The Impact of Mixing Technique on Macronutrients

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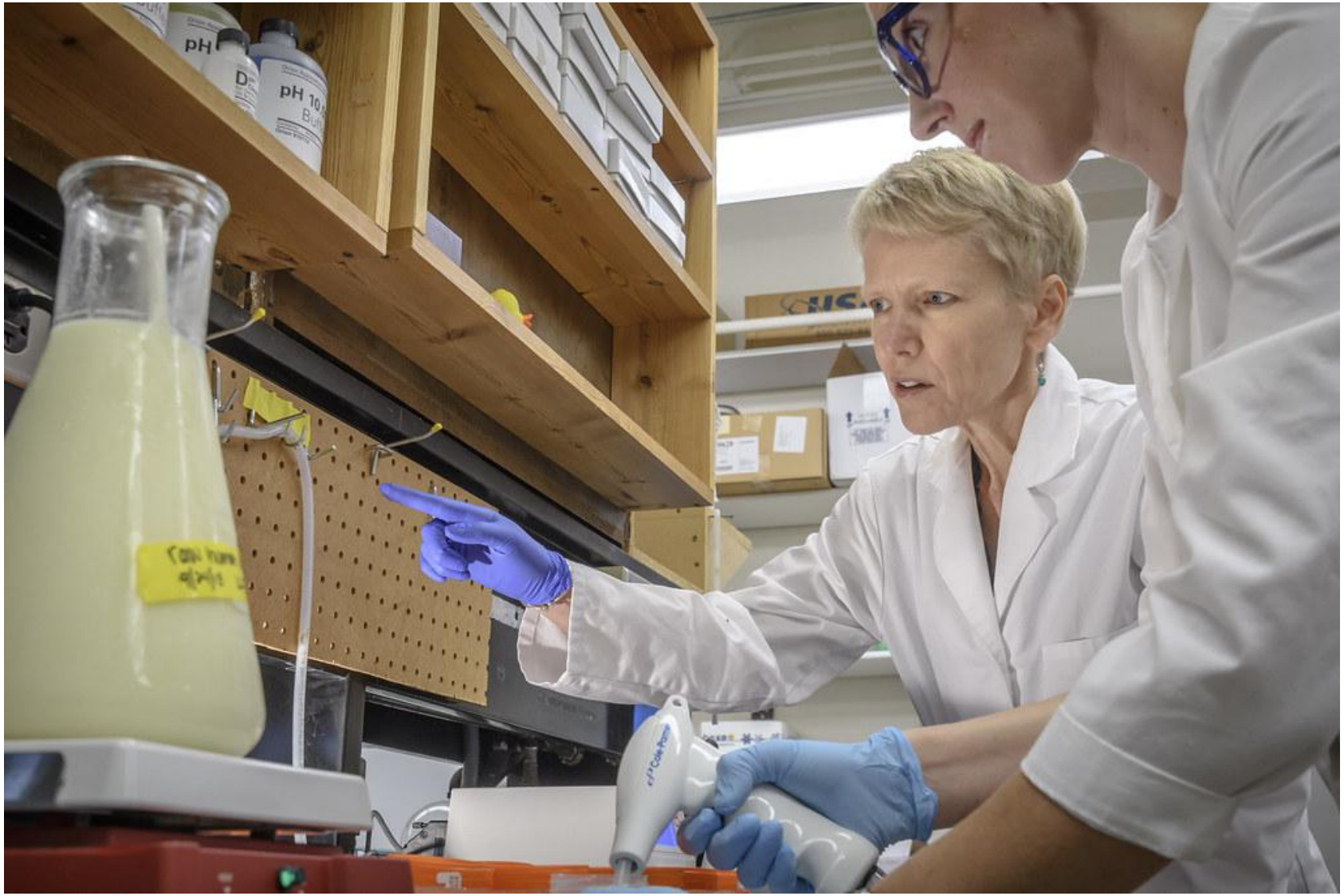
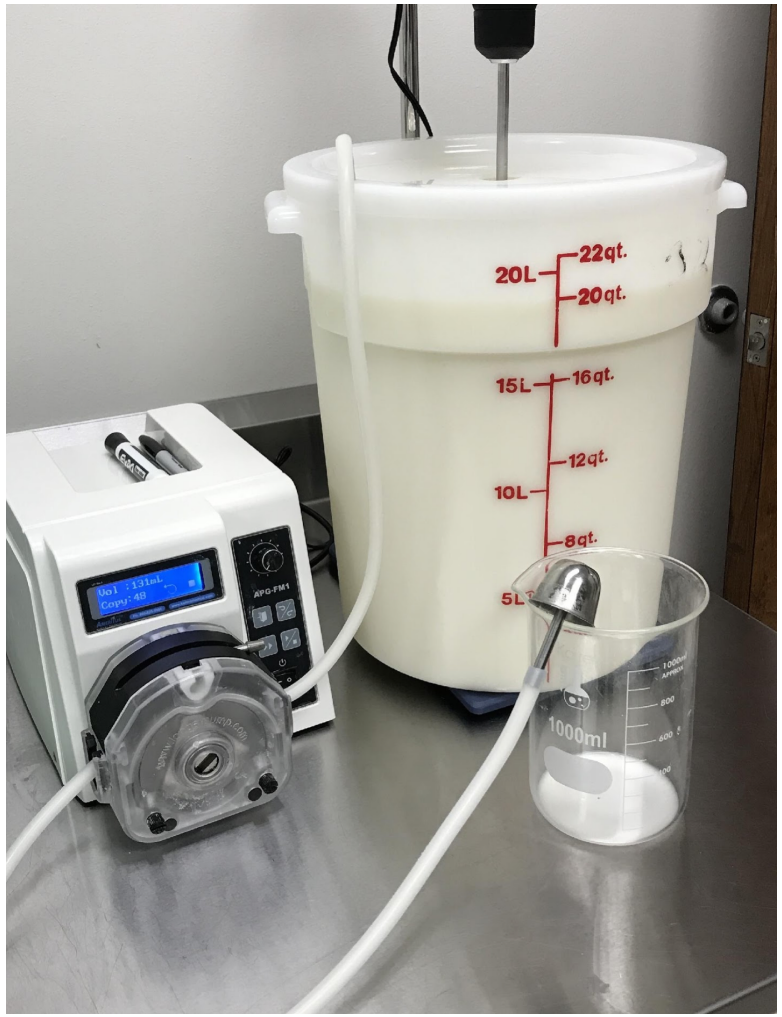


UNC GREENSBORO

Terminology

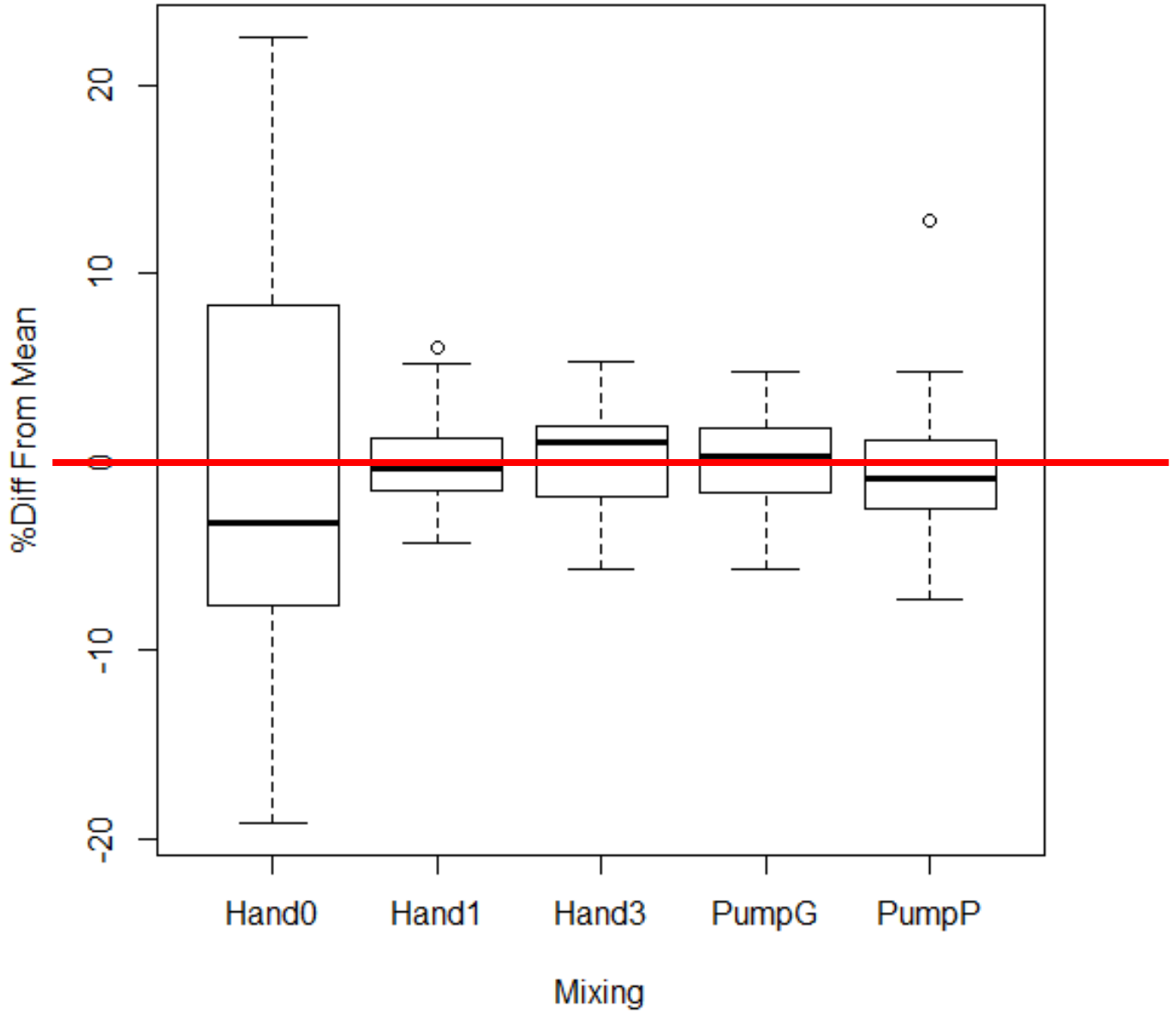
- Mixing & bottling
  - Hand
  - Pump
- Container material
  - Glass
  - Plastic



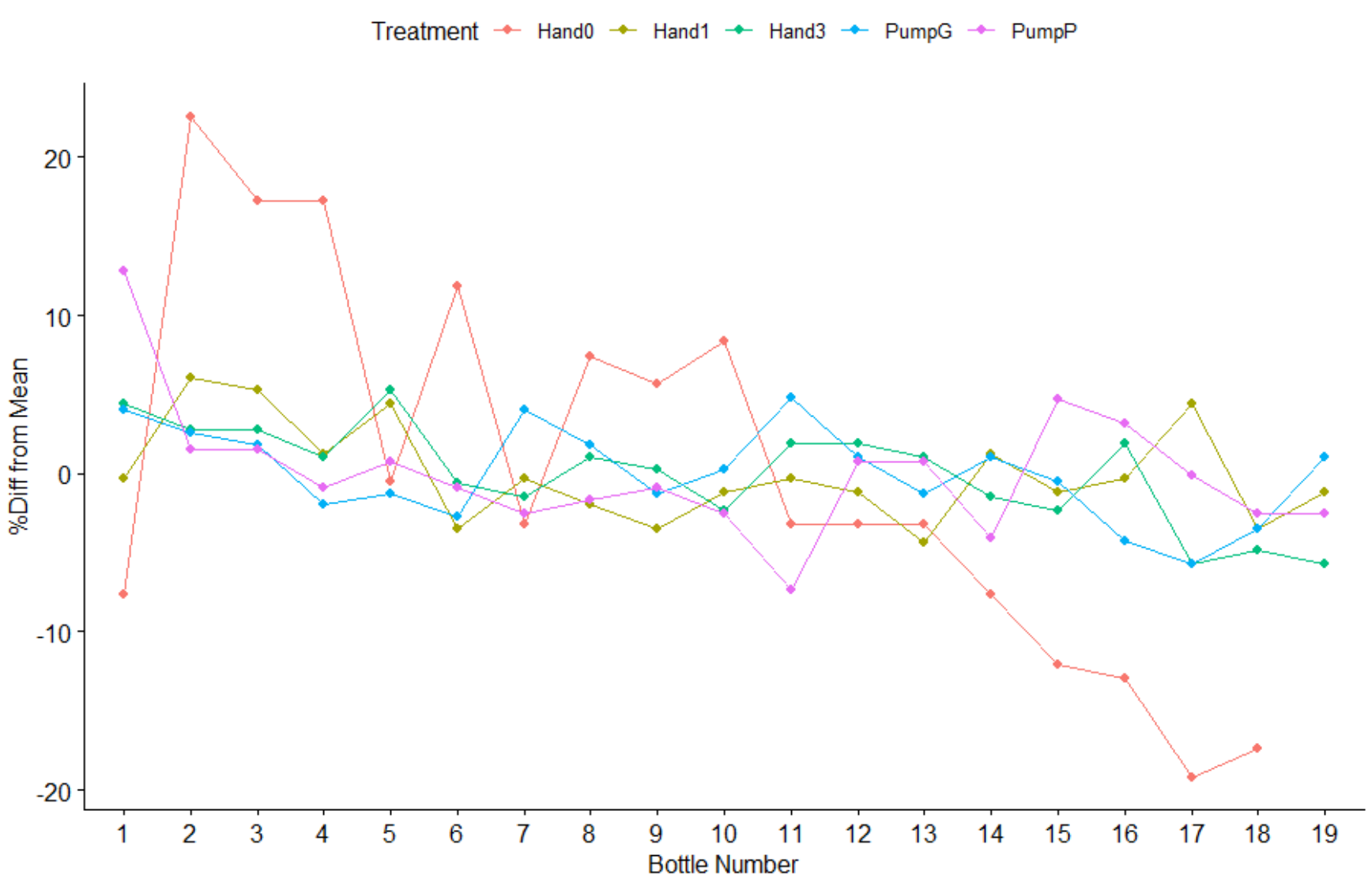
Research Methods

- Created ~1600 mL batches using 4 donors
- Mixing
  - Hand
    - Hando
    - Hand1
    - Hand3
  - Pump
    - PumpG
    - PumpP
- Fat measured
- Outcome: % difference from mean

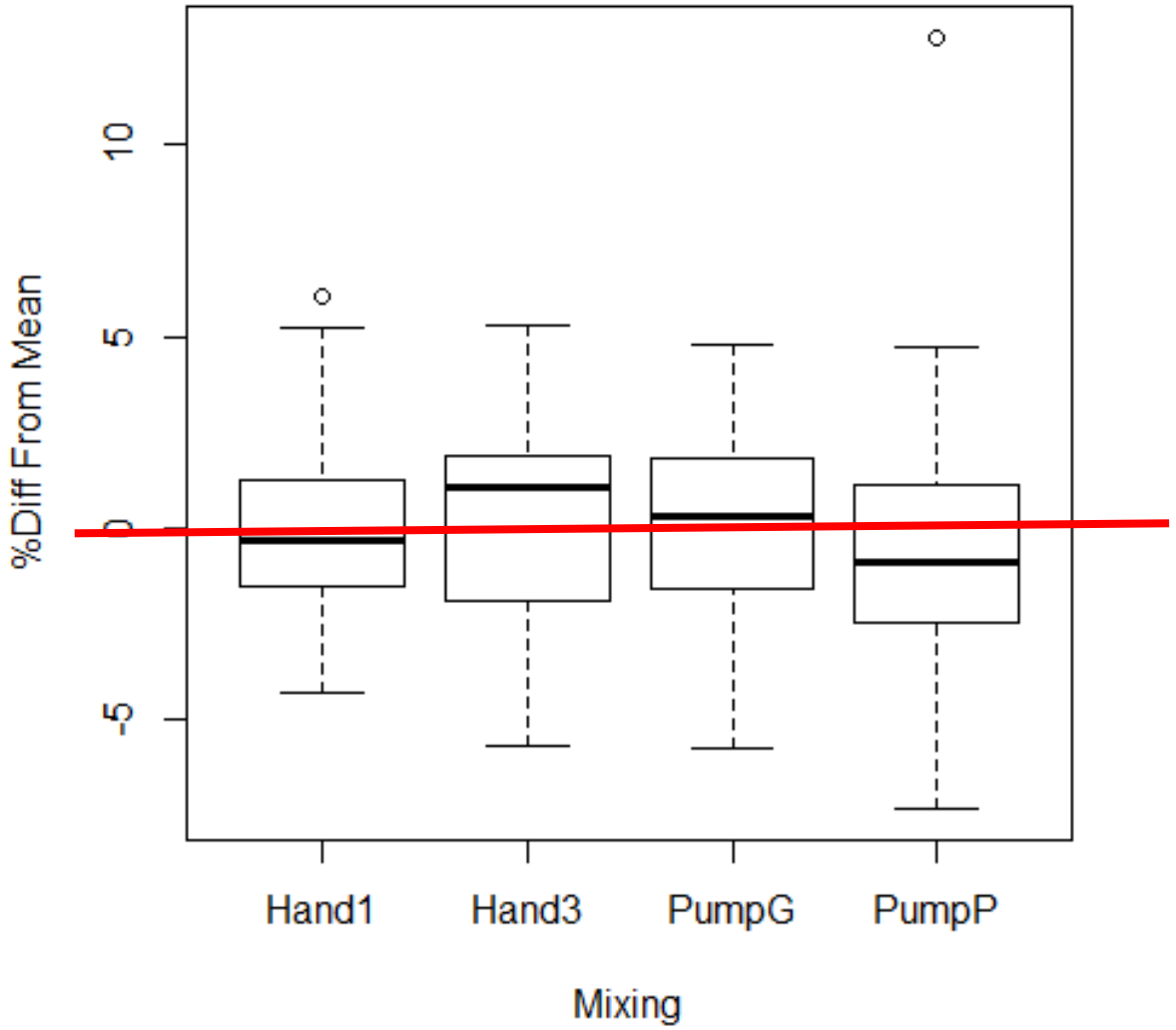
Results: Between Batches



Results: Within Batches



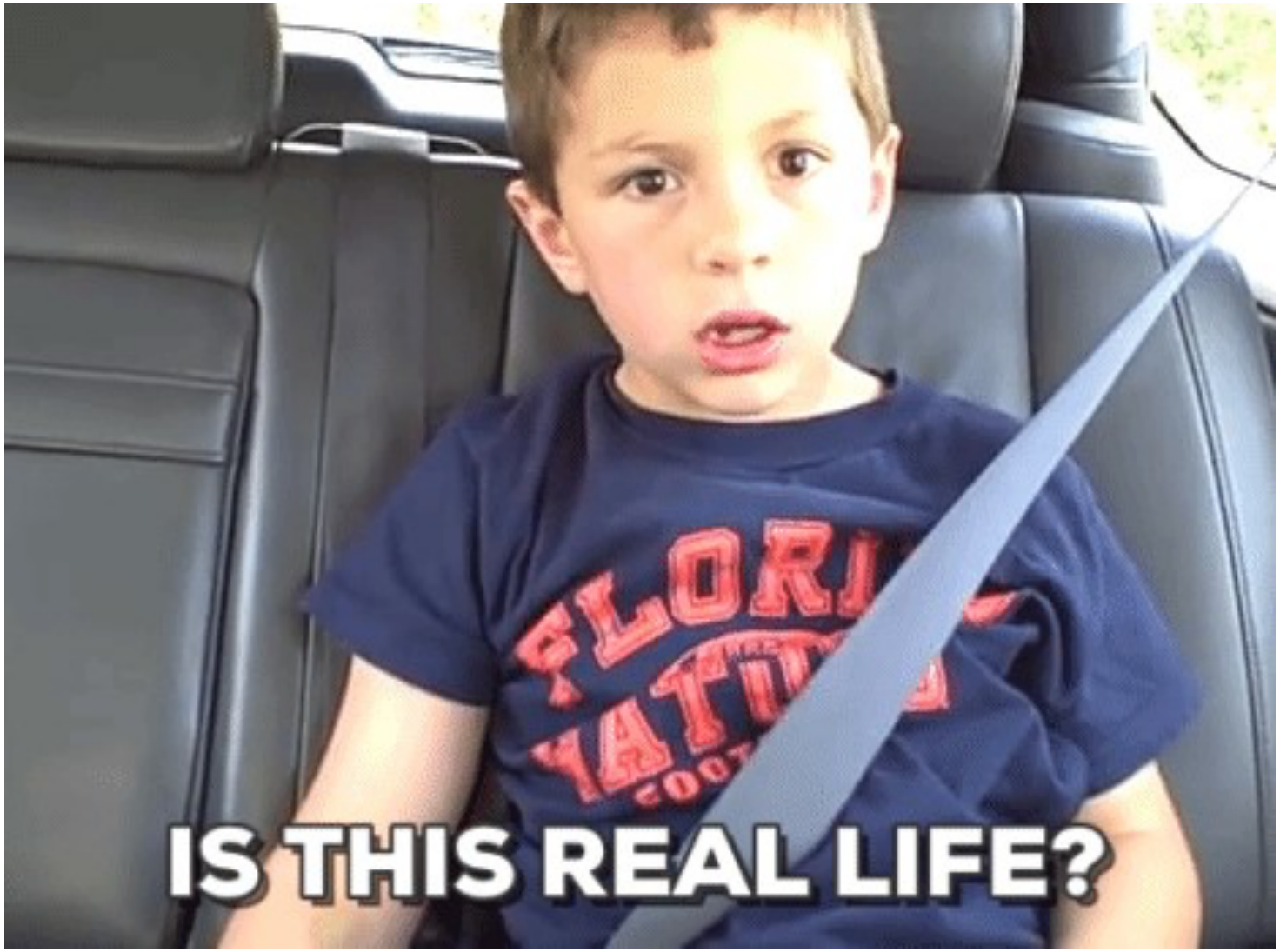
All Mixing



Preliminary Conclusions

- No significant differences between hand and pump
- **Take home message**: mixing is important

In the Lab
vs
In the Field



Overview of Samples

Donors/batch

- 1 = 17%
- 2 = 28%
- 3 = 40%
- 4 = 11%
- 5 = 4%

Pre-pooling analysis

- No = 55%
- Yes = 45%

Mixing

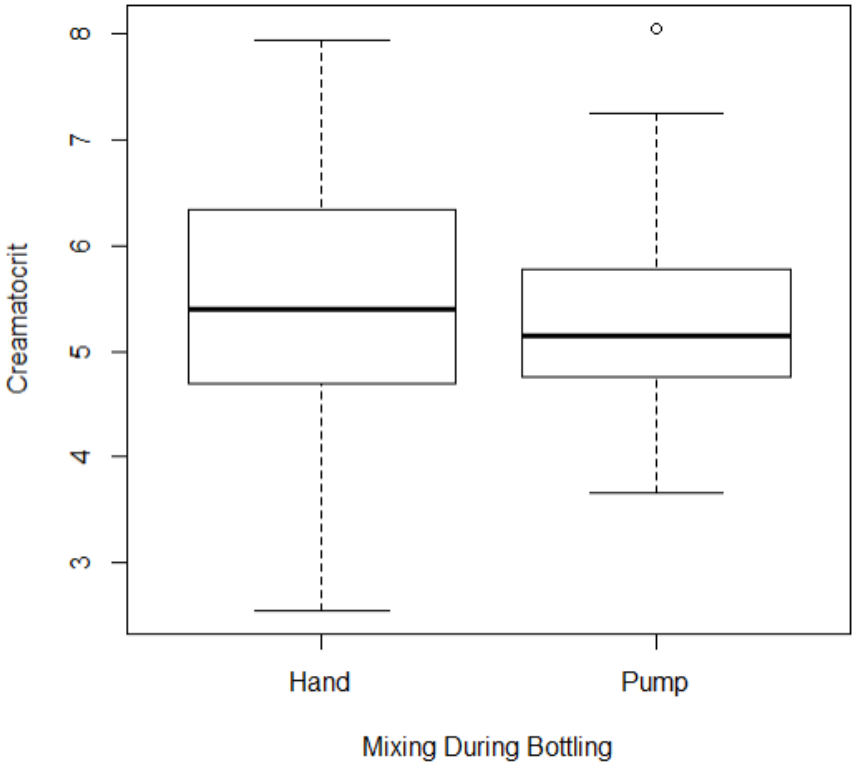
- Hand = 59%
- Pump = 41%

Pooling container

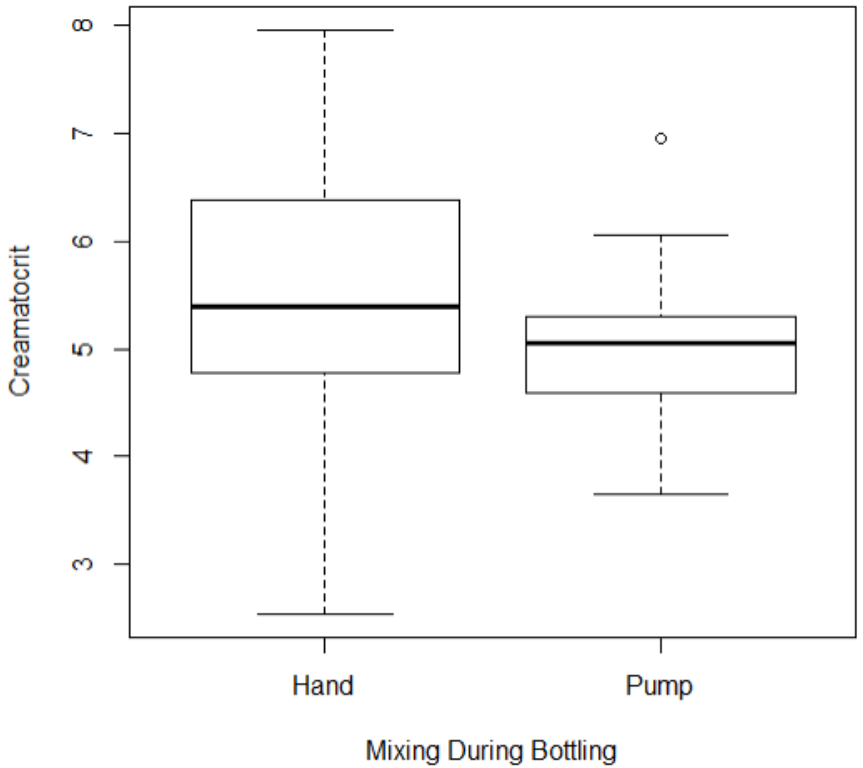
- Glass = 50%
- Plastic = 25%
- Steel = 25%

Controlled Environment vs Field Data

Pre-Pooling Analysis INCLUDED



Pre-Pooling Analysis EXCLUDED



Actual Preliminary Conclusions

- Mixing matters
- **Take home message**: differences in lab setting vs. field setting – more research

Questions?