

# Merge featureCounts read count output files into one

Toshihiro Arae

## General directory setting

```
wd <- here::here()
shared <- fs::path(fs::path_dir(wd), "shared")
```

## Loading packages

```
library(magrittr)
library(ggplot2)
```

## Load common R scripts

```
#source(fs::path(wd, "script_r", "MISC.R"))
#source(fs::path(here::here(), "script_r", "MISC_PALETTE.R"))
```

## Merge featureCounts outputs

```
dirs_output <-
  c(
    fs::path("data_preproc", "readcount", "count_ribo_uorf_psite")
  )

for(dir_output in dirs_output) {
  count_files <- fs::dir_ls(fs::path(wd, dir_output), regexp = "counts.txt$")

  count_df <-
    count_files %>%
    purrr::map(ngsmisc::fC_read_count) %>%
    purrr::map(ngsmisc::rename_fpath_bam) %>%
    ngsmisc::fC_merge_count() %>%
    ngsmisc::fC_calc_tpm() %>%
    dplyr::select(-(Chr:Strand))
  readr::write_csv(count_df, fs::path(wd, dir_output, "count_by_gene.csv"))
}
```

## Sessioninfo

```
sessionInfo()
```

```
R version 4.2.1 (2022-06-23)
Platform: aarch64-apple-darwin20 (64-bit)
Running under: macOS Ventura 13.1

Matrix products: default
BLAS: /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/lib/libRblas.0.dylib
LAPACK: /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/lib/libRlapack.dylib

locale:
[1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
```

attached base packages:

[1] stats graphics grDevices datasets utils methods base

other attached packages:

[1] ggplot2\_3.4.2 magrittr\_2.0.3

loaded via a namespace (and not attached):

[1] compiler_4.2.1	pillar_1.9.0	BiocManager_1.30.18
[4] tools_4.2.1	bit_4.0.5	digest_0.6.31
[7] jsonlite_1.8.4	evaluate_0.20	lifecycle_1.0.3
[10] tibble_3.2.1	gtable_0.3.1	pkgconfig_2.0.3
[13] rlang_1.1.0	cli_3.6.0	rstudioapi_0.14
[16] parallel_4.2.1	yaml_2.3.6	xfun_0.40
[19] fastmap_1.1.0	withr_2.5.0	dplyr_1.1.1
[22] stringr_1.5.0	knitr_1.42	hms_1.1.3
[25] generics_0.1.3	fs_1.5.2	vctrs_0.6.1
[28] ngsmisc_0.4.0	bit64_4.0.5	rprojroot_2.0.3
[31] grid_4.2.1	tidyselect_1.2.0	glue_1.6.2
[34] here_1.0.1	R6_2.5.1	fansi_1.0.3
[37] vroom_1.6.0	rmarkdown_2.24	tzdb_0.3.0
[40] readr_2.1.4	purrr_1.0.1	scales_1.2.1
[43] htmltools_0.5.3	colorspace_2.0-3	renv_1.0.3
[46] utf8_1.2.2	stringi_1.7.12	munsell_0.5.0
[49] crayon_1.5.2		