dept. of Marine and Earth Sciences, Florida Gulf Coast University

Mussels are dominant space-holders on rocky shores and formation of beds help increase species diversity in coastal habitats. Climate change exacerbates stress experienced by mussels, including extreme temperature events, and persistence of mussel populations depends on their ability to tolerate stress during low tide. We investigated the role of acclimation temperature and diet on the mussels' response to heat shock by monitoring changes in their proteome, gill physiology, and feeding behavior and found that well-fed mussels respond better to stress. At FGCU, I hope to expand on this research to see if food has similar effects on oyster stress tolerance.

**Wednesday October 21<sup>st</sup>, 2:30-3:30 PM**

**ZOOM info at [www.fgcu.edu/whitakercenter](http://www.fgcu.edu/whitakercenter)**