Correlation

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12/31/2021

```
suppressPackageStartupMessages(source("run_limma.R"))
dirSal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/sal_best/vbprior=1e0"
```

Correlation between Salmon and Shoal for weight 1e-05 for fixed prior

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_fixed_prior/vbprior=1e0/c=1e-05"
dfSal <- getQuantFiles(dirSal, type="salmon")
dfShoal <- getQuantFiles(dirShoal, type="shoal")

txiSal <- tximport(dfSal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
```

```
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
txiShoal <- tximport(dfShoal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
corr <- sapply(seq(12), function(i) cor(txiSal[["counts"]][,i], txiShoal[["counts"]][,i], method = "spearman"))
print(corr)
```

```
##  [1] 0.9936717 0.9936928 0.9937750 0.9937167 0.9937321 0.9937382 0.9937728
##  [8] 0.9938330 0.9936740 0.9937639 0.9938505 0.9937794
```

Correlation between Salmon and Shoal for weight 100 for fixed prior

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_fixed_prior/vbprior=1e0/c=100"
dfSal <- getQuantFiles(dirSal, type="salmon")
dfShoal <- getQuantFiles(dirShoal, type="shoal")

txiSal <- tximport(dfSal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
```

```
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
txiShoal <- tximport(dfShoal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
corr <- sapply(seq(12), function(i) cor(txiSal[["counts"]][,i], txiShoal[["counts"]][,i], method = "spearman"))
print(corr)
```

```
##  [1] 0.9965852 0.9966439 0.9968076 0.9966882 0.9968095 0.9968251 0.9965077
##  [8] 0.9966085 0.9965848 0.9965983 0.9966866 0.9966953
```

Correlation between Salmon and Shoal for weight 1e-05 for old prior

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best/vbprior=1e0/c=1e-05"
dfSal <- getQuantFiles(dirSal, type="salmon")
dfShoal <- getQuantFiles(dirShoal, type="shoal")

txiSal <- tximport(dfSal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
```

```
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
txiShoal <- tximport(dfShoal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
corr <- sapply(seq(12), function(i) cor(txiSal[["counts"]][,i], txiShoal[["counts"]][,i], method = "spearman"))
print(corr)
```

```
##  [1] 0.7586842 0.7595145 0.7608263 0.7599915 0.7608559 0.7604447 0.7586091
##  [8] 0.7592293 0.7605628 0.7592934 0.7612572 0.7604064
```

Correlation between Salmon and Shoal for weight 100 for old prior

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best/vbprior=1e0/c=100"
dfSal <- getQuantFiles(dirSal, type="salmon")
dfShoal <- getQuantFiles(dirShoal, type="shoal")

txiSal <- tximport(dfSal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
```

```
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
txiShoal <- tximport(dfShoal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
corr <- sapply(seq(12), function(i) cor(txiSal[["counts"]][,i], txiShoal[["counts"]][,i], method = "spearman"))
print(corr)
```

```
##  [1] 0.9803902 0.9804552 0.9804516 0.9802492 0.9803820 0.9802785 0.9803153
##  [8] 0.9802173 0.9803762 0.9802662 0.9805510 0.9801731
```

Correlation between Salmon and Shoal for weight 0.1 for updated prior

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_updated/vbprior=1e0/c=0.1"
dfSal <- getQuantFiles(dirSal, type="salmon")
dfShoal <- getQuantFiles(dirShoal, type="shoal")

txiSal <- tximport(dfSal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
```

```
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
txiShoal <- tximport(dfShoal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
corr <- sapply(seq(12), function(i) cor(txiSal[["counts"]][,i], txiShoal[["counts"]][,i], method = "spearman"))
print(corr)
```

```
##  [1] 0.9967099 0.9968065 0.9968765 0.9968377 0.9968437 0.9968884 0.9967579
##  [8] 0.9968596 0.9967366 0.9968432 0.9968435 0.9968688
```

Correlation between Salmon and Shoal for weight 1e-05 for updated prior

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_updated/vbprior=1e0/c=1e-05"
dfSal <- getQuantFiles(dirSal, type="salmon")
dfShoal <- getQuantFiles(dirShoal, type="shoal")

txiSal <- tximport(dfSal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
```

```
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
txiShoal <- tximport(dfShoal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
corr <- sapply(seq(12), function(i) cor(txiSal[["counts"]][,i], txiShoal[["counts"]][,i], method = "spearman"))
print(corr)
```

```
##  [1] 0.9959718 0.9960684 0.9960622 0.9960895 0.9960175 0.9960086 0.9963736
##  [8] 0.9964670 0.9962629 0.9964796 0.9963629 0.9963693
```

Correlation between Salmon and Shoal for weight 100 for updated prior

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_updated/vbprior=1e0/c=100"
dfSal <- getQuantFiles(dirSal, type="salmon")
dfShoal <- getQuantFiles(dirShoal, type="shoal")

txiSal <- tximport(dfSal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
```

```
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
txiShoal <- tximport(dfShoal[["files"]], type="salmon", txOut=T)
```

```
## reading in files with read_tsv
## 1 2 3 4 5 6 7 8 9 10 11 12
```

```
corr <- sapply(seq(12), function(i) cor(txiSal[["counts"]][,i], txiShoal[["counts"]][,i], method = "spearman"))
print(corr)
```

```
##  [1] 0.9958540 0.9959189 0.9960435 0.9960046 0.9960648 0.9960754 0.9957381
##  [8] 0.9958695 0.9958622 0.9958038 0.9959109 0.9959140
```