# The CMapBox User's Guide

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#### 1 Introduction

The CMapBox package provides efficient and powerful functions for pharmacogenomic data analysis...

## 2 Installation and Settings

CMapBox requires that several packages be installed. All dependencies are available from CRAN or Bioconductor:

```
if (!requireNamespace("BiocManager", quietly = TRUE))
    install.packages("BiocManager")
BiocManager::install("CMapBox", version = "3.8")
```

The package can also be installed directly form GitHub using devtools:

```
#install devtools if required
install.packages("devtools")

#install Xeva as:
devtools::install_github("bhklab/CMapBox")
```

Load Xeva into your current workspace:

```
library(CMapBox)
```

Load the dataset you wish to analyze:

```
#data(brca)
#print(brca)
```

## 3 SessionInfo

```
sessionInfo()
## R version 3.5.2 (2018-12-20)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Linux Mint 18.3
## Matrix products: default
## BLAS: /usr/lib/libblas/libblas.so.3.6.0
## LAPACK: /usr/lib/lapack/liblapack.so.3.6.0
## locale:
## [1] LC_CTYPE=en_CA.UTF-8
                                   LC_NUMERIC=C
## [3] LC_TIME=en_CA.UTF-8
                                  LC_COLLATE=en_CA.UTF-8
## [5] LC_MONETARY=en_CA.UTF-8
                                  LC_MESSAGES=en_CA.UTF-8
## [7] LC_PAPER=en_CA.UTF-8
                                  LC_NAME=C
## [9] LC_ADDRESS=C
                                  LC_TELEPHONE=C
## [11] LC_MEASUREMENT=en_CA.UTF-8 LC_IDENTIFICATION=C
## attached base packages:
                                                       datasets methods
## [1] parallel stats
                          graphics grDevices utils
## [8] base
## other attached packages:
                          BiocGenerics_0.28.0 CMapBox_0.0.0.9000
## [1] Biobase_2.42.0
## [4] knitr_1.21
## loaded via a namespace (and not attached):
## [1] gtools_3.8.1
                           tidyselect_0.2.5
                                               fgsea_1.8.0
## [4] xfun_0.4
                            slam_0.1-44
                                               sets_1.0-18
                           lattice_0.20-38
## [7] purrr_0.3.0
                                               colorspace_1.4-0
## [10] htmltools_0.3.6
                           yaml_2.2.0
                                               marray_1.60.0
## [13] rlang_0.3.1
                                               glue_1.3.0
                            pillar_1.3.1
## [16] piano_1.22.0
                           BiocParallel_1.16.5 bindrcpp_0.2.2
## [19] plyr_1.8.4
                           bindr_0.1.1
                                               stringr_1.3.1
## [22] munsell_0.5.0
                            gtable_0.2.0
                                               caTools_1.17.1.1
## [25] evaluate_0.12
                            highr_0.7
                                               Rcpp_1.0.0
## [28] KernSmooth_2.23-15
                           relations_0.6-8
                                               scales_1.0.0
## [31] BiocManager_1.30.4 limma_3.38.3
                                               gdata_2.18.0
## [34] gridExtra_2.3
                            gplots_3.0.1.1
                                               fastmatch_1.1-0
## [37] BiocStyle_2.10.0
                            ggplot2_3.1.0
                                               digest_0.6.18
## [40] stringi_1.2.4
                            dplyr_0.7.8
                                               grid_3.5.2
## [43] tools_3.5.2
                            bitops_1.0-6
                                               magrittr_1.5
## [46] lazyeval_0.2.1
                            tibble_2.0.1
                                               cluster_2.0.7-1
## [49] crayon_1.3.4
                            pkgconfig_2.0.2
                                               Matrix_1.2-15
## [52] data.table_1.12.0
                            assertthat_0.2.0
                                               rmarkdown_1.11
## [55] R6_2.3.0
                            igraph_1.2.2
                                               compiler_3.5.2
```