RAProject

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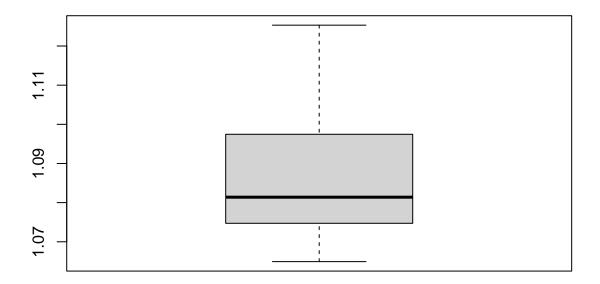
2022/10/10

Calculate distances for samples

```
DistanceListFromEM=c()
DistanceListFromUN=c()
for(i in 1:20){
  sample=getSample()
  sample$high_confidence<-as.logical(sample$high_confidence)</pre>
  sample$productive<-as.logical(sample$productive)</pre>
  sample$full_length<-as.logical(sample$full_length)</pre>
  sample$is_cell<-as.logical(sample$is_cell)</pre>
  samplelist <- split(sample, f = sample$barcode)</pre>
  samplelist <- SplitDataFrameList(samplelist)</pre>
  EMpredicted <- clonoStats(samplelist, method = 'EM')</pre>
  distance1=getDistance(clonoNames(EMpredicted),clonoAbundance(EMpredicted)[,1])
  DistanceListFromEM[i] = distance1
  UNpredicted <- clonoStats(samplelist, method = 'unique')</pre>
  distance2=getDistance(clonoNames(UNpredicted),clonoAbundance(UNpredicted)[,1])
  DistanceListFromUN[i] = distance2
```

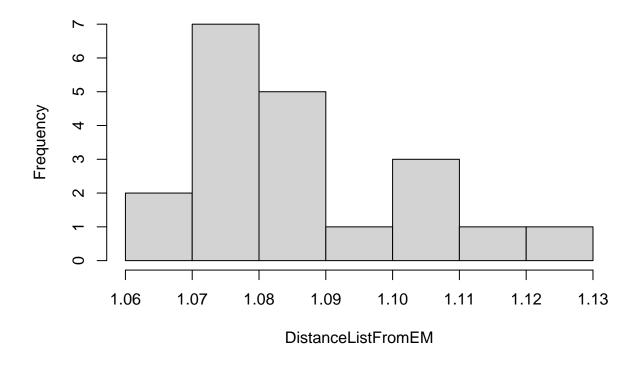
Visualize

```
boxplot(DistanceListFromEM)
```

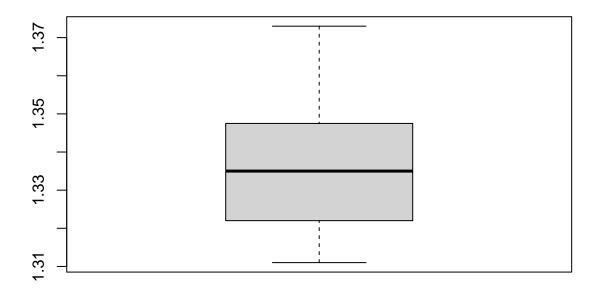


hist(DistanceListFromEM)

Histogram of DistanceListFromEM

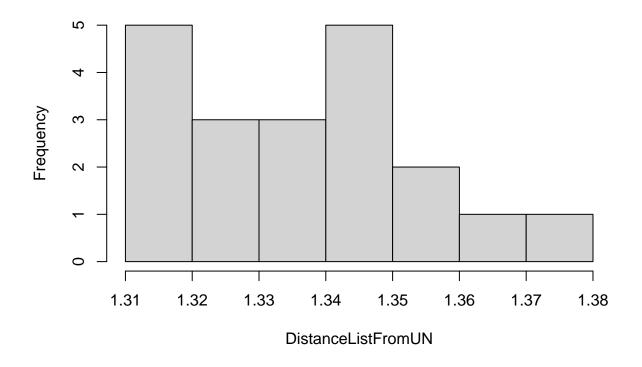


boxplot(DistanceListFromUN)



hist(DistanceListFromUN)

Histogram of DistanceListFromUN



print(median(DistanceListFromEM))

[1] 1.08139

print(median(DistanceListFromUN))

[1] 1.335

print(mean(DistanceListFromEM))

[1] 1.086425

print(mean(DistanceListFromUN))

[1] 1.33675