## 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 datastes that make the functions work
ASD manuscript data, stringent ASD genes
predicted
## [1] 10.1995
observed
## [1] 12
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.3261256
ASD manuscript data, relaxed ASD genes
predicted
## [1] 65.43419
observed
## [1] 75
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.1321181
control_model_693_mutrate data, stringent ASD genes
```

```
predicted
## [1] 17.10825
observed
## [1] 17
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.5426506
control\_model\_693\_mutrate, relaxed ASD genes
predicted
## [1] 109.5979
observed
## [1] 105
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.6825136
control\_model\_258\_mutrate\ data,\ stringent\ ASD\ genes
predicted
## [1] 4.394039
observed
## [1] 2
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.9333796
control\_model\_258\_mutrate, \ relaxed \ ASD \ genes
```

```
predicted
## [1] 27.04818
observed
## [1] 24
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.7469995
ASD\_model\_Scherer\_mutrate\ data,\ stringent\ ASD\ genes
predicted
## [1] 6.014071
observed
## [1] 6
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.5565778
ASD\_model\_Scherer\_mutrate, relaxed ASD genes
predicted
## [1] 38.47362
observed
## [1] 42
ppois(observed-1, predicted,lower.tail = FALSE)
## [1] 0.3056139
```