4 Week pH Exposure

Elevated pCO_2 (2800 µatm)

Control pCO_2 (400 µatm)

DNA Extraction and Bisulfite Sequencing

Identify Differentially Methylated Loci (DMLs)

Metabolic processes p = 1.21e-10

Similar to previous work

Elevated pCO_2 induced higher metabolic rates in Eastern oysters (Beniash et al. 2010)

Hypermethylation

Genes for metabolic regulation less likely to be transcribed

Larvae may benefit from stable housekeeping genes

Hypomethylation

Genes more likely to be transcribed

Could increase phenotypic plasticity in larvae