

R implementation

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1 Loaded functions:

```
#source("/media/Data/Dropbox/humanR/01funcs.R")
rm(list=ls())
#setwd("/media/Data/Dropbox/humanR/PD/")
#setwd("~/Dropbox/humanR/PD/")
###load("PD.Rdata", .GlobalEnv)
#lsos(pat="")
```

2 Load packages.

```
pkgs <- c('xlsx', 'lattice',
          'latticeExtra', 'dplyr', 'tidyr')
lapply(pkgs, require, character.only = TRUE)
```

3 1 Virus analysis

4 1.1 Classification of viruses and other phyla

5 Kraken is used for **read classification**. Deploying Kraken is documented **here**. Database used for
6 classification are those of NCBI (date: 3/30/2016).

↗ Describe the sample
preparation protocol

↗ Add github link after creating
repo

```
df <- read.table("./data/summary.all.outputs")
colnames(df)=gl(10,2,10,labels=c("A","F","P","I","V"))
df <- data.frame(samples = gl(26,2,26,labels=c("Ctrl",seq(1:12))),
                 kraken=gl(2,1,26,labels=c("C","U")),
                 df)
df1 <- gather(df[, c(1:2,seq(3,12,by=2))], "Phyla", "Sequence", 3:7)
df2 <- gather(df[, c(1:2,seq(4,12,by=2))], "Phyla", "Percentage", 3:7)
data.frame(df1, Percentage=df2[,4]) %>%
  write.table("summary.all.outputs.compiled", sep = "\t", quote=F)
```

7 2 System Information

8 The version number of R and packages loaded for generating the vignette were:

```
###save(list=ls(pattern=".*|. *" ), file="PD.Rdata")
```

sessionInfo()

R version 3.2.1 (2015-06-18)

Platform: x86_64-unknown-linux-gnu (64-bit)

Running under: elementary OS Luna

locale:

[1] LC_CTYPE=en_US.UTF-8	LC_NUMERIC=C
[3] LC_TIME=en_US.UTF-8	LC_COLLATE=en_US.UTF-8
[5] LC_MONETARY=en_US.UTF-8	LC_MESSAGES=en_US.UTF-8
[7] LC_PAPER=en_US.UTF-8	LC_NAME=en_US.UTF-8
[9] LC_ADDRESS=en_US.UTF-8	LC_TELEPHONE=en_US.UTF-8
[11] LC_MEASUREMENT=en_US.UTF-8	LC_IDENTIFICATION=en_US.UTF-8

attached base packages:

[1] stats	graphics	grDevices	utils	datasets	methods
[7] base					

other attached packages:

[1] knitr_1.10.5	tidyr_0.2.0	dplyr_0.4.2
[4] latticeExtra_0.6-26	RColorBrewer_1.1-2	lattice_0.20-31
[7] xlsx_0.5.7	xlsxjars_0.6.1	rJava_0.9-6
[10] RevoUtilsMath_3.2.1		

loaded via a namespace (and not attached):

[1] Rcpp_0.11.6	magrittr_1.5	R6_2.0.1	stringr_1.0.0
[5] highr_0.5	plyr_1.8.3	tools_3.2.1	parallel_3.2.1
[9] grid_3.2.1	DBI_0.3.1	lazyeval_0.1.10	assertthat_0.1
[13] reshape2_1.4.1	formatR_1.2	evaluate_0.7	stringi_0.5-5
[17] compiler_3.2.1			