

Undergraduate Research Seminar
Wednesday, July 1st, 2014 5:30 p.m.
Leigh 309

Samantha Johnson

“The relationship between egg size and terminal filaments in *Drosophila melanogaster* lines selected for large and small-egg size ”

Egg size in *Drosophila melanogaster* is an important complex polygenic trait that influences both the mother's and the progeny's fitness. *Drosophila* ovaries are made up of smaller functional units called ovarioles. During larvae development, terminal filament cell stacks, a group of somatic gonad precursor cells, determine the number of ovarioles in the adult female. In two inbred lines selected for egg size, previous research found that the small egg line had more ovarioles per ovary than the large egg line. Given differences in ovariole number, we seek to analyze arrangement of terminal filament cells in the *Drosophila* lines selected for large and small egg size by counting terminal filament stacks and terminal filament cells per stack.