

Burden

Partition enhancers based on distance to TSS based on strict overlap. Basically, her pipeline takes intersections between enhancers and distance ranges, and remove bases of enhancers that are not overlapped. ###
NOTICE

```
getwd()
```

```
## [1] "/media/yuwen/F/ASD/analysis"
```

```
knitr::opts_chunk$set(warning=FALSE, message=FALSE)
```

read in data with predicted mutation count and observed mutation count

load in functions and datasets that make the functions work

ASD manuscript data, stringent ASD genes

```
predicted
```

```
## [1] 8.575015
```

```
observed
```

```
## [1] 14
```

```
ppois(observed-1, predicted,lower.tail = FALSE)
```

```
## [1] 0.05443376
```

ASD manuscript data, relaxed ASD genes

```
predicted
```

```
## [1] 57.02076
```

```
observed
```

```
## [1] 74
```

```
ppois(observed-1, predicted,lower.tail = FALSE)
```

```
## [1] 0.01745865
```

control_model_693_mutrate data, stringent ASD genes

```
predicted
```

```
## [1] 15.40811
```

```
observed
```

```
## [1] 15
```

```
ppois(observed-1, predicted, lower.tail = FALSE)
```

```
## [1] 0.5755185
```

control_model_693_mutrate, relaxed ASD genes

```
predicted
```

```
## [1] 102.3134
```

```
observed
```

```
## [1] 110
```

```
ppois(observed-1, predicted, lower.tail = FALSE)
```

```
## [1] 0.2361604
```

control_model_258_mutrate data, stringent ASD genes

```
predicted
```

```
## [1] 2.725912
```

```
observed
```

```
## [1] 5
```

```
ppois(observed-1, predicted, lower.tail = FALSE)
```

```
## [1] 0.1409721
```

control_model_258_mutrate, relaxed ASD genes

```
predicted
```

```
## [1] 18.00097
```

```
observed
```

```
## [1] 30
```

```
ppois(observed-1, predicted, lower.tail = FALSE)
```

```
## [1] 0.005948494
```

ASD_model_Scherer_mutrate data, stringent ASD genes

```
predicted
```

```
## [1] 4.584999
```

```
observed
```

```
## [1] 9
```

```
ppois(observed-1, predicted, lower.tail = FALSE)
```

```
## [1] 0.0443264
```

ASD_model_Scherer_mutrate, relaxed ASD genes

```
predicted
```

```
## [1] 30.46346
```

```
observed
```

```
## [1] 43
```

```
ppois(observed-1, predicted, lower.tail = FALSE)
```

```
## [1] 0.0185239
```