



Flexibility and vulnerability of porcelain crabs to environmental change

Jonathon H. Stillman
San Francisco State University
University of California Berkeley
USA

Organismal responses to environmental stress are a function of phenotypic plasticity and evolutionary adaptation to specific habitat conditions. In this seminar I will present intertidal zone porcelain crabs as a model system for understanding how physiological adaptation to temperature is related to the capacity for response to thermal stress. Upper thermal limits of cardiac thermal performance indicates interspecific variation in plasticity during thermal acclimation and acclimatization that is inversely correlated to maximal habitat temperature. Functional genomic analyses of cardiac tissue indicate that *in vivo* response patterns are reflected at the molecular level, providing a novel set of hypotheses regarding mechanisms driving adaptation to warm and cool habitat temperatures and the potential for response to global change.



Thursday January 16th at 13.40
Seminar room (Room 127 building 1131)