

Biological Data Analysis: The Linear Regression Controversy

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As technology continues to increase the amounts of data accessible to biologists, the use of effective data analysis becomes important. Many students are not equipped with the knowledge and skills to handle these data sets. With an active learning activity, we explore two recent and related research articles. They have two different conclusions using the same data set concerning the cause of tumorigenesis differing only in the application of linear regression analysis. In this workshop, students learn about linear regression, how it is useful, and then utilize this knowledge to determine which research group correctly analyzed the data. The class is split, and the two groups hold a mock debate to hone their scientific communication skills on this subject.

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