Lab 1b: Cell speeds

Team info

Lab section: C01 (12-3 PM) | C02 (3-6 PM)

Table number: \_\_\_\_\_\_\_\_\_\_\_

Team name: \_\_\_\_\_\_\_\_\_\_\_

Journalist: \_\_\_\_\_\_\_\_\_\_\_

Data Interpreter: \_\_\_\_\_\_\_\_\_\_\_

Critic: \_\_\_\_\_\_\_\_\_\_\_

Checker: \_\_\_\_\_\_\_\_\_\_\_

[This is a shell of a blank writeup. Strip out the verbiage, including this sentence, and replace it with your own.]

# Journal

This corresponds roughly to Materials and Methods in a scientific paper. It won’t have all the technical detail of an academic paper (for instance, you don’t need to report what kind of microscope you used), but it should have enough information that *the reader can understand exactly what you did and how you did it*. It is particularly important to explain any deviations from the lab instructions, or anything not explicit in the lab instructions.

*For instance, this week* you need to calculate the average speed of cells from video data. Explain how you tracked the cells and converted the raw click data into real numbers (with real units). [This may involve answering one of the questions you were specifically asked; it’s fine to answer within Journal section]

# Data and Interpretation

Your findings, displayed in an easy-to-understand form, with the important features explicitly described and explained.

We are mostly concerned that you display your data to us in a comprehensible and elegant way. *You* can decide exactly how to do so, but we often over hints of suggestions.

*This week, for instance*, you should probably include

1. A table of your data averages (and maybe also min/max?) by cell type.
2. Maybe a plot of the position of a particularly interesting cell as a function of time, but probably only if there is a cell whose behavior you want to comment on.

# Evaluation

Deeper reflection on what your results mean. Do they make sense? Are they consistent with other things you know?

*This week, for instance*, you might comment on

1. Are a given cell type’s velocity components (not speeds!) different? (This means the cell is not moving isotropically in space). Why or why not?

**Make sure you answer all the questions from the lab page somewhere in your writeup!**