

Laboratory Classes: Questionable situations

1. In a lab class, students must add a drug molecule to a bacteria sample and then measure the percentage of bacteria that survives after 24 hours, using fluorescence microscope measurements. Students A and B are in a lab group and do the experiments, and the measurements 24 hours after the initial experiment. Students C and D are in a separate lab group, but their experiments didn't work. Student A sends their fluorescence microscope data to Student C, and then Student C and D analyze the data and write their lab reports.

Is this an academic integrity violation? If so, then who is guilty? If not, then what would have made this a violation?

2. In a lab class, students must measure a chemical reaction rate constant and compare it to a literature value. Two students perform the experiment and measure a rate constant, but it is very different from the value reported in the literature. The literature value is 47, but the students measured 857400. In the lab report, one student reports a value of 58, and reports that their value is close to the literature value.

Is this an academic integrity violation? If so, then who is guilty? If not, then what would have made this a violation?