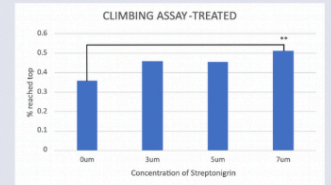
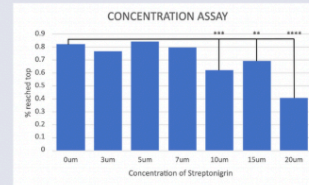
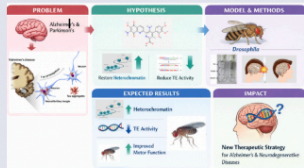


Investigating the Potential of Streptonigrin as a Treatment for Neurodegeneration in *Drosophila*.

Ashley Li, Massachusetts Academy of Math and Science

RQ: Does Streptonigrin have potential as a treatment for Alzheimer's and related neurodegenerative diseases?

HYP: Streptonigrin will promote heterochromatin formation, silencing transposable element activity and reducing neurodegenerative symptoms.

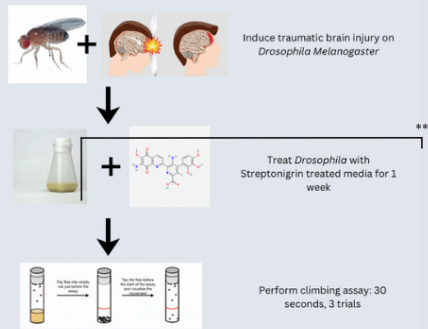


Streptonigrin has a positive impact on locomotive ability of *Drosophila Melanogaster* with traumatic brain injury

PRELIMINARY DATA: Concentration analysis - used to determine what concentration of Streptonigrin can be safely administered.

CLIMBING ASSAY OF TREATED FLIES: Percentage of flies that reached top of vial after 30 seconds. Used to evaluate if Streptonigrin had an impact on locomotive ability of *Drosophila* with TBI.

METHODOLOGY:



A higher percentage of flies reached the top of the vial during the climbing assay after being treated with a greater amount of Streptonigrin.

Suggests that heterochromatin levels were successfully increased and TE activity was suppressed.