## Taller 3A Estadística genómica

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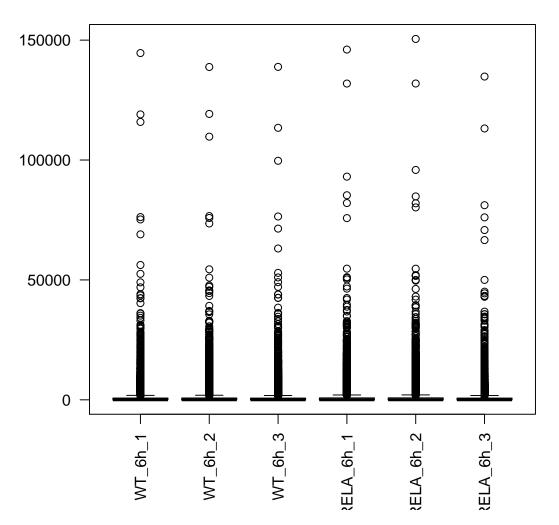
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Sobre unos datos del GEO (una sola medición en el tiempo) que comparen dos condiciones, identifique los genes diferencialmente expresados usando acde:

```
> library(acde)
> library("DESeq")
> #######################
> data <- read.table("GSE58972_RELA_6h_processed_data.txt", h=T)</pre>
> dim(data)
[1] 23284
> head(data)
           gene description WT_6h_1 WT_6h_2 WT_6h_3 RELA_6h_1 RELA_6h_2
1 0610005C13Rik
                                  9
                                         12
                                                 12
                                                            11
                         na
2 0610007C21Rik
                                                           512
                                 534
                                         581
                                                 562
                                                                      537
3 0610007L01Rik
                                2124
                                        2197
                                                2168
                                                          2811
                                                                     2706
                         na
4 0610007N19Rik
                         na
                                  17
                                        26
                                                  21
                                                             18
                                                                       20
5 0610007P08Rik
                                1410
                                        1504
                                                1543
                                                           1546
                                                                     1577
                         na
6 0610007P14Rik
                               2049
                                        2008
                                                2074
                                                           2192
                                                                     2192
  RELA_6h_3
1
         10
        501
2
3
       2265
4
         15
5
       1353
       1968
6
```

<sup>&</sup>gt; boxplot(data[, 3:8], main="Boxplot Mus musculus", col="lightgreen", cex.names=0.2, las=2)

## **Boxplot Mus musculus**



<sup>&</sup>gt; rownames(data) <- data\$gene

<sup>&</sup>gt; head(countsTable)

	WT_6h_1	WT_6h_2	WT_6h_3	RELA_6h_1	RELA_6h_2	RELA_6h_3
0610005C13Rik	9	12	12	11	16	10
0610007C21Rik	534	581	562	512	537	501
0610007L01Rik	2124	2197	2168	2811	2706	2265
0610007N19Rik	17	26	21	18	20	15
0610007P08Rik	1410	1504	1543	1546	1577	1353
0610007P14Rik	2049	2008	2074	2192	2192	1968

<sup>&</sup>gt; conds <- factor( c( "S1", "S2", "S3", "M1", "M2", "M3"))

<sup>&</sup>gt; countsTable <- data[,3:8]</pre>

<sup>&</sup>gt; newcds <- newCountDataSet( countsTable, conds )</pre>