## Evolution of Sex Chromosome and Dosage Compensation in Beetles

## Overarching Questions

- 1. As X chromosome genes become hemizygous...
  - Does the expression level evolve to maintain diploid expression (i.e. X=AA), or
  - Does the X evolve to balance expression between males and females (i.e. (X=XX), or
  - Both X=XX=AA
- 2. Is the X chromosome silenced during male meiosis?