## Department of Biology presents

## "Phylogenetic reconstructions of deep-water sharks: things just ain't what they seem. Again."



**ABSTRACT.** The genus *Squalus* includes about thirty species of sharks, commonly known as spurdogs. Several of these species are commercially harvested and listed as Vulnerable by the IUCN. Most *Squalus* species are deep-water sharks. Historically, marine biologists have considered the deep ocean to be ecologically homogenous. In fact, many deep-water species have near global distributions, suggesting tremendous dispersal capabilities and/or a lack of ecological barriers to dispersal. Here, we used molecular phylogenetics to ask two simple questions: 1) Are species of the genus *Squalus* "good" species, or are there cryptic species throughout the genus? And 2) is there evidence that the most morphologically similar and/or geographically clustered groups are also each other's closest relatives phylogenetically? This talk will explore yet another example of molecular phylogenetics rewriting taxonomy and our understanding of the deep ocean and species boundaries.

## Dr. Joshua Reece Department of Biology, Fresno State Friday, September 30, 2016 3:00 PM Science 2, Room 109

**For further information:** <u>www.csufresno.edu/biology or phone 278-2001</u>. If you need a disability-related accommodation or wheelchair access information, please contact Lindasue Garner at the Department of Biology @ 278-2001 or e-mail lgarner@csufresno.edu (at least one week in advance of event).