

# Getting Credit For Your Hard Work

## Objective

- Add a basic CITATION.cff file to your repo
- Practice the wrap-up steps to publish/archive a research compendium with a DOI.
- Understand concept of a reproducible computational environment.
- Learn renv and discuss Docker (concept).

## Lesson Outline

- Why share code?
  - Facilitate discussion
  - Show figure from B. Maitner *et al.* [1]
  - Higher citations
  - To “pay it forward” to other researchers
  - To demonstrate your skills
  - To facilitate error correction
- Getting credit for code
  - Code is not cited often, but partly because it’s not made easy to cite
- CITATION.cff
  - Show CITATION.cff files for this repo and maybe one for a research compendium
  - Show “cite this” button on GitHub
  - Everyone use CITATION.cff creation tool CFFINIT to create a *basic* CITATION.cff
  - *Maybe* mention `cffr::cff_validate()`
- Archiving
  - Exercise: guide everyone through archiving a repo with Zenodo using [sandbox.zenodo.org](https://sandbox.zenodo.org)
  - Add DOI badge to readme
  - Update CITATION.cff with DOI
- renv
  - Discuss why
  - Ask students to activate renv for a project and inspect files it creates
  - Explain how renv works, especially `renv::status()` , and `renv::snapshot()`
  - Clone demo repo with renv files
    - Show that no packages are available initially (project is isolated)
    - run `renv::restore()`

- Docker (if time)
  - Conceptual overview of what it is
  - Discuss how tools like renv and Docker both help and hinder reproducibility

## Homework

- Prep for reproducibility colloquium

## Bibliography

- [1] B. Maitner *et al.*, “Code sharing increases citations, but remains uncommon,” 2023, doi: 10.21203/rs.3.rs-3222221/v1.