R Console Interaction

- Identify the **clinical** and **phenotypic** variables in the dataframe either in the R Console or in RStudio

- Use the R Console or the console in RStudio

- Use the functions head() and/or View()

Mini Project Exercise

Use R plot functions to visualize the correlation between Hallmark Hypoxia and Hallmark Inflammatory Response

- Is the correlation positive or negative?

Use the R plot functions to visualize the correlation between Hallmark Inflammatory Response and Up and Down-Regulated Hypoxia

- **Is the correlation positive or negative?**

Mini Project Exercise

- Use the function qplot() in R

- The qplot() function is from the ggplot2 library

- Try and see if you can qplot() without calling the ggplot2 library

Syntax of R commands

qplot() function:

```
qplot(HALLMARK_HYPOXIA, HIF1A,

    data = r2_gse62564_GSVA_Metadata,

    colour=quantile,

    ylab = "HIF1A",

    xlab = "Hallmark Hypoxia")
```

Link to reference

Syntax of R commands

boxplot() function:

```
boxplot(data=r2_gse62564_GSVA_Metadata,

r2_gse62564_GSVA_Metadata$mycn_status,

r2_gse62564_GSVA_Metadata$MYCN)
```

[Link to reference](#)