Packages

Using the help search in RStudio, or \ref{tudio} , we can discover if the function is in an installed package. If so, we simply need to load the package first

```
library(MASS)
truehist(iris$Species)
```

If it's not in an installed package, we can try searching on Rdocumentation.org or RSeek.org.

Installing Packages

CRAN packages can be installed from the RStudio Packages tab.

For Bioconductor packages, we source the **biocLite** function from the Bioconductor website, then run e.g.

```
source("https://bioconductor.org/biocLite.R")
biocLite("limma", "edgeR")
```

biocLite must be sourced in each session a Bioconductor package is to be installed. It ensures the Bioconductor and R versions are compatible. GitHub packages are built from source, so require additional tools (see "Install R" notes). Once setup, we can use install_github from the devtools package, e.g.

```
library(devtools)
install_github("hadley/vctrs")
```

It may be necessary to install other packages the package depends on from GitHub/Bioconductor first.

Finding Out About Packages

Often we find out about packages from a book, paper or tutorial.

To find a package that implements a particular method, we can search on Rdocumentation.org or RSeek.org.

CRAN Task Views and BiocViews give overviews of packages relating to a particular application or type of method.

Navigating a Package

Help for a package can be found by clicking on the *Packages* tab. This lists the functions/topics with help pages in that package.

In addition the following may be available

DESCRIPTION Metadata for the package, including a short Description field

vignettes User guides or extended documentation on specific topics
demos Use e.g. demo(package = "stats") to see available
 demos

NEWS News of changes in each package release pkg-package Overall help file for pkg