Members of the Fellows Society will present their research & scholarship during a free buffet luncheon. Time for Q&A will be included! Bring a friend or two to join the fun!

Katherine Easterling
Presentation: The Unusual Meiotic Chromosome Behavior of Hop (Humulus lupulus)

Hop is an integral ingredient in beer brewing, and the demand for novel hop varieties with desirable chemical profiles is at an all-time high. However, hop can be finicky when it comes to creating strains with predictable traits and disease resistance for breeders due to its complex reproductive behaviors and genome variability. In order to study transmission genetics in hop, my work utilizes 3D fluorescent microscopy to visualize chromosomes during meiosis, the sexually reproductive cell cycle that produces gametes.

Eve A. Humphrey
Presentation: Variation in behavior as a result of eumelanin-based coloration in the eastern mosquitofish

From an early age, students learn about predator-prey relationships; the lion roars and chases the gazelle, the eagle swoops down and claims the mouse. Many theories have focused on the how ingesting prey influences population densities. My work seeks to build upon the theoretical work of these scientists to better understand how populations change over time. Specifically, I am asking how is a distinct and rare polymorphism (genetic trait) specifically, black coloration, maintained in populations and do different fish morphs (back and silver colored males) of the eastern mosquitofish (Gambusia holbrooki) have different behavior and stress responses to a predator? Black coloration in the mosquitofish causes differences in their behavior, as a result, this species are an ideal organism to address my question. The production of the black color, or melanin, in some of the males (it is rare) may influence behavior (mating and stress response).

Marielena Dias
Presentation: Self-Identification and Support for European Integration: A New Conceptualization and Operationalization

How does identity explain support for European integration? National identity has been shown to negatively correlate with support for integration. Yet, most empirical analyses lack a clear conceptualization of either "national identity," "support for integration," or both. I employ a political conceptualization of national identity to differentiate national identity and European identity. I distinguish between "cultural" and "policy" identities, and theorize how each component part corresponds to different types of support for European integration. I test my hypotheses using survey data from the Eurobarometer.