

Cullen Sessions

Super points project

Problem 2: What can the histogram of displacements tell you about the diffusion coefficient?

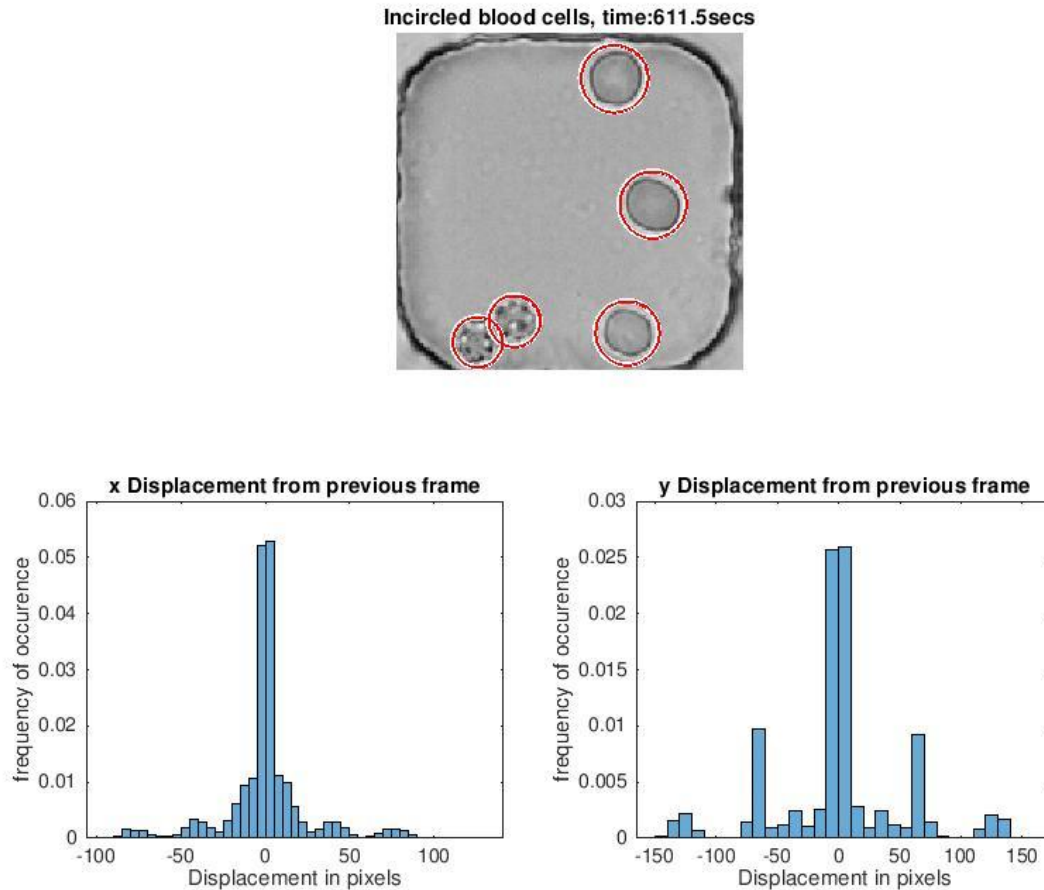


Figure 1: picture of final output of program

Based on the histogram of the data of displacements in the x and y axes, it looks to be a normal distribution with a mean close to zero. This suggests a diffusion coefficient that is relatively low since they tend to resist motion. This could possibly be caused by the viscosity of the medium in combination with the shape of the cells, notice those with a smaller radius tended to shift more.