

Yet Another Digital Fruit Fly Lab – But with an Emphasis On the Genetic Experiment

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There are a host of computer simulations to help students grapple with the intellectual challenge of genetics using realistic data. This may be desirable because of the high cost in both time and money in running an actual fly lab. This presentation will outline how the instructors of a second-year genetics course have integrated “fruit fly breeding” as a group project using a hypothetical organism *Suminospauci combibo*. Rather than simply provide crossing data, this project is designed to provide a task to students as a central focus in order to meet and analyze the data from mutant “flies” that demonstrate Mendelian inheritance with sex-linkage and epistasis. Students are guided through “best practices” of laboratory notebook keeping and learning to use appropriate genetic terminology as they interact with each other and with instructors. The presenter will discuss how this project addresses group interaction and peer instruction as well as scheduling challenges and how they were overcome.

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