

- Introductions
- 20.109 Philosophy
- Day-to-Day Workflow
- Semester-Long Workflow
- Lab Safety
- Self-/Guided Lab Tour

20.109: Promises and Expectations

authentic investigation
constructive feedback

deep attention
support your peers

class is a collaboration b/w all of us

Day-to-day workflow

- Hand in current HW, get old HW back
- Announcements
- Discussion of prior HW
- Quiz *by 1:10 sharp 5-10', 2-3Q*
- Pre-lab lecture .
- Lab work
 - See wiki
- Hand in notebook pages before leaving

Annotating protocols

→ 49 μ L

1. Begin by adding the correct amount of water to a 200 μ l PCR tube. Add that amount +1 μ l to a second PCR tube.
2. Next add the primers to each reaction. Be sure to change tips between additions. *oops - forgot to change tips*
3. Next add template to the first reaction tube.
4. Finally add PCR Master Mix to each tube, pipetting up and down to mix. Leave your tubes on ice until the entire class

↓
4 μ m

↓
rxn.
- 5 μ m

Semester-long workflow

- Work in pairs
- Broader community collaboration
- Assessments
 - Minor: HW, quizzes, notebooks, participation 2040
 - Major: reports and presentations 8070
 - **Ask if something is unclear** → 20109.talk@gmail.com (mid if u send)
 - Available over email, occasional OH = 2-3 d before due dates or by appt.
 - **Plan ahead and manage your time**

16.336

16.^{or}319

Lab Safety

- Protection: gloves, glasses, coat
- Just in case... eyewashes, shower
- Hazards: materials $\left\{ \begin{array}{l} \text{chem. (toxic, caustic)} \\ \text{bio.} \end{array} \right.$ splash (irritant)
- Waste disposal

sharps bin



biohazard barrel



- bio and non-bio
- broad definition
- no solids/liquids

- non-sharp bio. waste
- solids ok.

bio. liq. → bleach, down the sink
chem. liq. → fume hood waste containers

Time for demo and tour!