

# Research compendia: projects as packages

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Rodríguez-Sánchez et al. 2016, Marwick et al 2018, but see [McBain 2020](#)

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- Automatic code review (**goodpractice**)

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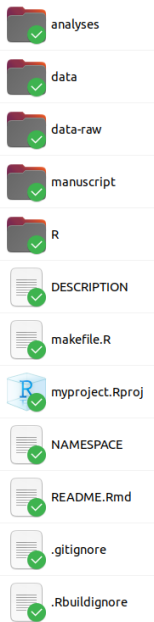
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- Easy to share and run
- Automatic checks (Continuous Integration)
- Automatic code review (**goodpractice**)
- Easily create website with **pkgdown**

Rodríguez-Sánchez et al. 2016, Marwick et al 2018, but see [McBain 2020](#)

# Creating package structure with template

```
library('template')
```

```
new_project('myproject',  
            package = TRUE)
```





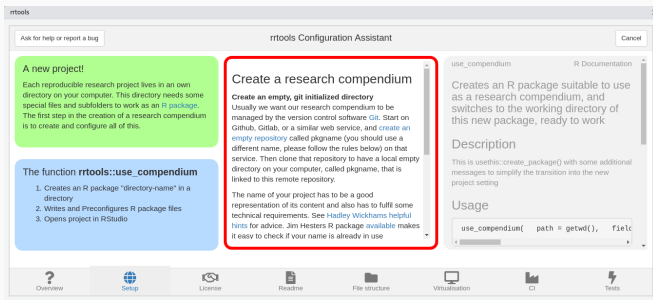
rrtools

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# rrtools creates research compendia

```
library('rrtools')  
  
use_compendium('~/.myproject/')
```

Rstudio addin: <https://github.com/nevrome/rrtools.addin>



# rrtools: project structure

```
- README
- LICENSE
- DESCRIPTION
- renv/
- Dockerfile
- analysis/
  |
  |- paper/
    |- paper.qmd
    |- references.bib
  |
  |- figures/
  |
  |- data/
    |- raw_data/
    |- derived_data/
```



rcompedium

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## rcompendium creates new project with all scaffolding













































```
library('rcompendium')
```

```
new_compendium()
```

- R package structure
- GitHub repository
- Automatic testing & website update

# Continuous Integration (GitHub Actions, GitLab CI...)

Automatic testing with every commit!

Pakillo / Carex.bipolar  <span>build passing</span>			
Current	Branches	Build History	Pull Requests
<a href="#">More options</a> 			
 master  Pakillo	add two more articles to pkgdown	 #7 passed  1c006ff <a href="#">🔗</a>	 3 min 22 sec  a day ago
 master  Pakillo	added leaflet occurrence maps to appear as a	 #6 passed  57f5374 <a href="#">🔗</a>	 5 min 23 sec  a day ago
 master  Pakillo	build site with pkgdown	 #5 passed  6108a7a <a href="#">🔗</a>	 17 min 35 sec  a day ago
 master  Pakillo	still trying to fix error with sf in travis (via mat	 #4 failed  2c922d4 <a href="#">🔗</a>	 16 min 58 sec  2 days ago
 master  Pakillo	adding more sf dependencies to travis	 #3 errored  5a60b49 <a href="#">🔗</a>	 13 min 59 sec  2 days ago
 master  Pakillo	trying to fix error with rgdal on travis	 #2 errored  076af29 <a href="#">🔗</a>	 14 min 15 sec  2 days ago
 master  Pakillo	add travis	 #1 errored  4bce6e8 <a href="#">🔗</a>	 18 min 54 sec  3 days ago

<https://github.com/cboettig/compendium>

- DESCRIPTION (dependencies)
- Manuscript (Rmd)
- GitHub Actions