Sex-Specific Aging in *Drosophila pseudoobscura*

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Context/Background

Why *Drosophila pseudoobscura*?

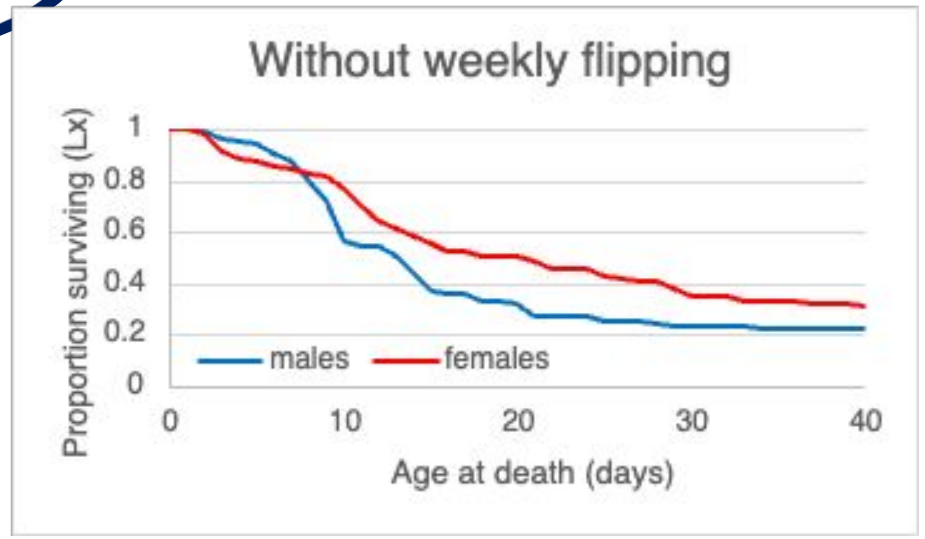
- neo-x chromosome
- third chromosome inversion polymorphism
- X chromosome is twice the size of *D. melanogaster*
- Potential for toxic Y chromosome

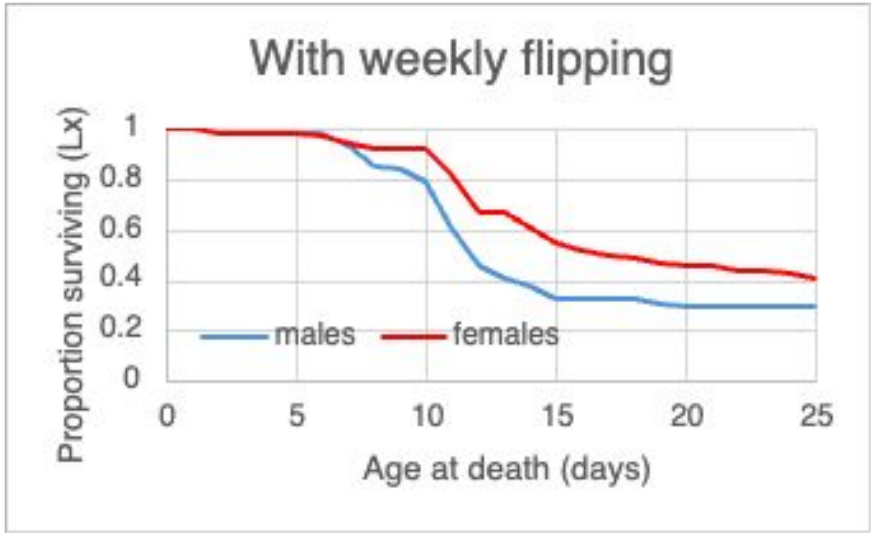
Aim: To investigate the differences in lifespan between male and female *D. pseudoobscura*

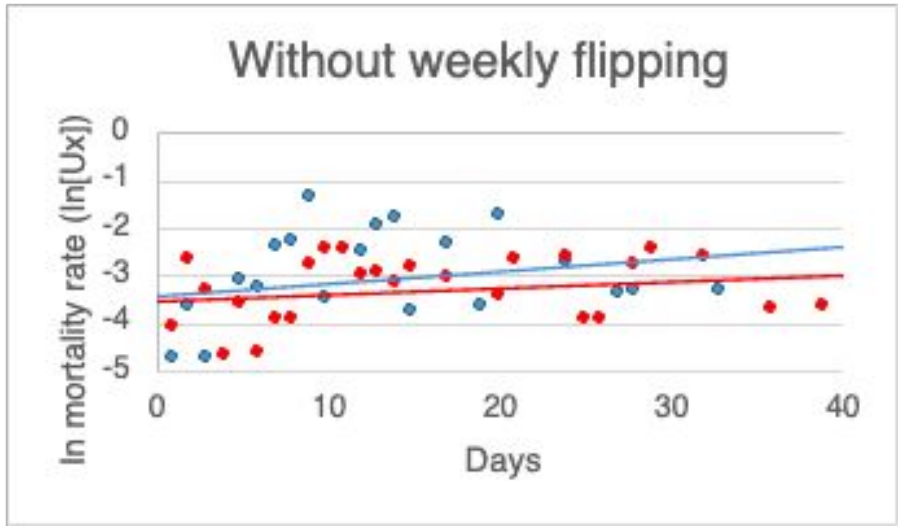
Hypothesis: Females *D. pseudoobscura* will live longer than males

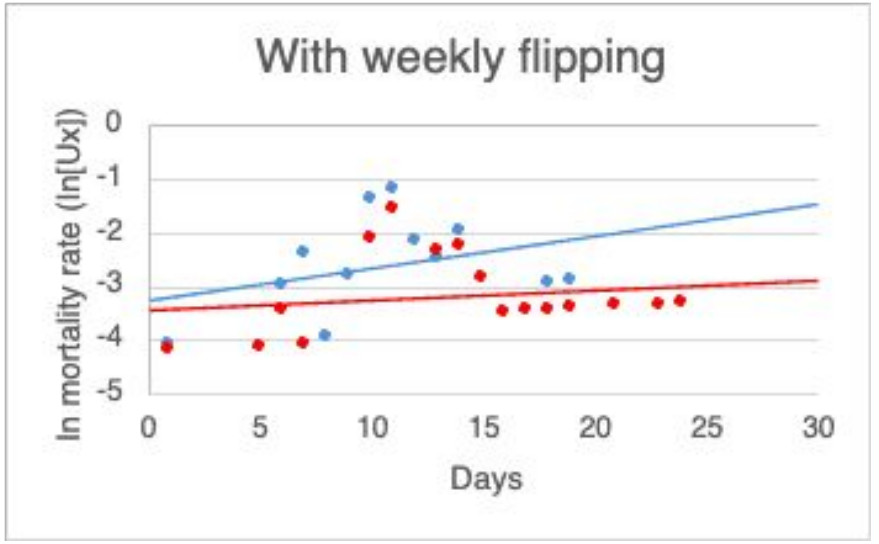
- potential misregulation of dosage compensation could shorten male lifespan
- chromosomal inversions may result in males having higher number of sexually antagonistic genes

Methods/Results









Conclusion

<u>What I learned:</u>

- Female *D. pseudoobscura* survive longer than males
- Mortality rate for males increases quicker with age compared to females

<u>What should be explored in the future:</u>

- Effects of chromosomal inversions on sex differences in aging
- Are these inversions sex-specific?
- Are these inversions temperature-dependent?