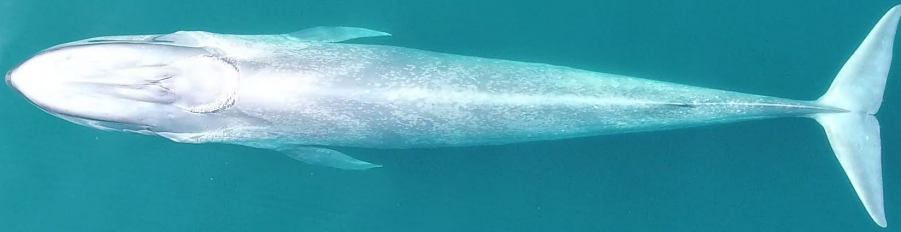# Interested in marine predator and prey response to climate change?

Our multidisciplinary project aims to understand how shifting prey (krill) availability and quality due to climate change will impact predator (blue whale) health and population resilience.

We seek a PhD student to lead one of these projects:

Assess relationships between krill abundance, oceanography, and blue whale behavior and body condition

<u>Expectations:</u> Process echosounder data; conduct photogrammetry; process CTD data; work collaboratively; lead statistical analyses; broad written and verbal dissemination of findings
<u>Desired skills:</u> Knowledge of marine ecology; data management, analysis and computer programming experience; strong communication skills; collaborative and independent worker

Integrate predator and prey physiological data to develop predictive models of species vulnerability and resilience to environmental change

<u>Expectations:</u> Integrate diverse data on the health of prey (krill size and caloric content) and predators (blue whale body condition, hormone levels, reproductive rates) using Bayesian statistical methods
<u>Desired skills:</u> Knowledge of Bayesian statistics; computer programming experience; strong communication skills; collaborative and independent worker

<u>SAPPHIRE</u>:
Synthesis of Acoustics, Physiology, Prey, and Habitat in a Rapidly Changing Environment

Krill: a key prey item in marine food webs
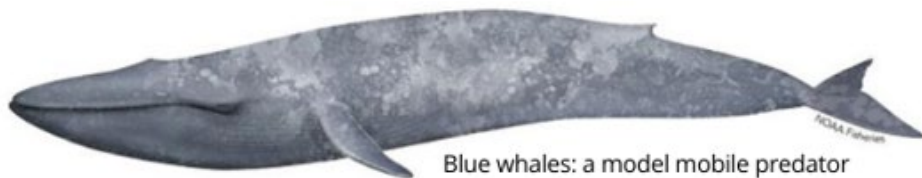
Blue whales: a model mobile predator

Learn more about project SAPPHIRE here: https://beav.es/Tt3
Learn about the GEMM Lab, led by Dr. Leigh Torres: https://mmi.oregonstate.edu/gemm-lab
Info for prospective students: https://beav.es/Ttw
Send CV and cover letter emphasizing your fit for the project to leigh.torres@oregonstate.edu
Applications are due March 15th, and a decision will be made by May 1.

Oregon State University Marine Mammal Institute

GEMM Geospatial Ecology of Marine Megafauna Lab

NSF National Science Foundation