

# Why do we need to reproduce the computational environment?

- Quite often analysis code ‘breaks’ - often in one of two ways:
- Code that worked previously now doesn’t - maybe a function in an R package was updated (e.g., `lsmeans` became `emmeans` so old code using `lsmeans` wouldn’t now run).
- Code that worked previously still works - but produces a slightly different result or now throws a warning where it didn’t previously (e.g., convergence/singular fit warnings in `lme4` version 1.1-19 vs. version 1.1-20).

# Capturing your local computational environment

- You need to capture the versions of the different R packages (plus their dependencies).
- May sound trivial but trying running some old R code and be amazed at how many things now don't work as they once did!