

Population Analysis (Q13 & Q14)

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Section 4: Population Scale Analysis

```
expr <- read.table("rs8067378_ENSG00000172057.6.txt")
head(expr)
```

```
##      sample geno      exp
## 1 HG00367   A/G 28.96038
## 2 NA20768   A/G 20.24449
## 3 HG00361   A/A 31.32628
## 4 HG00135   A/A 34.11169
## 5 NA18870   G/G 18.25141
## 6 NA11993   A/A 32.89721
```

```
#how many individuals there are
nrow(expr)
```

```
## [1] 462
```

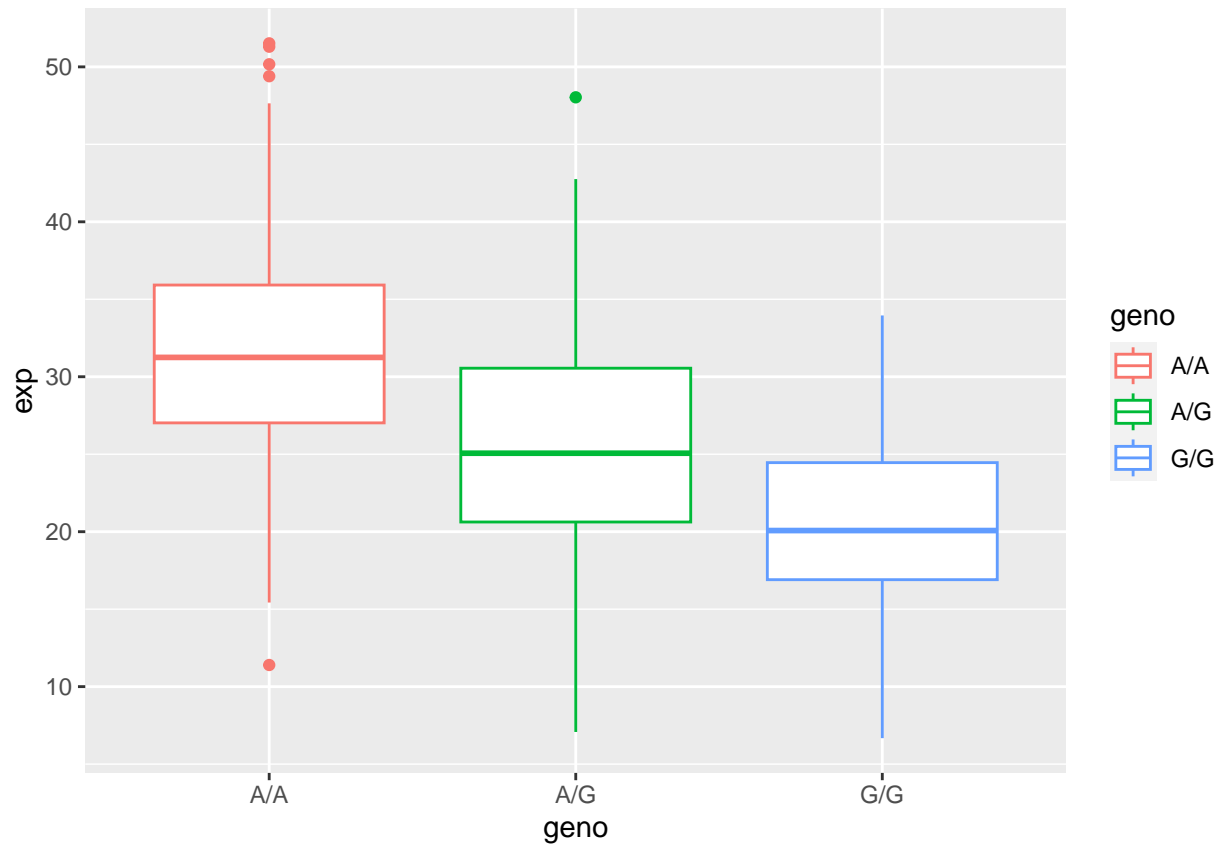
```
#how many of each genotype
table(expr$geno)
```

```
##
## A/A A/G G/G
## 108 233 121
```

Summary Figure

Using ggplot which function(); group by

```
library(ggplot2)
ggplot(expr, aes(geno, exp, col= geno)) + geom_boxplot()
```



The SNP does affect gene expression; G|G genotype results in lowered expression.