

Raw Counts Data Frame

Nate Olson

2017-09-27

```
library(ProjectTemplate)
cwd <- getwd()
setwd("../")
load.project()

## Warning in .load.config(override.config): Your configuration file
## is missing the following entries: data_loading_header, data_ignore,
## logging_level, cache_loaded_data, sticky_variables. Defaults will be used.

## Warning in .check.version(config): Your configuration is compatible with version 0.7 of the ProjectT
## Please run ProjectTemplate::migrate.project() to migrate to the installed version 0.8.

setwd(cwd)
pipeline_dir <- "../mgtst_pipelines"
mrexp <- get_mrexp(pipeline_dir)
```

Objective

Generate a tidy dataframe with count data.

```
get_count_df <- function(mrojb, agg_genus = FALSE, css = TRUE){
  if(agg_genus){
    mrojb <- aggregateByTaxonomy(mrojb, lvl = "Rank6",
                                norm = FALSE, log = FALSE, sl = 1)
  }

  if(css == TRUE){
    mrojb <- cumNorm(mrojb, p = 0.75)
    count_mat <- MRcounts(mrojb, norm = TRUE, log = FALSE, sl = 1000)
  }else{
    count_mat <- MRcounts(mrojb, norm = FALSE, log = FALSE, sl = 1)
  }
  count_mat %>%
    as.data.frame() %>%
    rownames_to_column(var = "feature_id") %>%
    gather("id", "count", -feature_id)
}

## Converting count matrix to data frame
counts_df <- mrexp %>%
  map_df(get_count_df, css = FALSE, .id = "pipe") %>%
  ## Adding sample metadata
  left_join(pData(mrexp$dada2))

## Joining, by = "id"
saveRDS(counts_df, "~/Desktop/raw_counts.RDS")
```