# 15-400 Project Milestone 3
## Yiyang Guo (Feb 26)

**What You Have Accomplished Since Your Last Meeting/Meeting Your Milestone**

Most of my work over the past 2 weeks is literature search. I studied different modes of simulation algorithms used in quantitative biology (time-triggered/event triggered, eGFRD, Gillespie, etc.). I also started working around the rule-based modeling framework that we decided to use (BioNetGen).

For the concrete biological model, Huntington's amyloid protein self-assembly, we tentatively decided to study whether how the number of initial reaction of monomers affect the overall dynamics.

**Milestones:**

As for now, there are no major changes to the milestones. Although I realized the next 2 milestones are essentially dual to each other, so they might get mingled together.

- March 22nd: determine the target model and its simulation
- April 5th, implement the simulation algorithm of the model
- April 19th, simulation analysis, possibly formal approach as an add-on
- May 3nd, prepare for poster/presentation, report write up

**Next 2 weeks:**

For the next 2 weeks, I plan to get hands on the actual simulation as soon as possible.

As a side project, I am also interested to learn about probabilistic programming languages as a different high-level perspective of the problem (http://www.cs.cmu.edu/~janh/papers/WangHR17.pdf).