

SIO 296 Fall 2016
Biochemical Adaptations
Instructor: Ron Burton

The goal of this seminar is to review the current state of knowledge regarding the biochemical mechanisms that permit marine organisms to adapt to changes in their environment. Both short-term acclimation and evolutionary genetic responses will be considered. The plan to achieve this goal is to review George Somero's new book (due for release this winter). George has kindly provided pdfs of 4 or the five chapters and hopes to get us the last chapter (#2) sometime during the quarter.

Time: Tuesdays 4-5:30

Week 1 (Sept 19): Introduction scheduling

Week 2 (Sept 26): Interface between biochemistry and life history evolution (Ron)

Week 3 (Oct 3): Somero Chapter 1: Conceptual Foundation (Mike will lead)

Week 4 (Oct 10): Somero Chapter 3: Temperature (Por and Alice)

Week 5 (Oct 17): Somero Chapter 3: Temperature (Por and Alice)

Week 6 (Oct 24): Somero Chapter 4: Water and Solutes (Reggie and Jinae)

Week 7 (Oct 31): Somero Chapter 4: Water and Solutes (Reggie and Jinae)

Week 8 (Nov 7): Somero Chapter 2 (or substitute): Oxygen (Natalya and Tessa)

Week 9 (Nov 14): Somero Chapter 2 (or substitute): Oxygen (Natalya and Tessa)

Thanksgiving week – no class

Week 10 (Nov 28): Somero Chapter 5: Adaptation in the Anthropocene (Ron)