- My priorities over the next few weeks:
  - Get Steve up to speed on SFL, confocal, and image analysis
  - Determine if I have to finish any experiments for my thesis as currently outlined, or if anything needs to be added or cut.
  - Write thesis and produce figures.

#### **September: First Pass Through Thesis**

8/29 - 9/4 9/5 - 9/11 9/12 - 9/18 9/19 - 9/25 9/26 - 10/2 Janus Fab Particle collect / Clean room Clean room Confocal training **Practice** processing training training Analyze any new data; Finish analysis New rod experiments New images if of rod data if necessary needed Chapter 5: Chapter 2: Chapter 3: Outline content: Intro + Complex Tracking Rod-shaped Decide cuts? Lit Review Algorithms particles Colloids Confocal piezo arrives? Job Interviews Fix confocal! (R and Riverbed) Coordinate w/ Scott Wolfram On DNA paper interview?

**Key:** Training Steve

**Lab for Thesis** 

Writing

Misc

### **October: Finish Thesis and Editing**

Software primer (Matlab, Clewin, etc)

Basic analysis of confocal data experiments

If at all possible, no experiments this month

Appendices Editing; may Include new data Include new data Give to JAL.

Close down my lab space.

**Key:** Training Steve

# Thesis decisions

## Experiments

- Need to finish analyzing rod tracking data I have!
- Decide if new data is needed: start doing this ASAP if so.
- Determine if we need higher-quality particle images: obtain if so.

## Computational

- Algorithm is developed for tracking other shapes, but the programming isn't. Very difficult to get right.
- How necessary is this? Do we drop it or deprioritize?
- Note: I want this section, but not as much as I want to graduate.
- Is anything else necessary?

- What should Steve be working on?
  - My experiments are almost done for the thesis as defined. At most, I will need:
    - A few more rod diffusion experiments (take a couple days)
    - A few good images of Janus rods or other particles, if current ones don't serve
  - These are not useful for him, except as SFL practice.
- My suggestion: start him on "mini-project" with defined goal.
  - One idea: hydrophobic-patterned substrate, let rods assemble on this.
  - Another: Set up "PnP" SFL, get him talking to Rogers group early.