# Notes on R package development

### **Prerequisites**

Package development is based on the helper package usethis, and here package to set the project root. The notes are based on the information provided in this package online reference

```
library("usethis")
library("here")
```

## here() starts at /home/baumanph/Your team Dropbox/Philipp Baumann/repro-science-guides

- 1. Create a folder where you want to start the self-contained package
- 2. Navigate to this folder and open a terminal from this folder
- 3. Start RStudio from the terminal

#### rstudio

After this, RStudio opens with the working directory in the package folder.

### Set up the package root manually

Next, you can set the project root programatically, for example using the here package. You can also set up a package project using the File -> New Project... menu in RStudio.

To initate a hidden .here file that sets the project root within the self-contained project folder, you can use:

```
here::set_here()
```

After setting the project root, you can store the active project for use for the remaining session. For details, consider **this help section** 

To create the package template folder structure and key files you can run:

```
create_package(here())
```

This creates the package template and starts the RStudio project session in a new session.

## Use usethis interactively

This r-lib online article explains further how to setup and invoke R package development workflow functions. It provides a good overview how to integrate git version control and how to install package building tools, e.g. compilers.

1. Set up interactive mode. This will open the .Rprofile file

```
usethis::use_usethis()
```

2. Copy the following lines into the file:

```
if (interactive()) {
  suppressMessages(require(devtools))
  suppressMessages(require(usethis))
}
```

Initiate a github repositiory