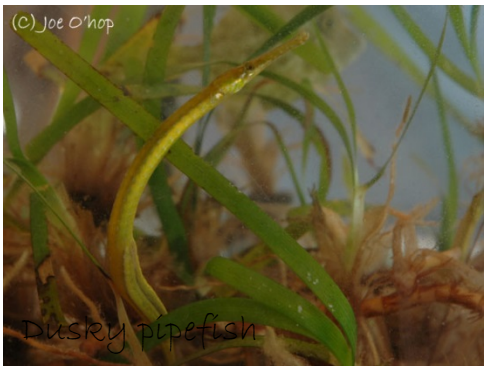
A seminar by the Population Genetics faculty candidate



The Ecology of Sex: How the environment shapes the strength of sexual selection and reproductive behaviors

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Darwin's theory of sexual selection accounts for a multitude of gaudy behaviors and traits that make mates more attractive or give them an advantage over a rival. Investigating how the ecological setting can promote or limit the potential for sexual selection is fundamental to our understanding of evolution in sexually reproducing organisms. First, I will discuss my work concerning the influence of the environment on sexual selection in natural populations of dusky pipefish (*Syngnathus floridae*) – a species with the interesting attributes of male pregnancy and sex-role reversal. Second, I will discuss my ongoing research on the influence of parasites on sexual selection, the major histocompatibility complex (MHC), and mate choice on individual traits in the three-spined stickleback (*Gasterosteus aculeatus*) – parasitic nematode *Camallanus lacustris* model system. Finally, I will introduce an initiative investigating the potential for endocrine disrupting compounds and other water-born anthropogenic contaminants to affect behavior and reproduction in fishes. Specifically, I am exploring the effect of the synthetic hormone 17β-estradiol pollution on male reproductive traits and gene expression in three-spined sticklebacks.

Tuesday 3 March, 2015: 3:00 – 4:00 PM

Electrical Engineering, Room 191

For further information: www.csufresno.edu/biology