Cell scrape protocol

**OBJECTIVE**

* Meant for after bacterial transformation once colonies have grown, and we want to know something about the population level
  + For example, if we want to know how efficient the ligation or Gibson assembly reaction was on a population level, instead of picking individual clones

**PROTOCOL**

* Starting from Lb agar + Cb plate with colonies
  + Add just enough LB media (or Lb + CB, doesn’t matter at this point) to each plate so that it covers the plate and all the colonies
  + Let the plates rock on the rocker for at least an hour
  + After an hour, scrape the colonies off the agar with a cell scraper or pipette tip
  + If you want to purify plasmid:
    - Pipette media from agar plate containing the scraped colonies into a 50 mL falcon tube
    - Fill the falcon tube to 50 mL with Lb + Cb media
    - Split into two 50 mL falcons (25 mL each)
    - Let the tubes spin in the warm room on a shaker for 1-2 hours
    - Purify plasmid
  + If you want to do a colony pcr
    - Pipette media from agar plate containing the scraped colonies into a 15 mL falcon tube
    - Optional: fill to 5 or 10 mL with Lb + Cb media and grow in warm room on shaker for 1-2 hours
    - Colony pcr (in 384-well plate):
      * 2x PCR MM: 12.5uL
      * Dw: 11uL
      * Primer mix: 1uL
      * Template: 0.5uL
    - TD65 touchdown pcr protocol
    - Run on gel to see population level ligation efficiency

**POTENTIAL PITFALLS**

None of note