

bulk-org figures (AB) V1.351

Raphael Kubler

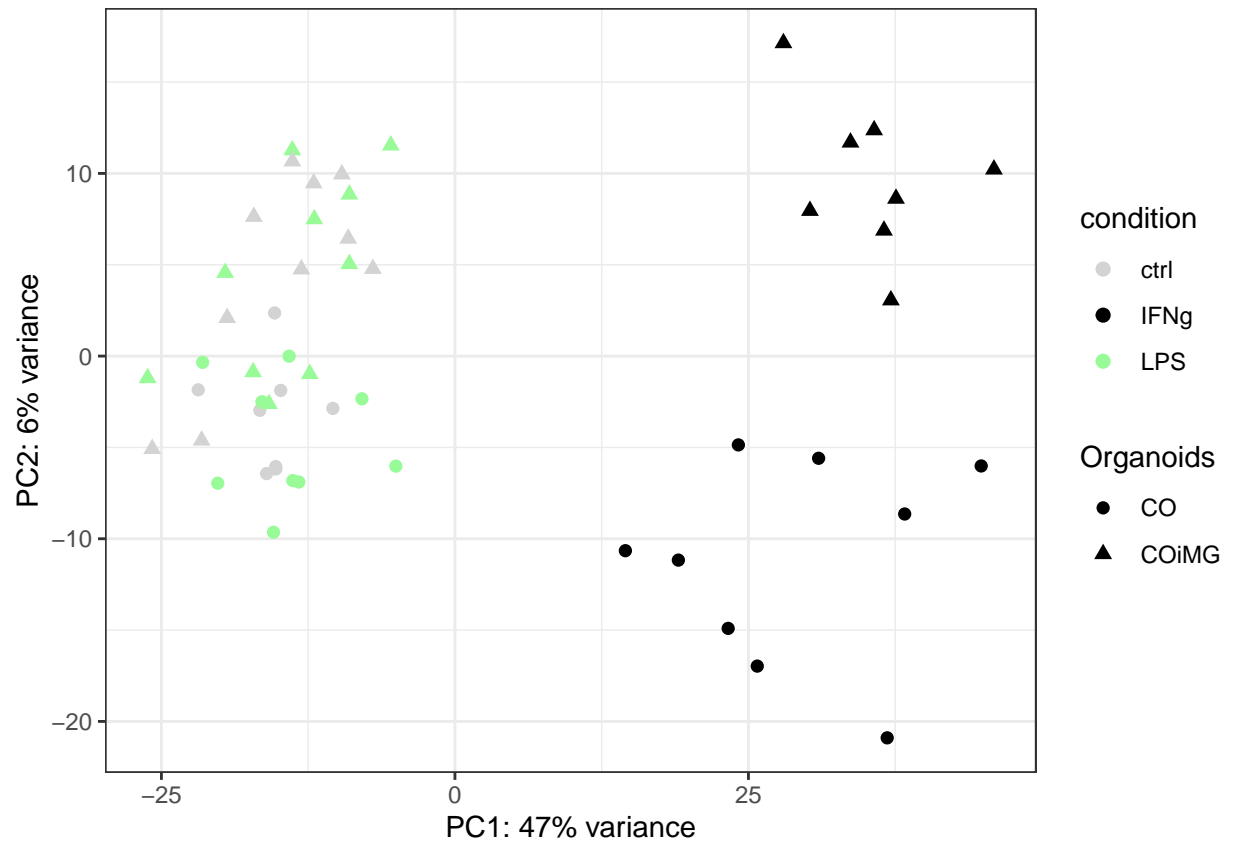
03/01/2024

Contents

PCA IFNγ, LPS, ctr	2
CO vs COiMG in control samples	3
PCA plots	3
Volcano plot	4
DEG table	5
Boxplot CO vs COiMG in CTR	5
Patir microglia genes heatmap	7
Enrichment heatmap (gene sets of interest)	8
GO enrichment	9
Stimulation (IFNγ) samples	11
PCA plots	11
Volcano plot	12
DEG table	13
Boxplot genes of interest	13
Top 40 DEGs heatmap	14
Enrichment heatmap (gene sets of interest)	16
GO enrichment	17
IFNγ in COiMG	19
PCA plots	19
Volcano plot	20
DEG table	21
Boxplot genes of interest	21
Top 40 DEGs heatmap	22
Enrichment heatmap (gene sets of interest)	23
GO enrichment	23

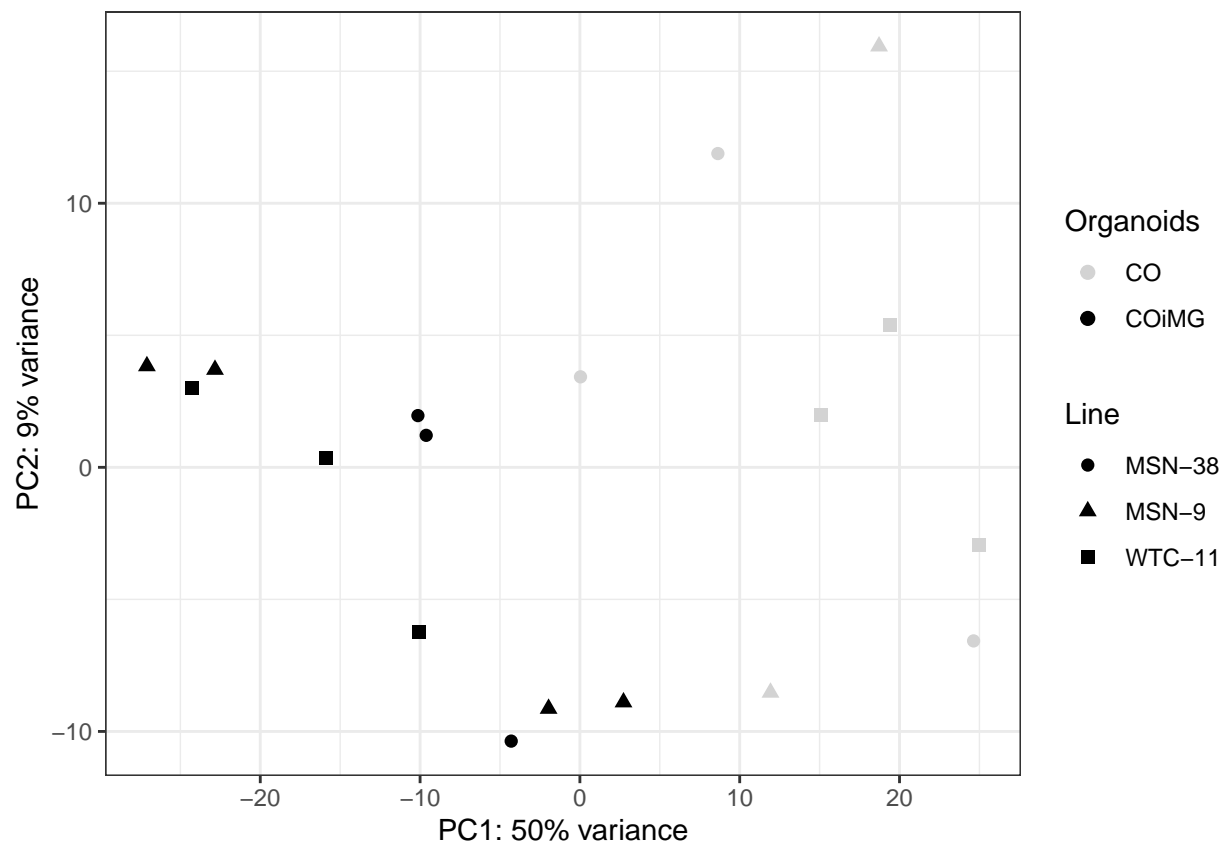
CO vs COiMG under IFNy	27
Phagocytosis: CO vs COiMG under IFNy	27
Gene set heatmap	28
IFNy CO vs COiMG	29
CO vs COiMG lFC correlation plot	32
iMG vs ocMG	33
Volcano	34
Interaction boxplots	34
A	34
B	35
SFARI response to IFNy (COiMG genes)	36
SFARI response to IFNy (CO genes)	36
SFARI enrichment in IFNy:	37

PCA IFNy, LPS, ctr

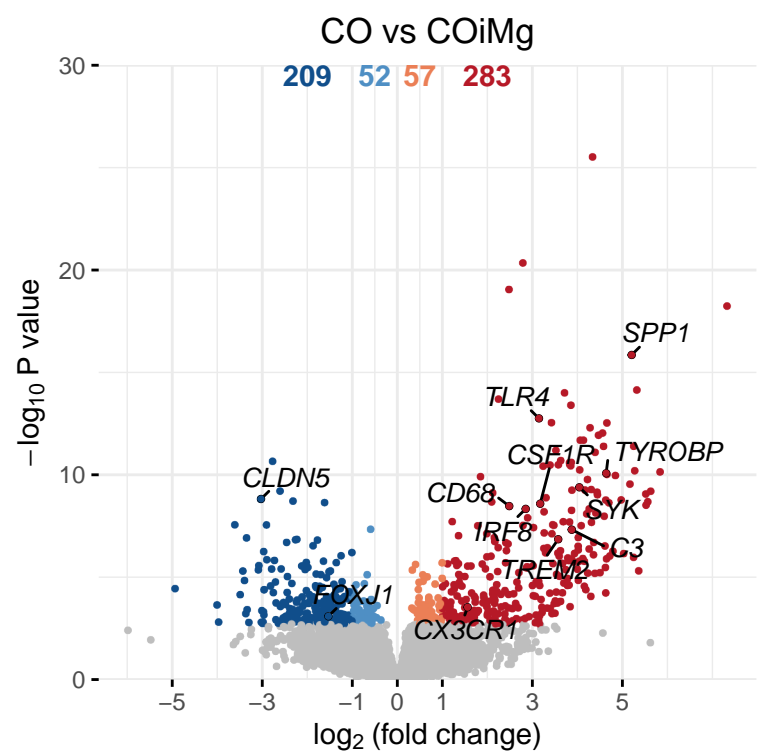


CO vs COiMG in control samples

PCA plots

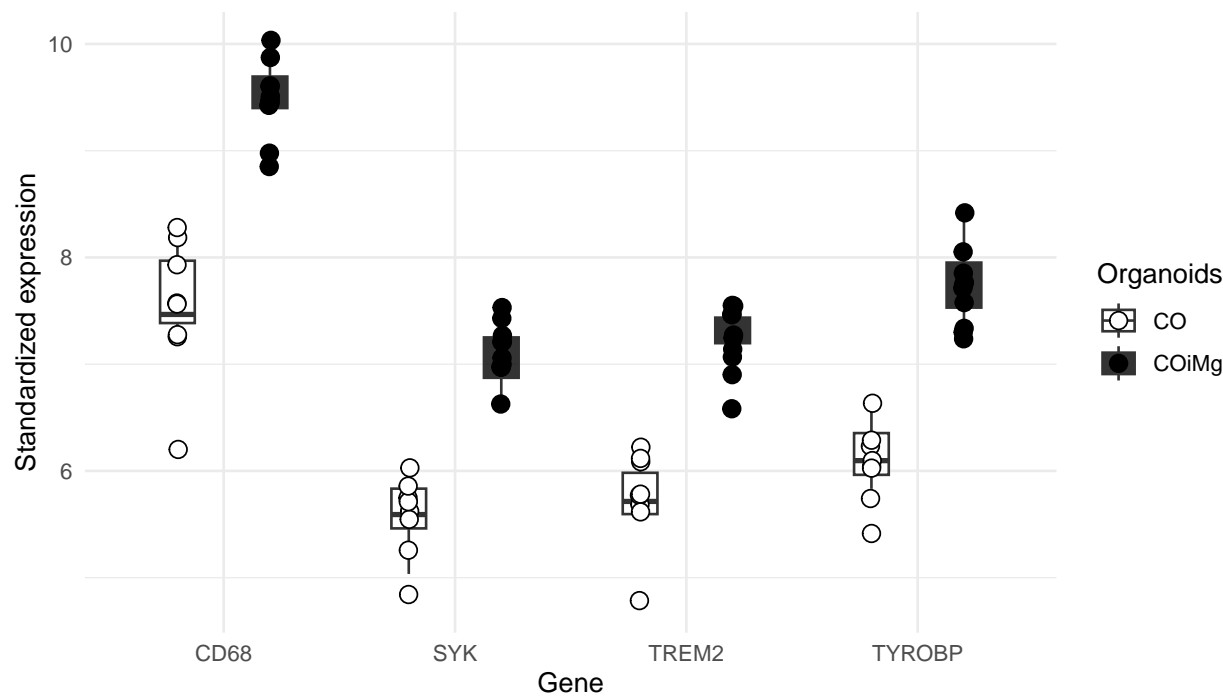
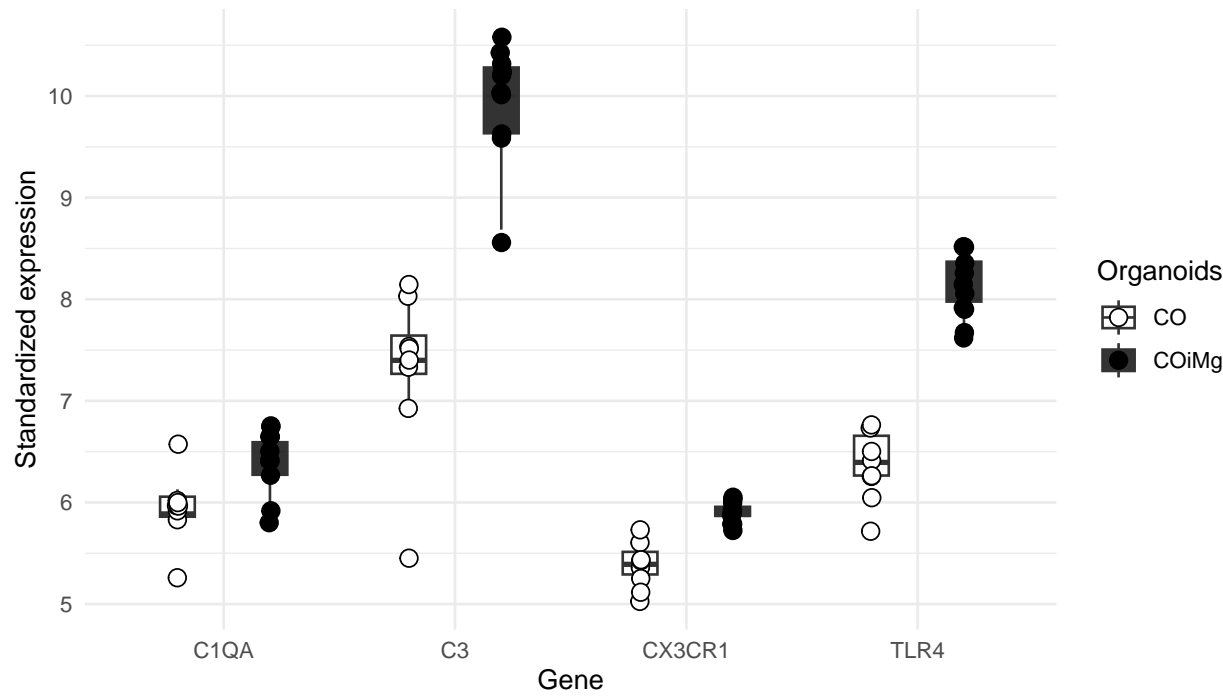


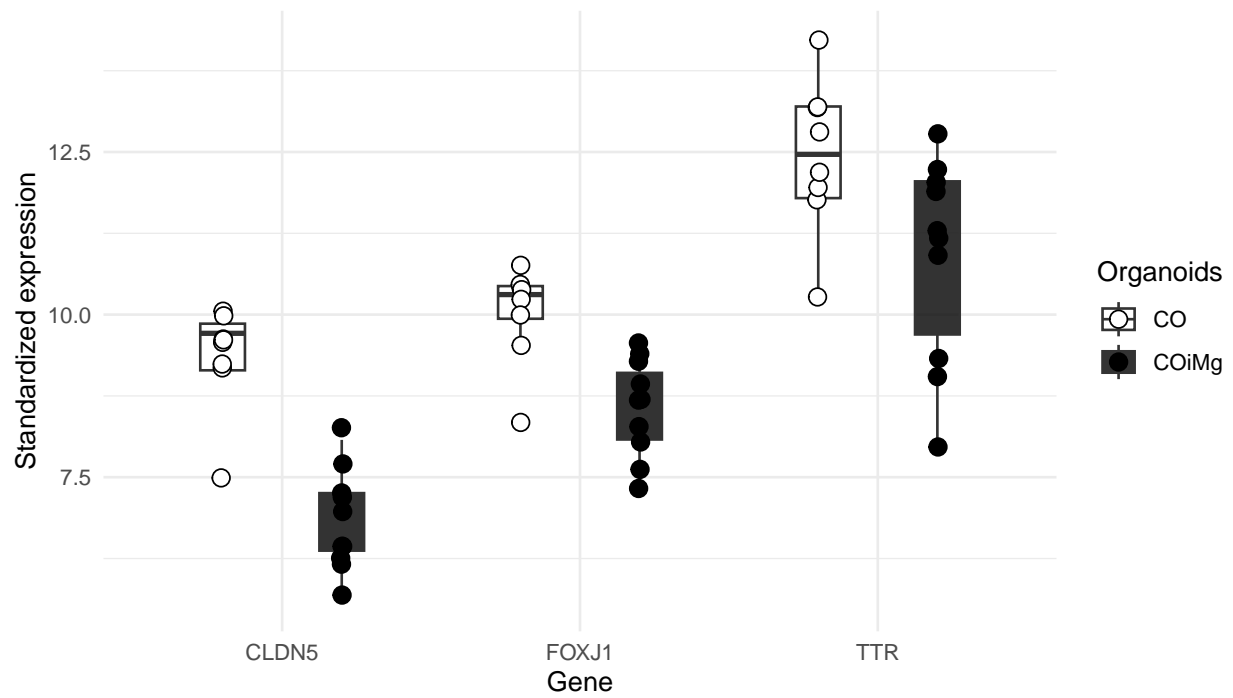
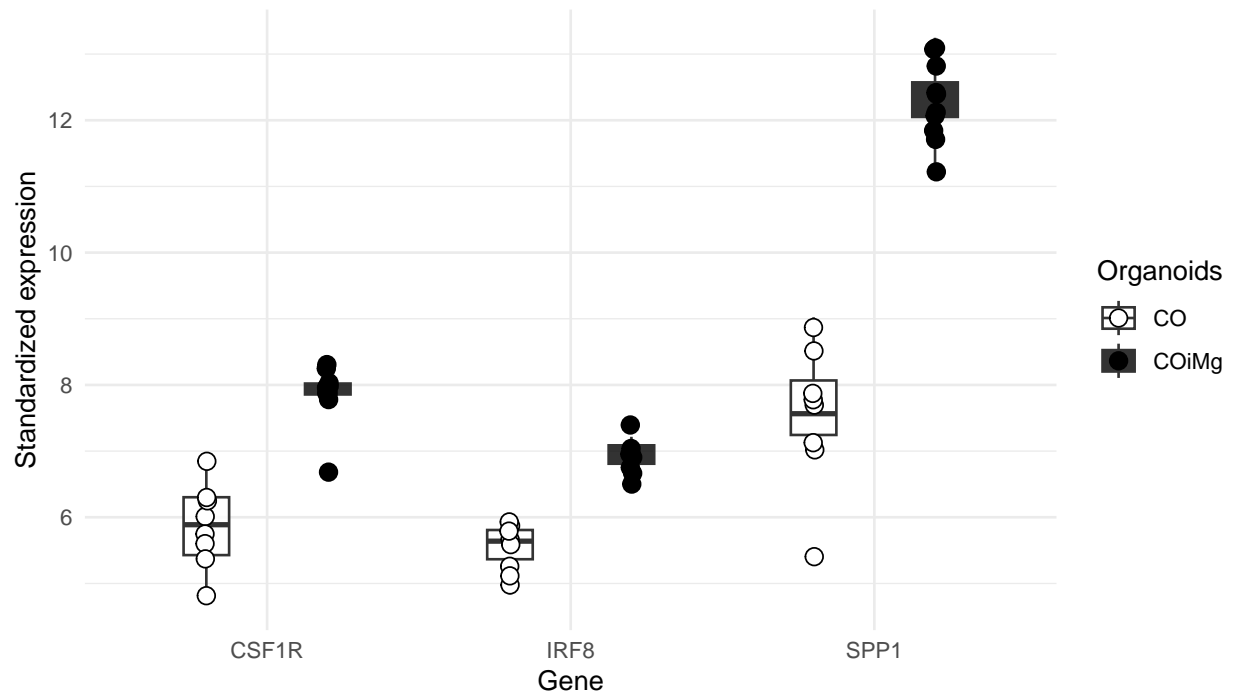
Volcano plot



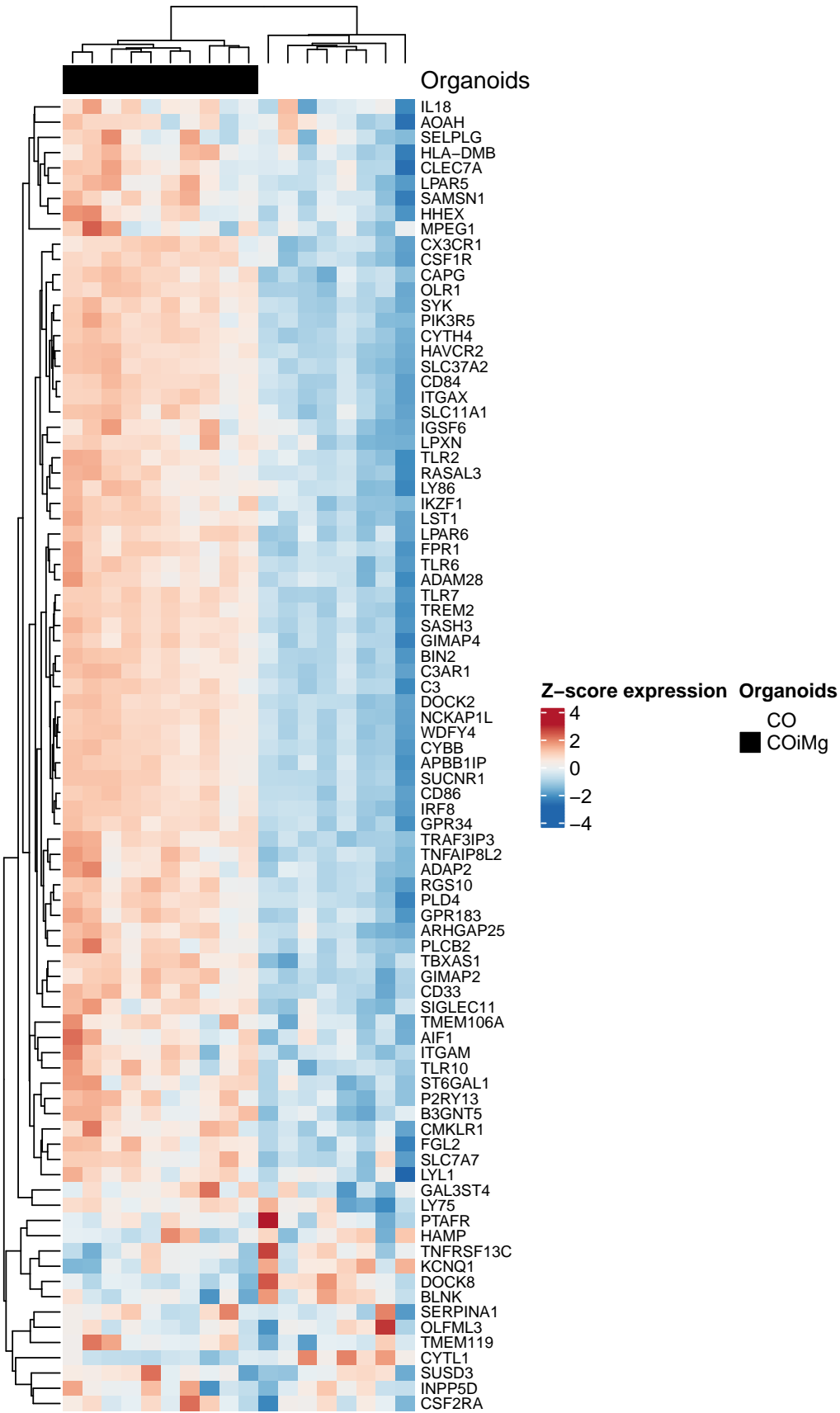
DEG table

Boxplot CO vs COiMg in CTR

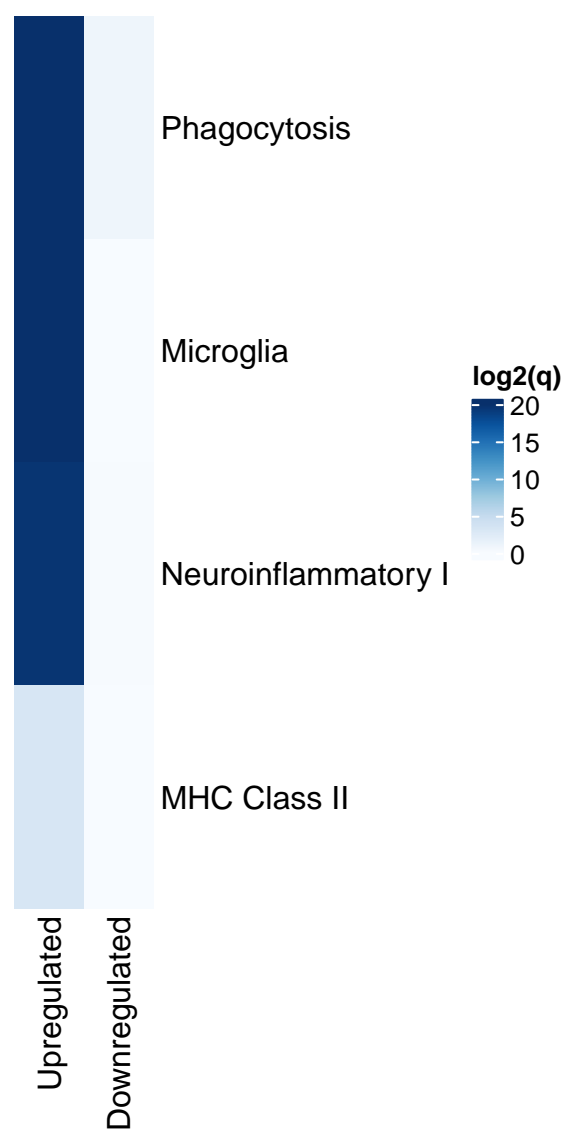




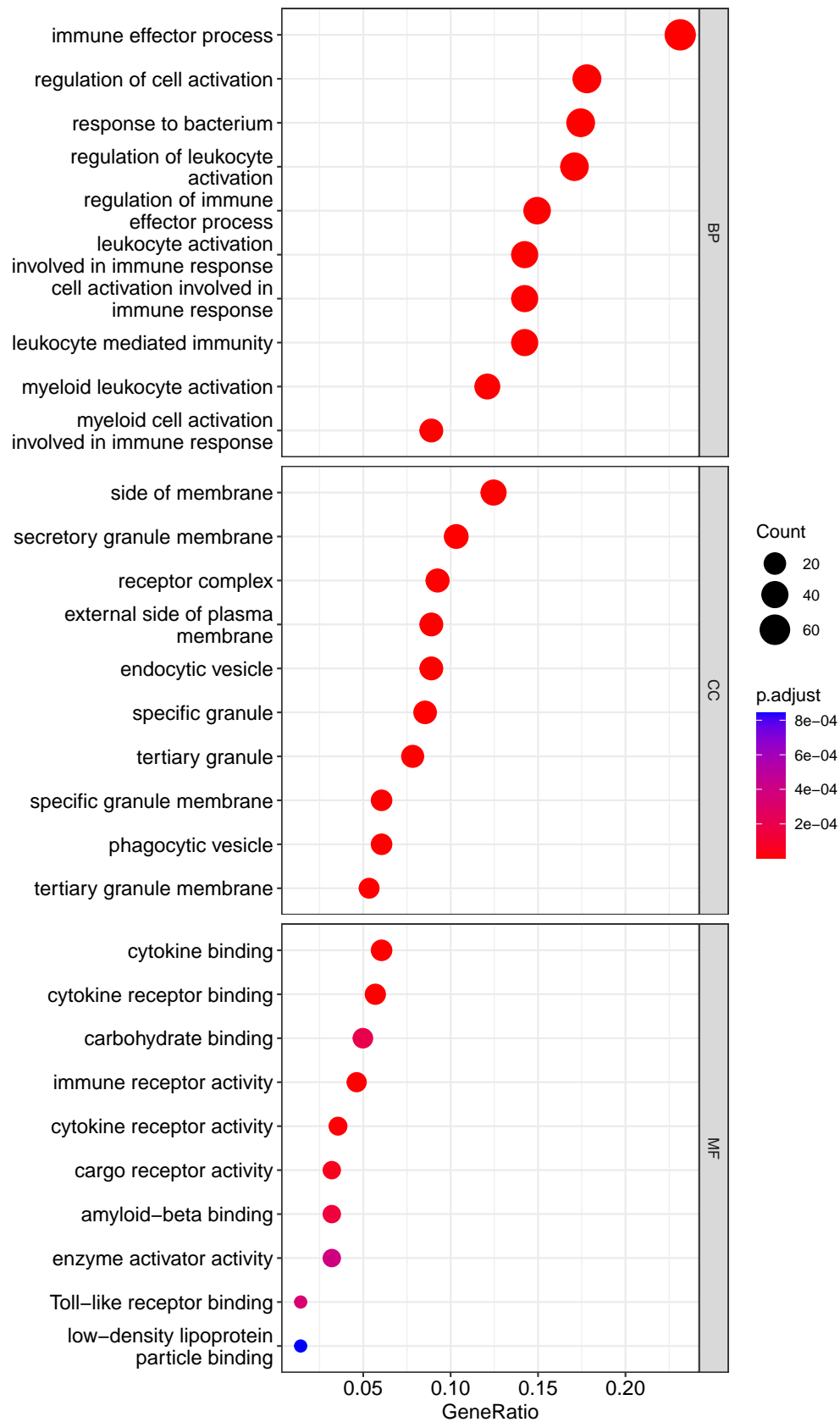
Patir microglia genes heatmap

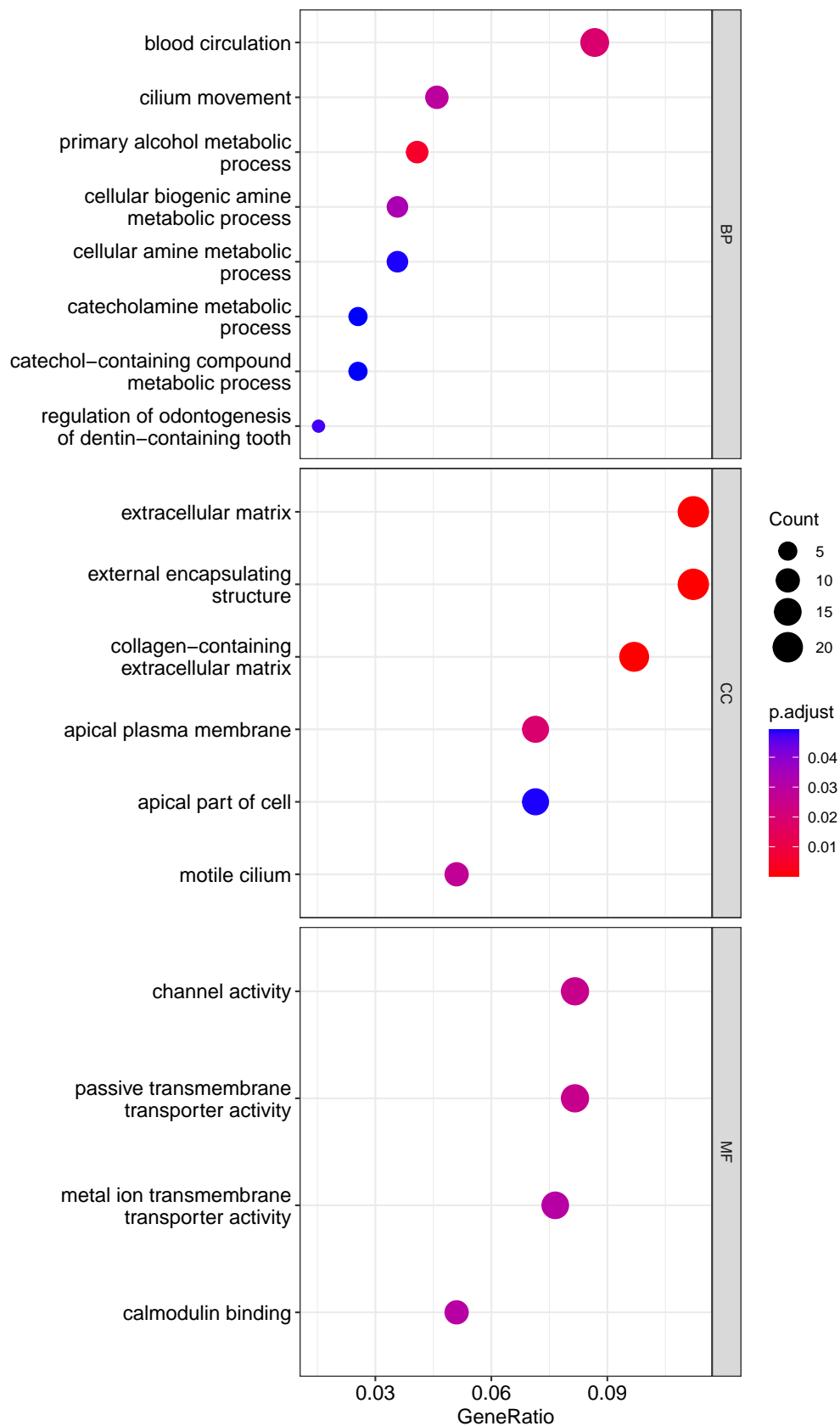


Enrichment heatmap (gene sets of interest)



GO enrichment





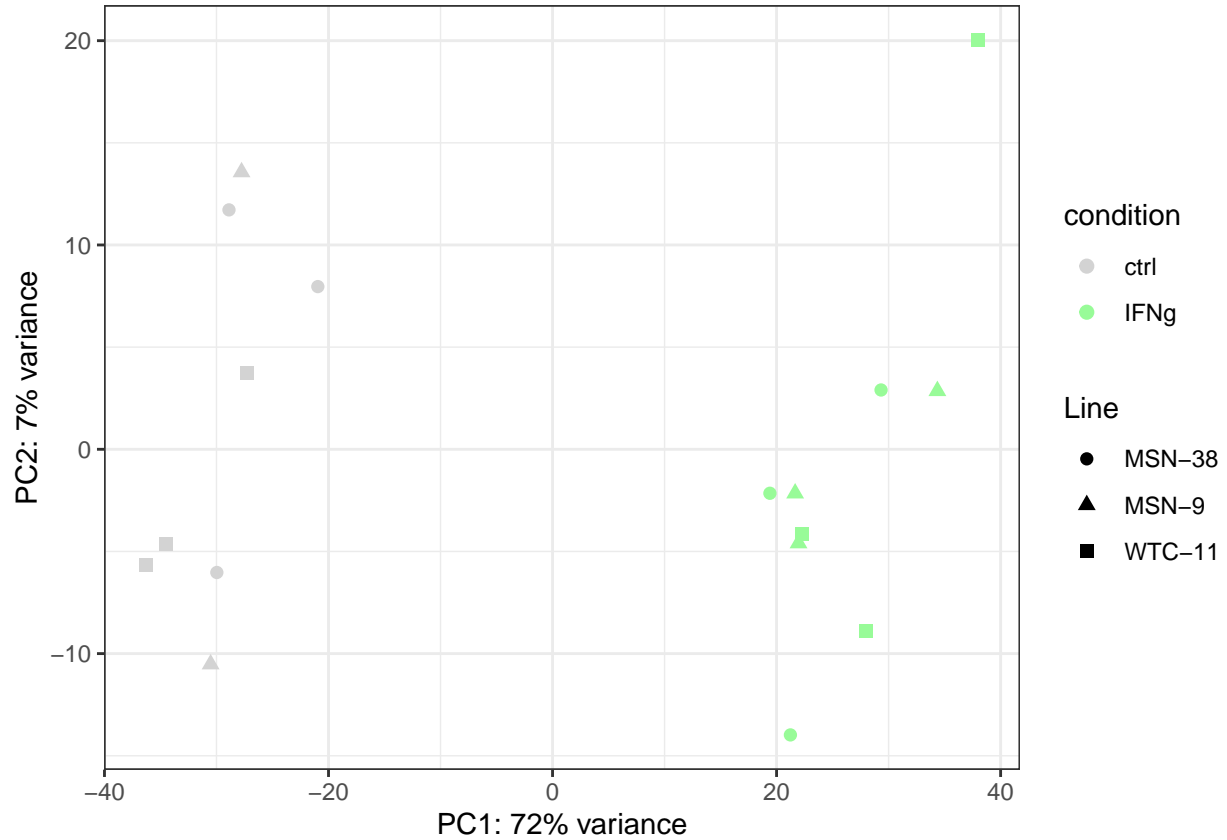
Stimulation (IFN γ) samples

PCA plots

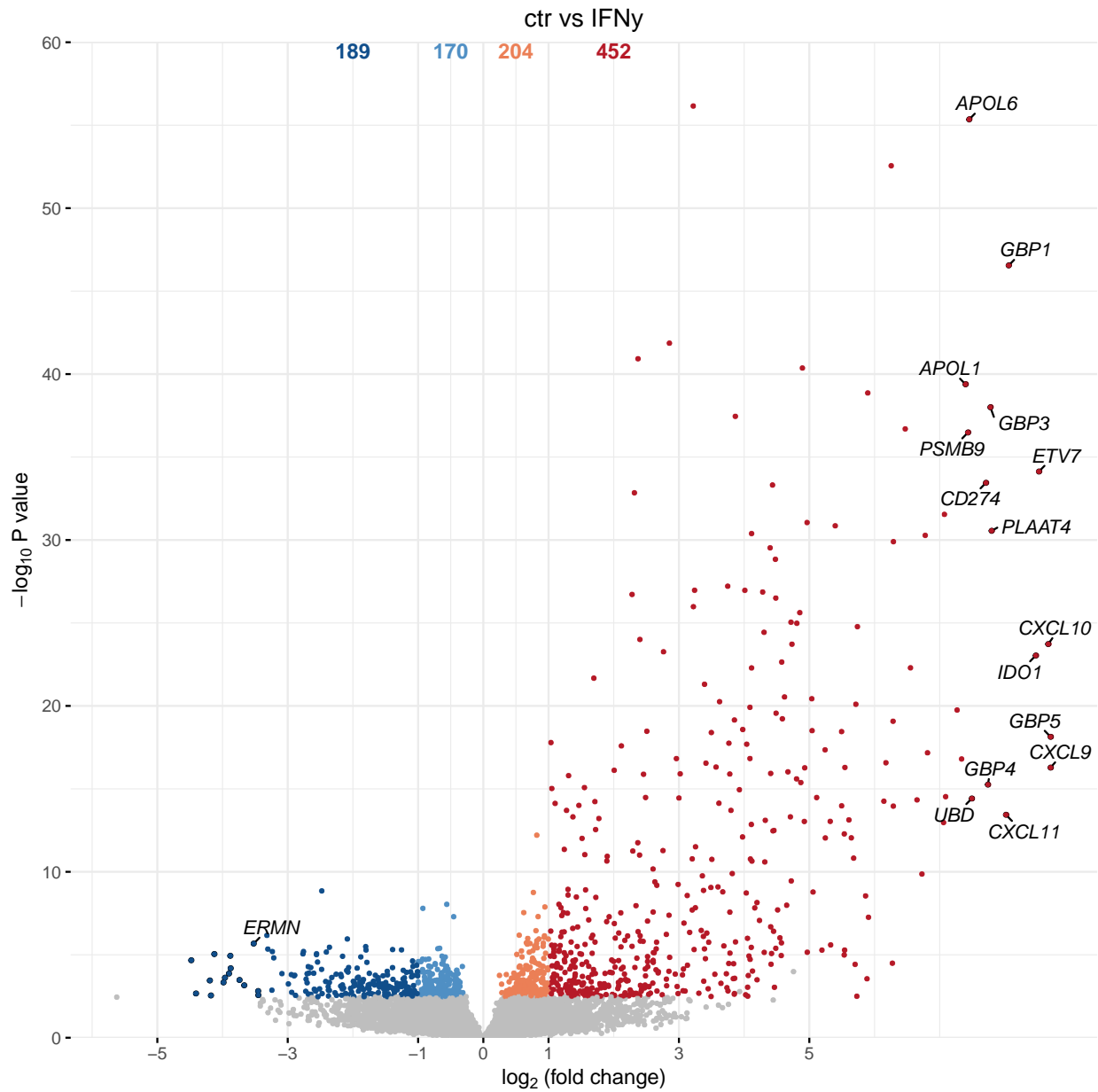
```
## [1] TRUE
```

```
## [1] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
```

```
## [16] TRUE TRUE
```

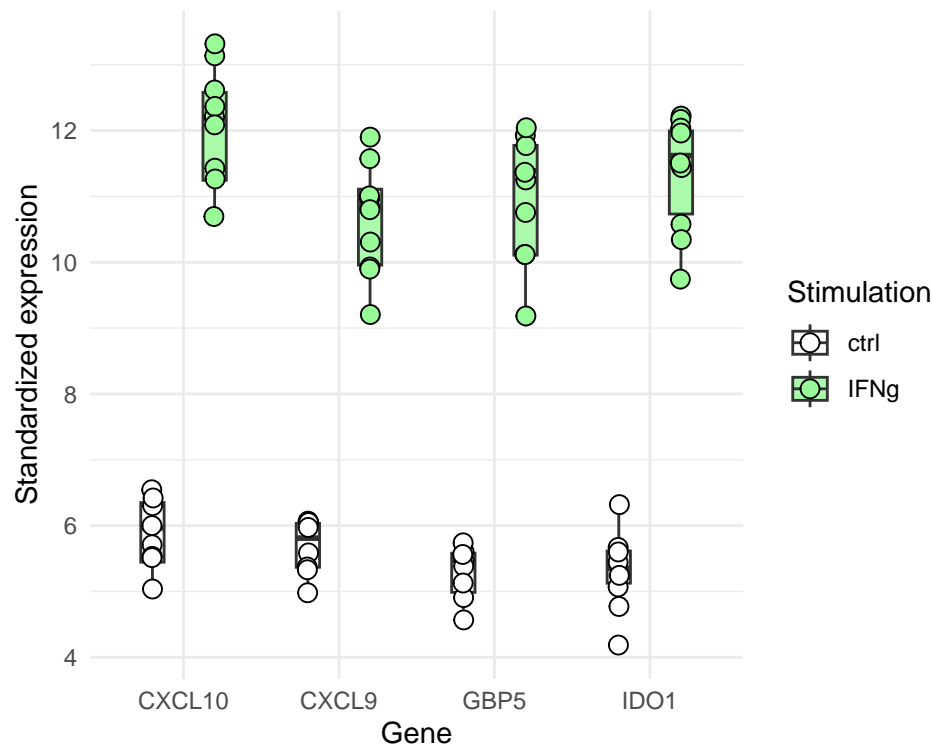
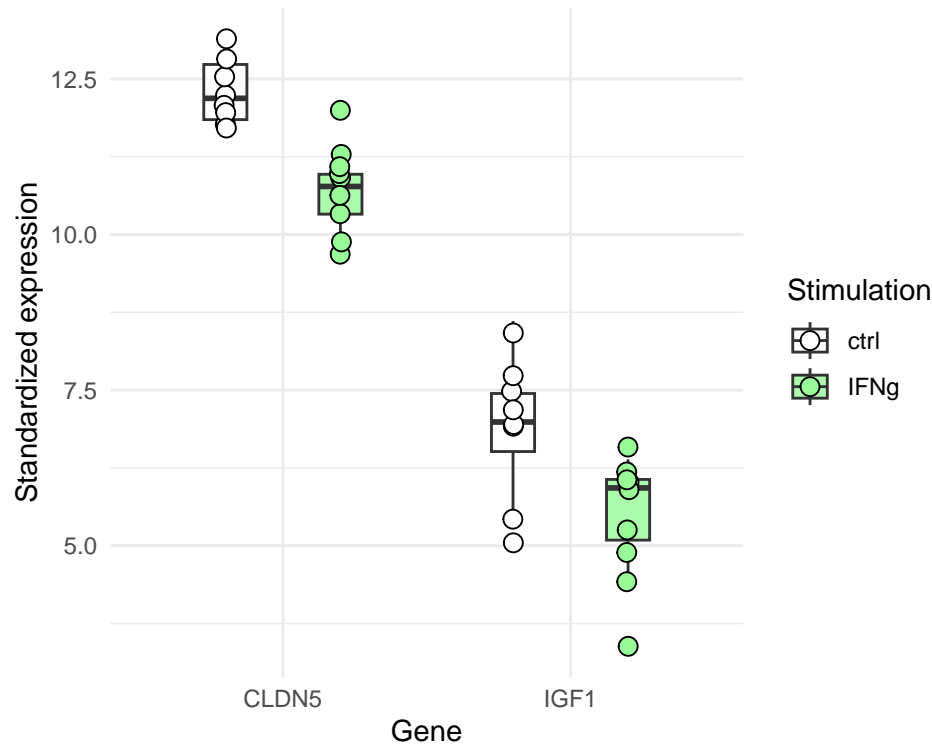


Volcano plot



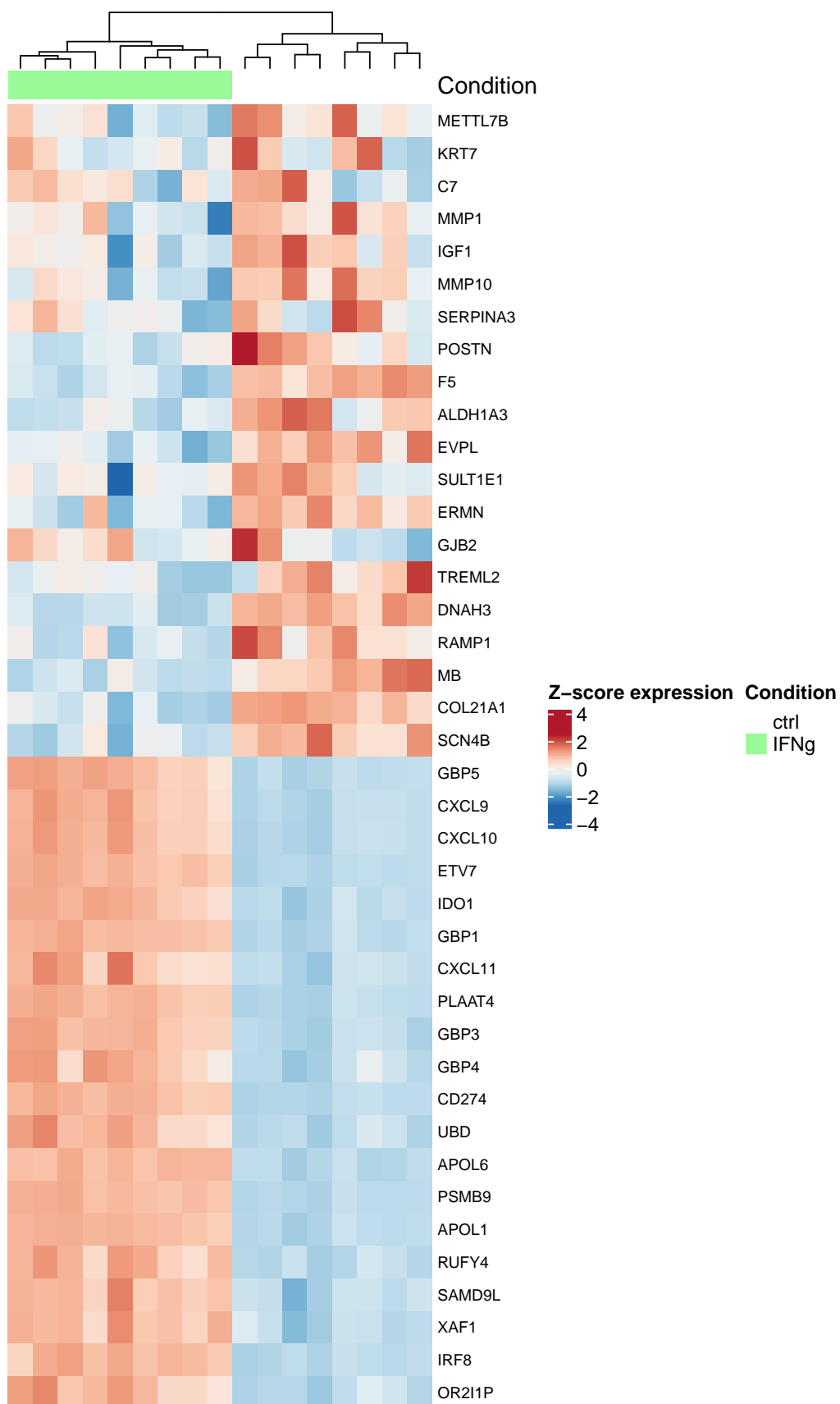
DEG table

Boxplot genes of interest

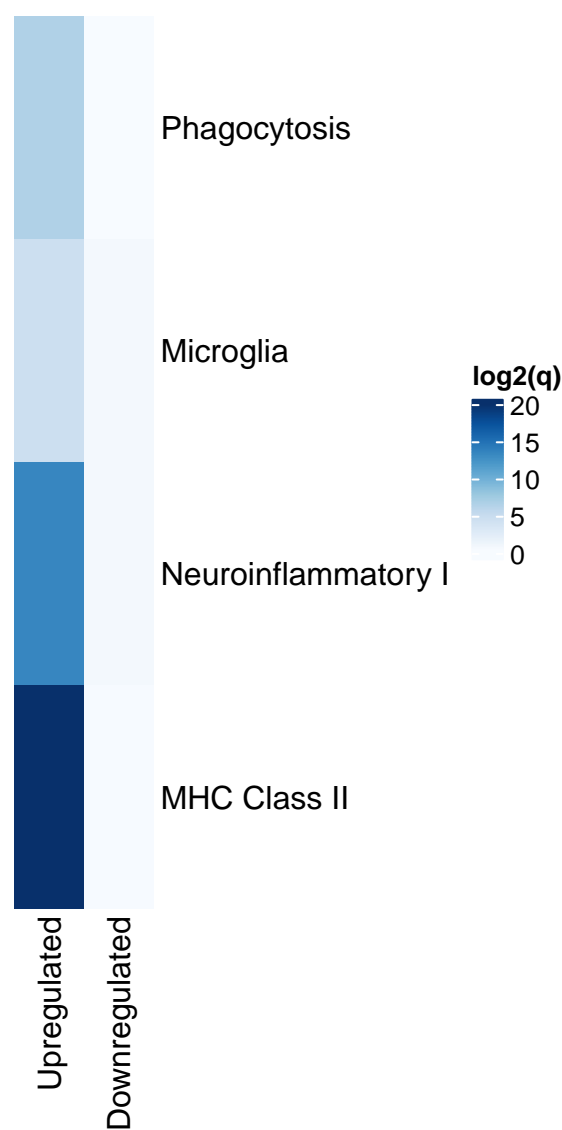


Top 40 DEGs heatmap

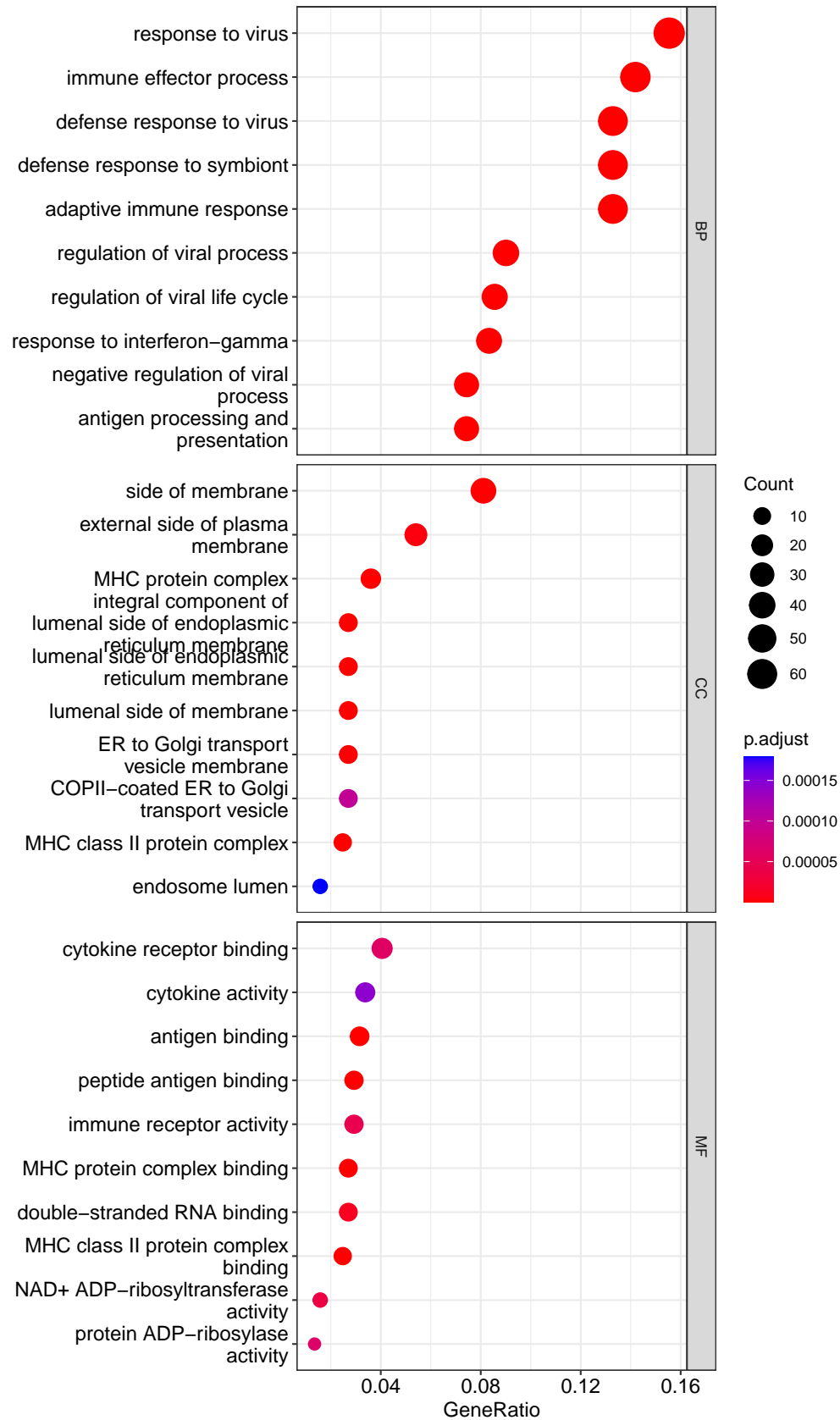
```
## [1] FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE
## [13] FALSE FALSE FALSE FALSE FALSE
```

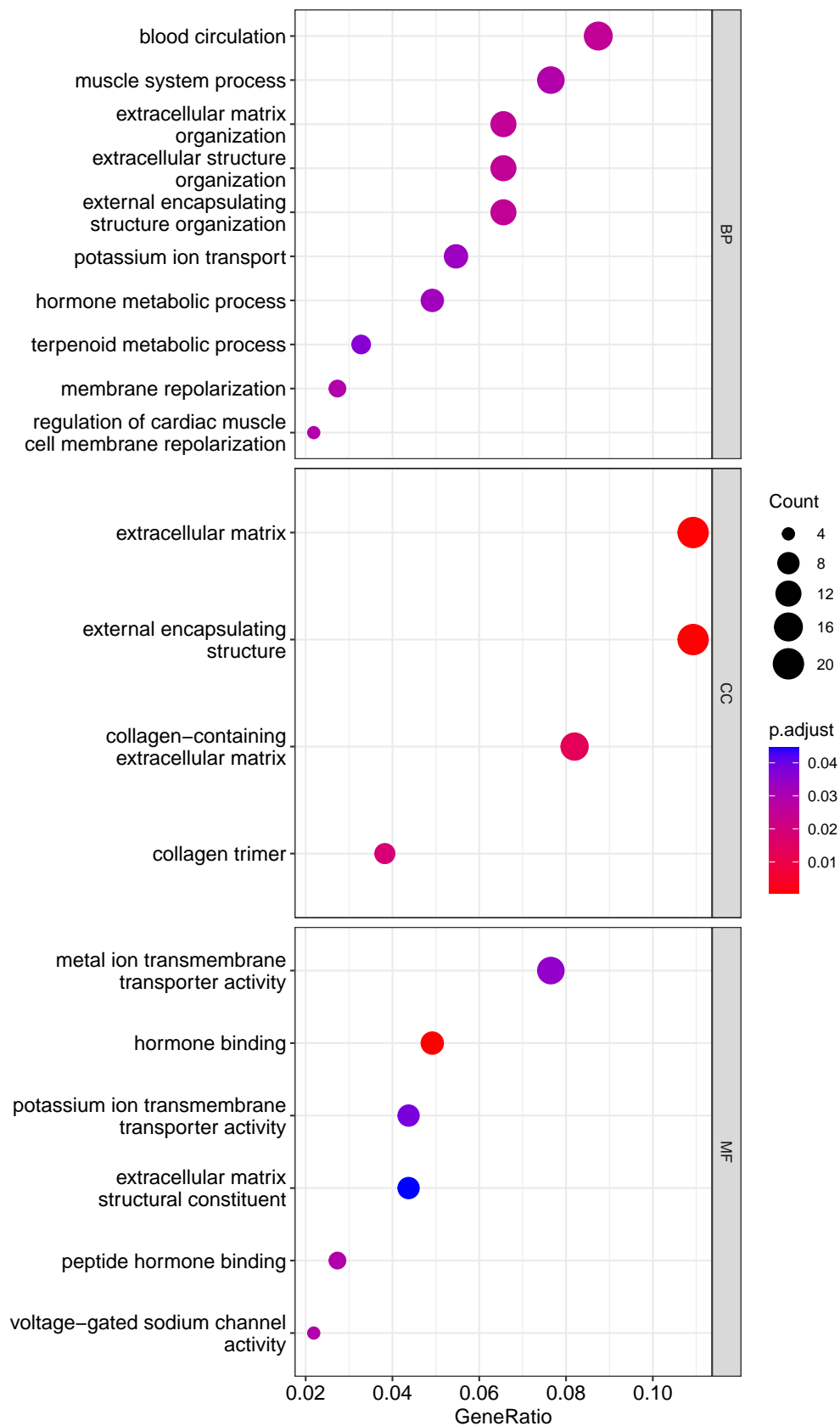


Enrichment heatmap (gene sets of interest)



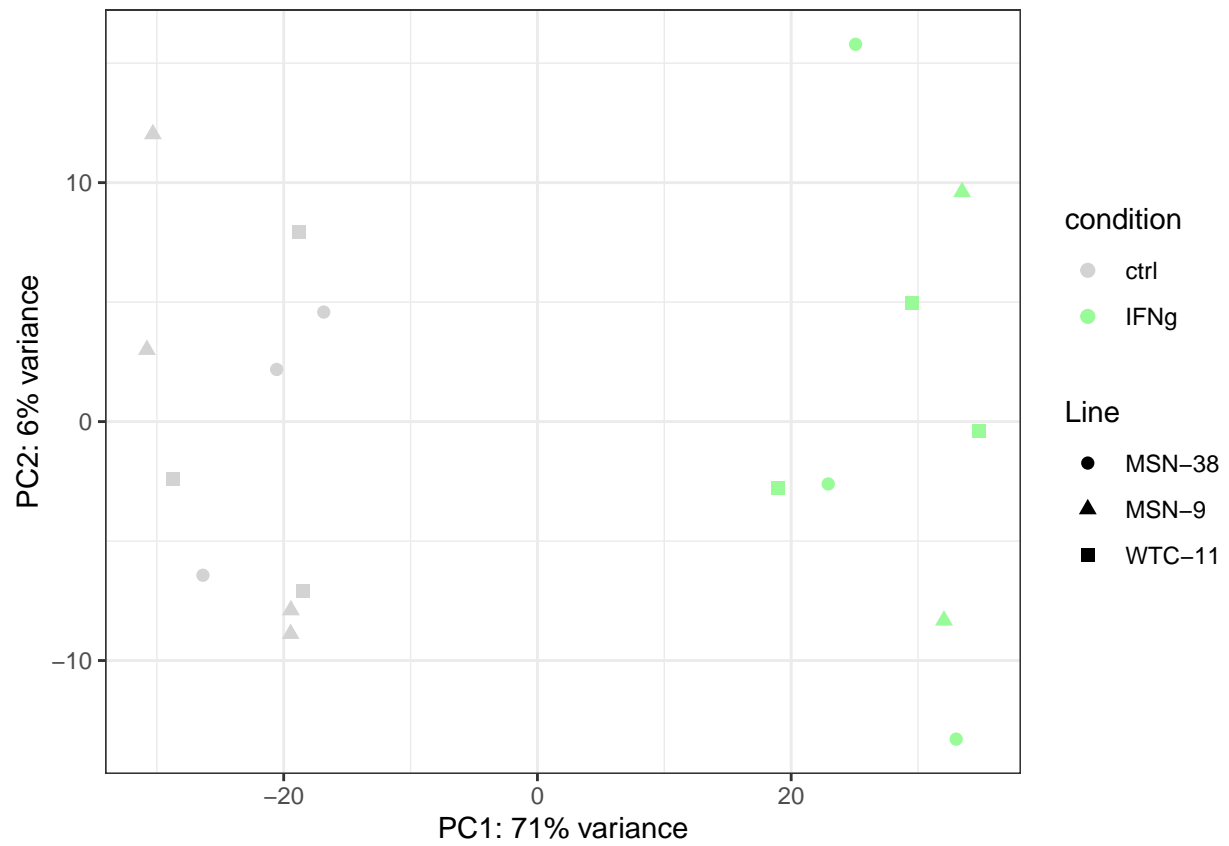
GO enrichment



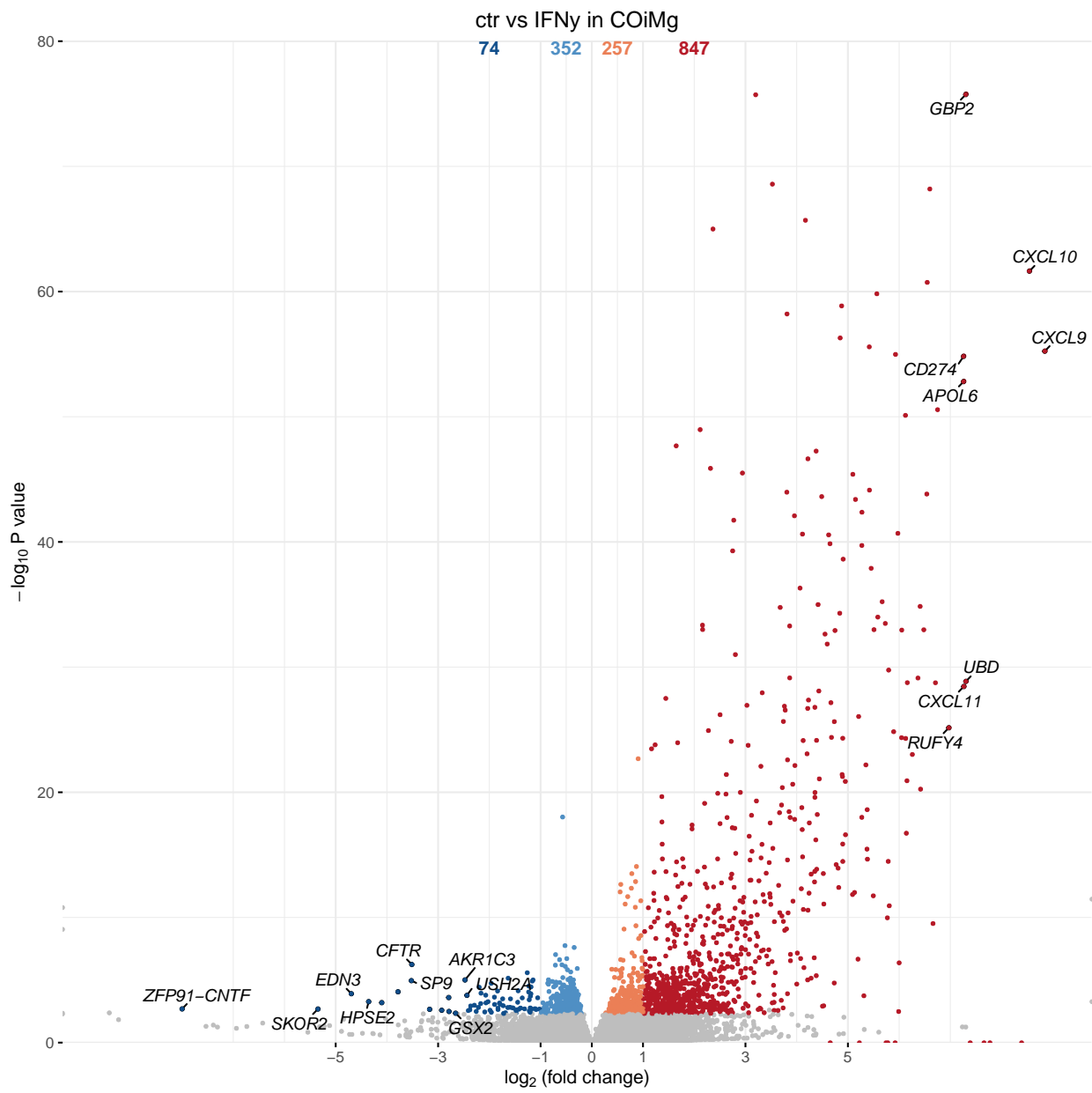


IFNy in COiMG

PCA plots

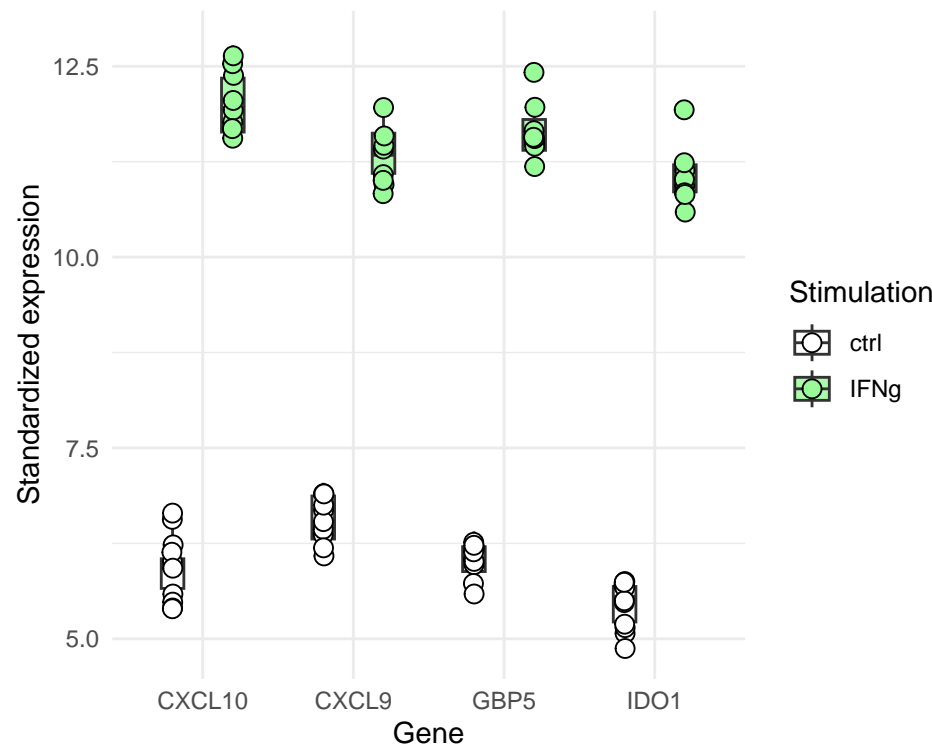
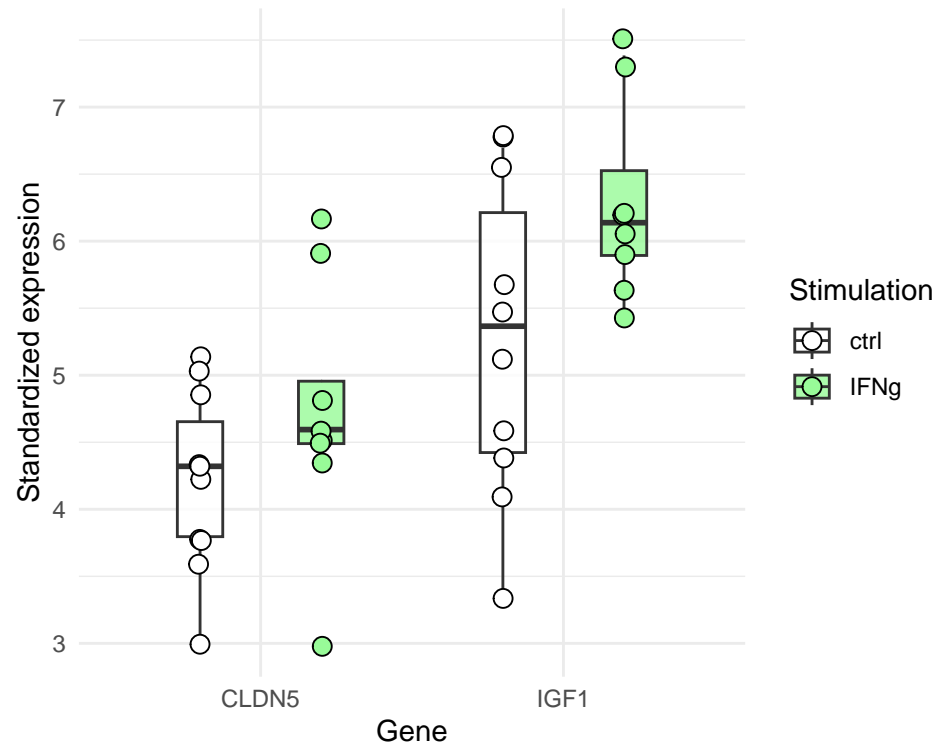


Volcano plot

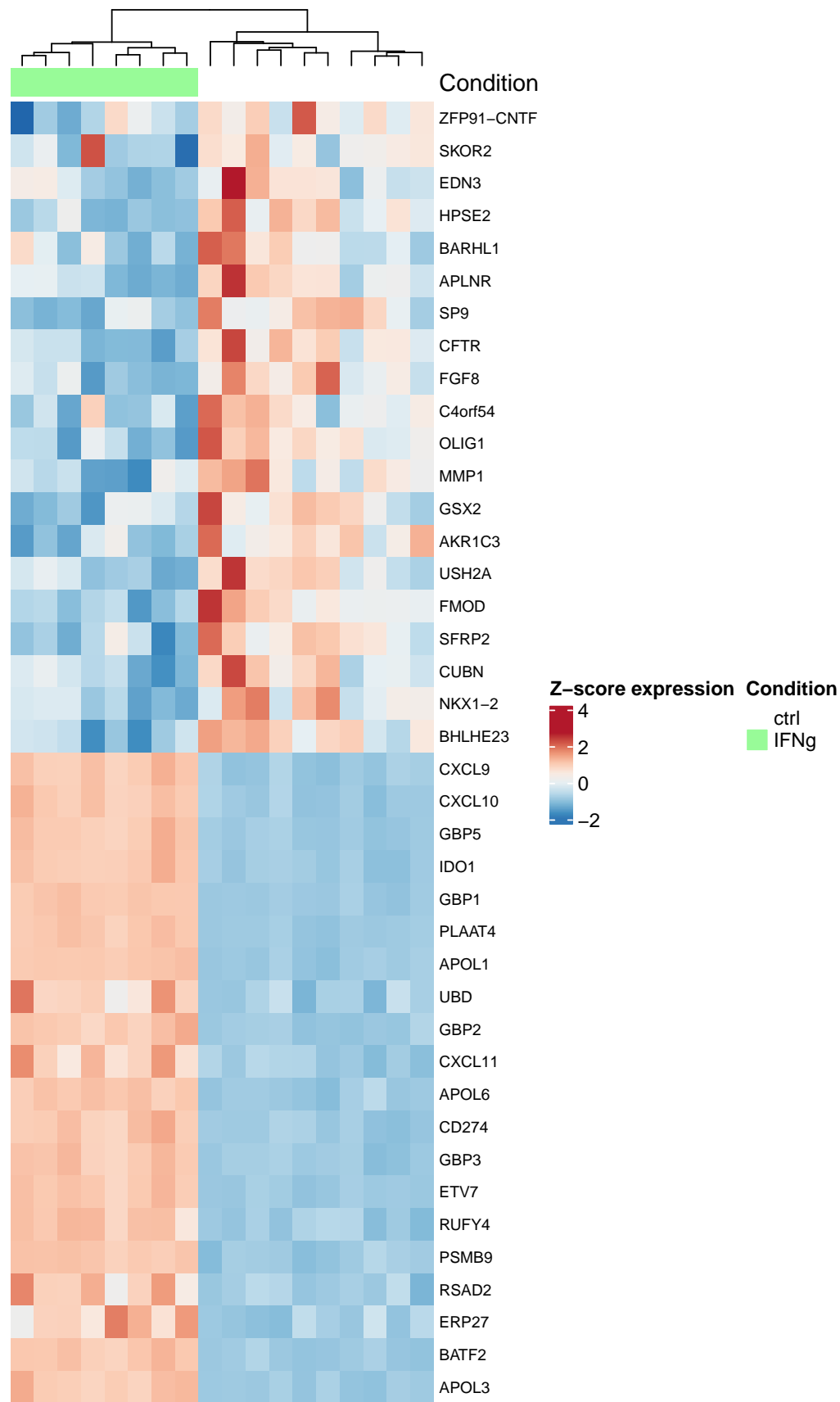


DEG table

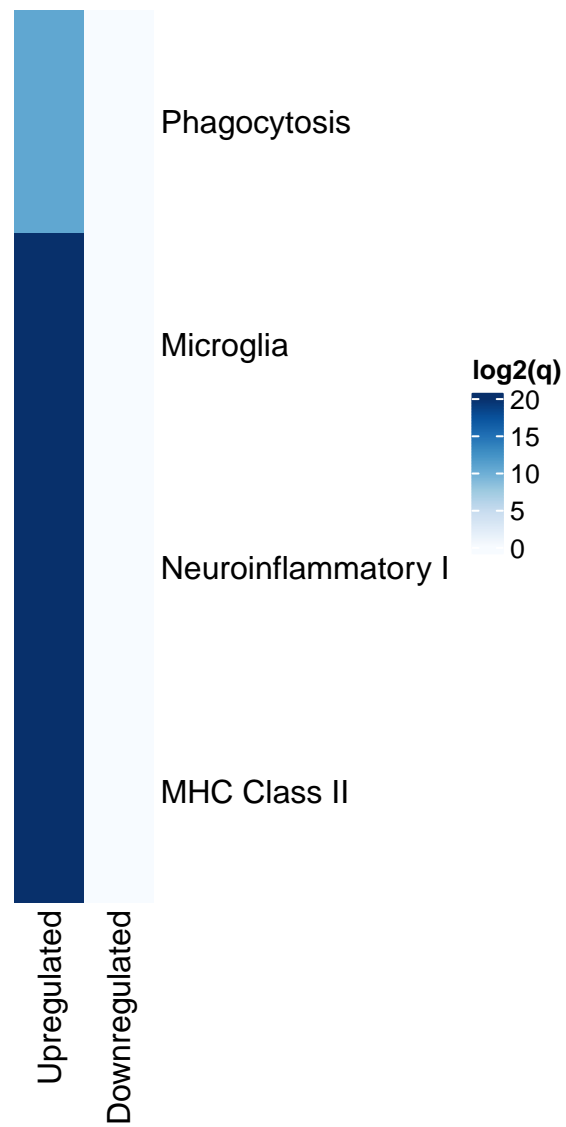
Boxplot genes of interest



Top 40 DEGs heatmap

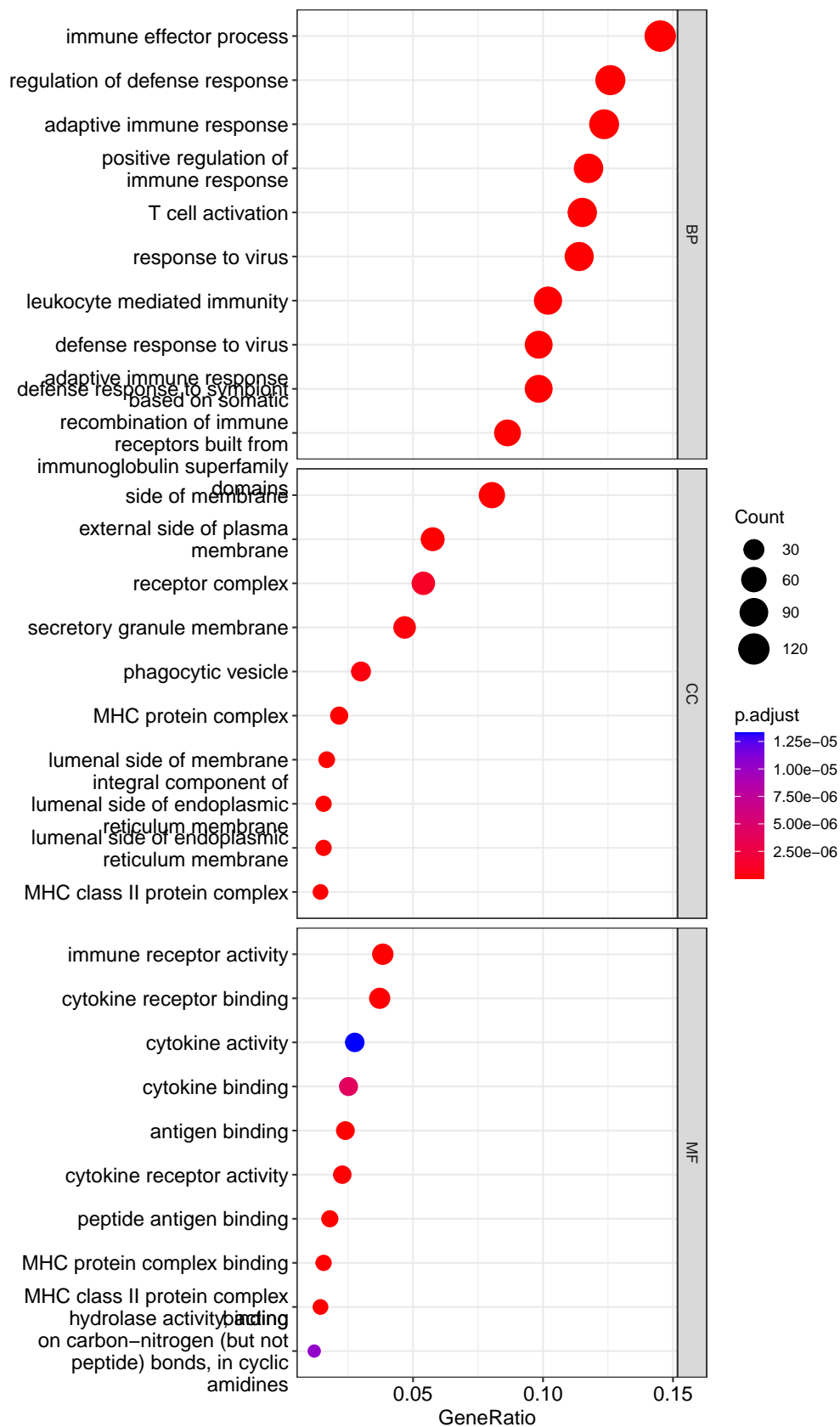


Enrichment heatmap (gene sets of interest)

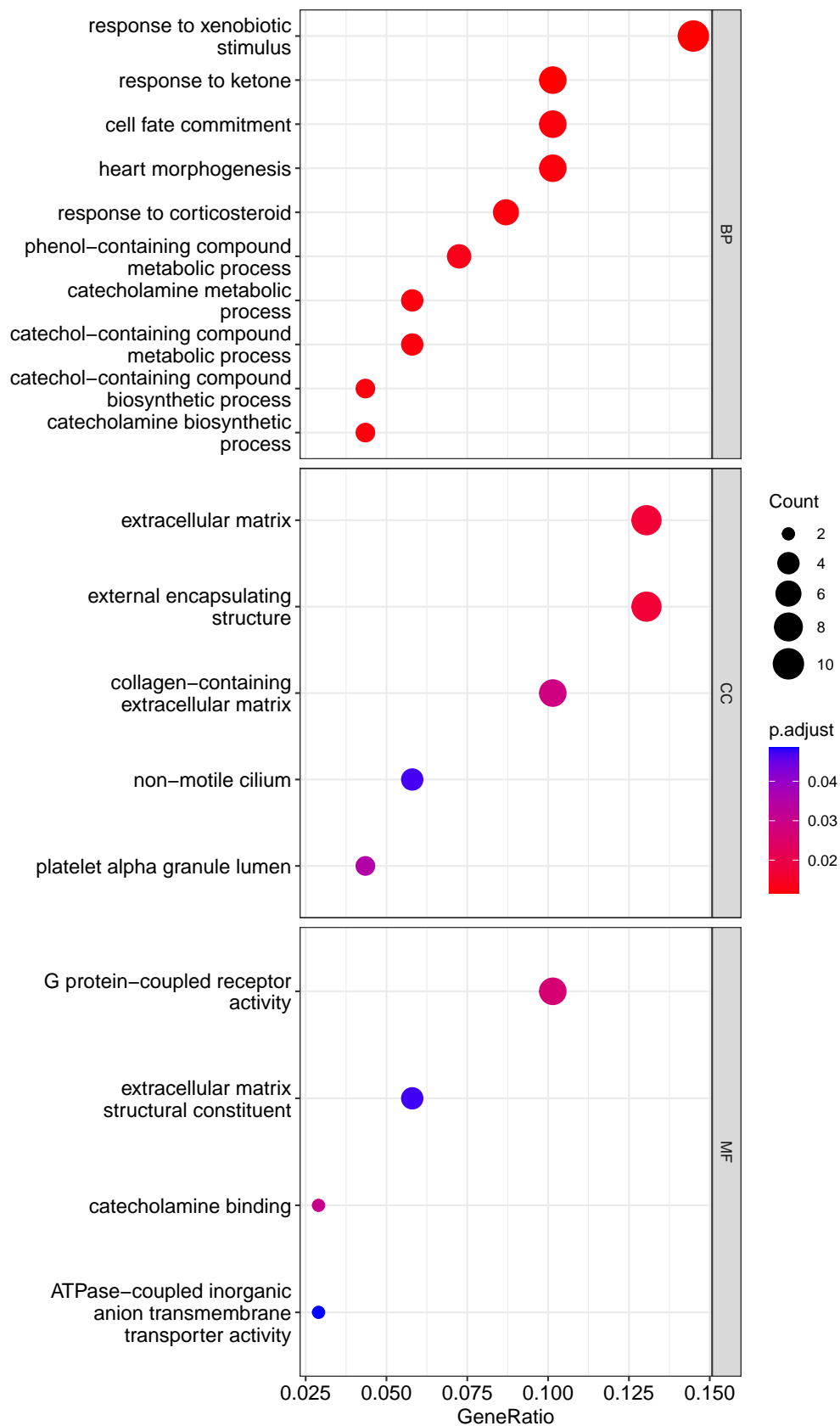


GO enrichment

```
## [1] "Upregulated"
```

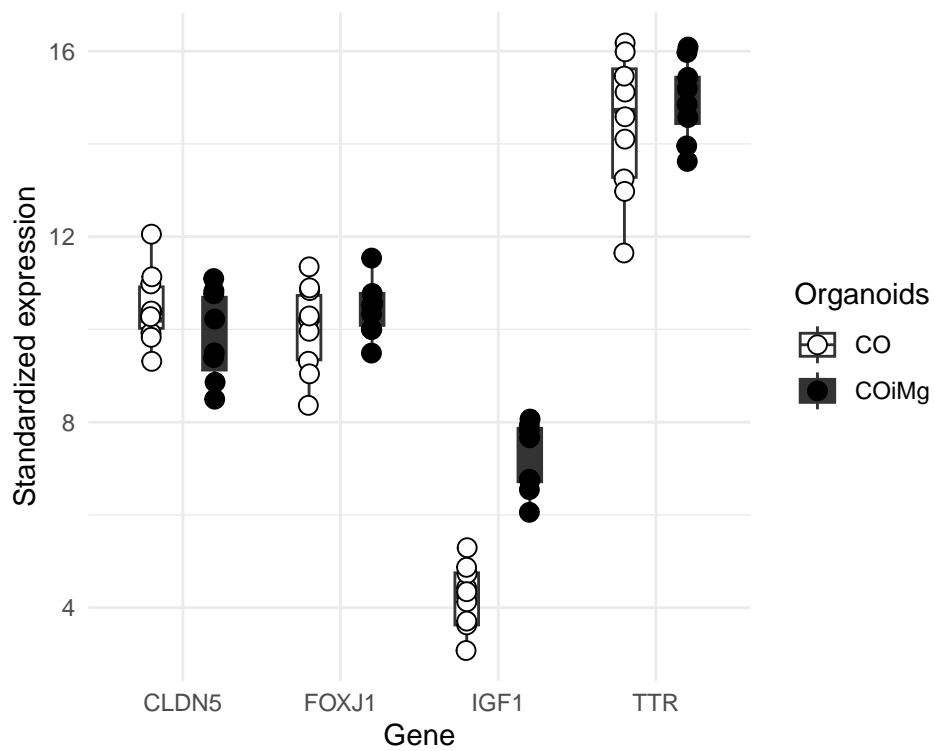
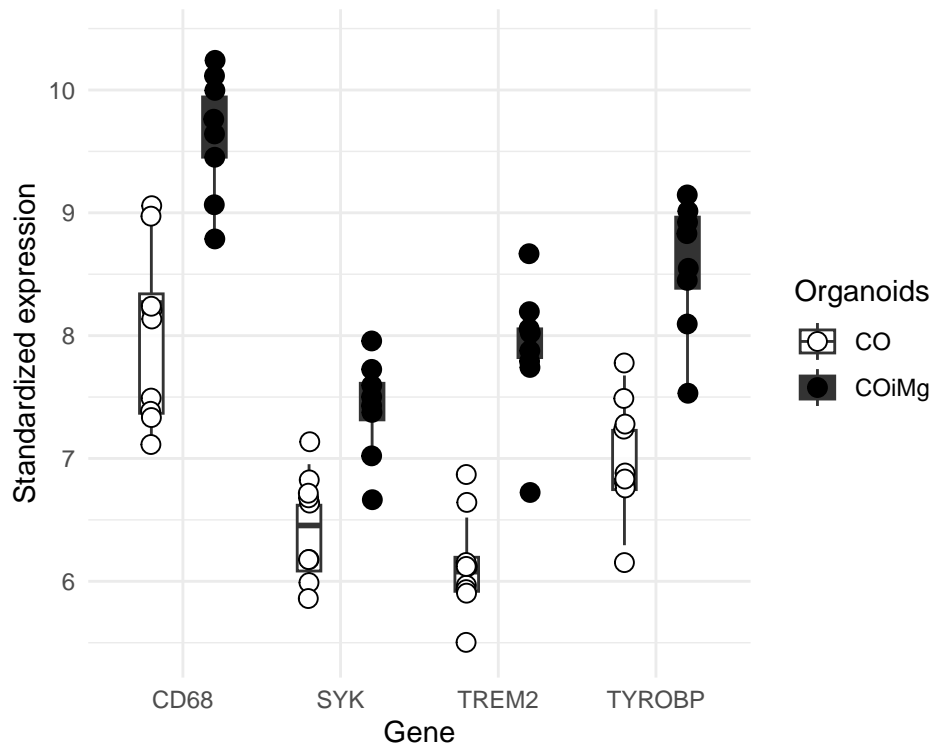



```
## [1] "Downregulated"
```



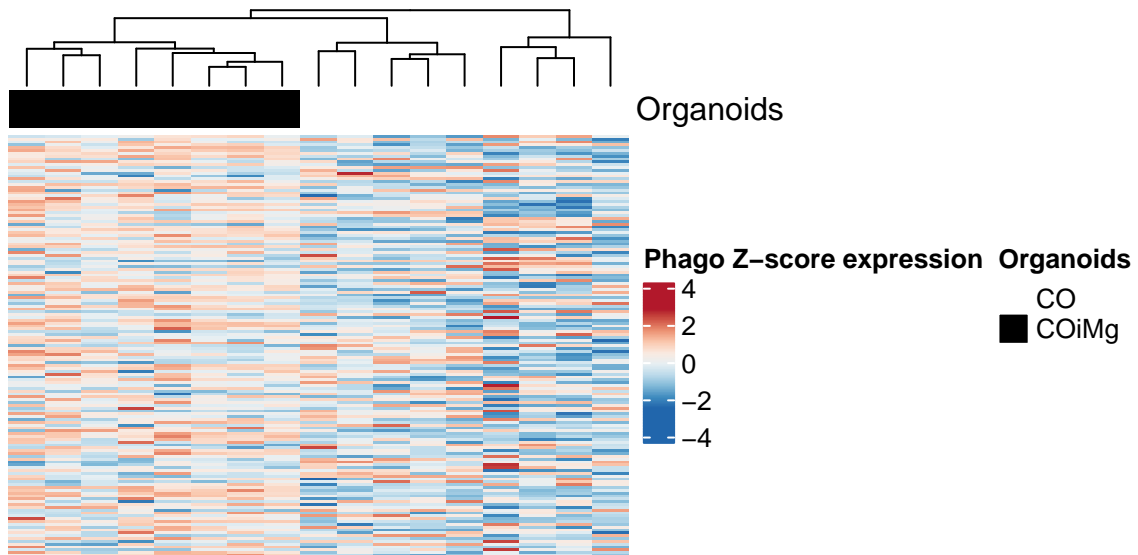
CO vs COiMg under IFN γ

Phagocytosis: CO vs COiMg under IFN γ

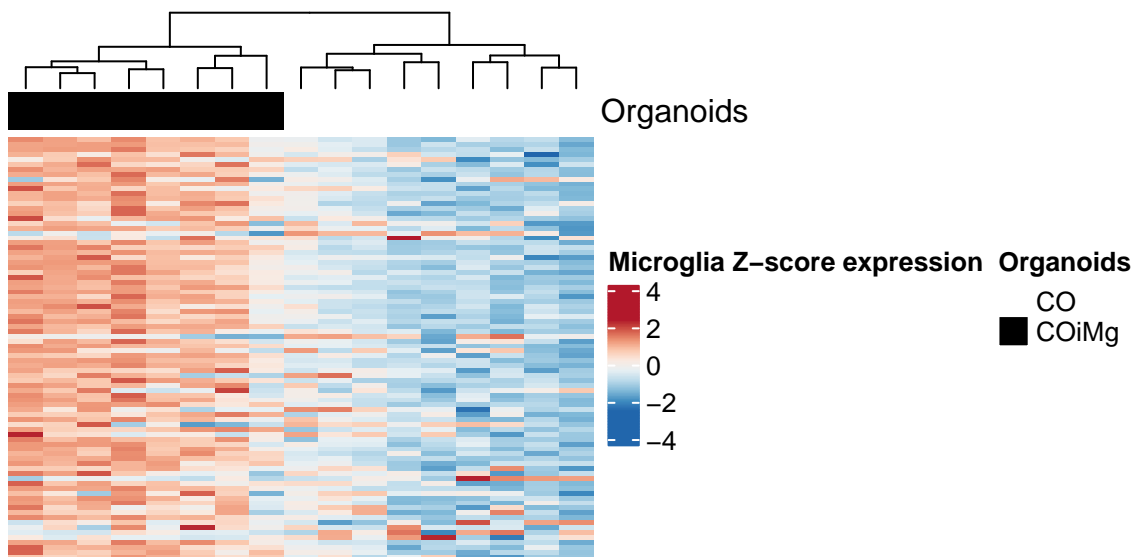


Gene set heatmap

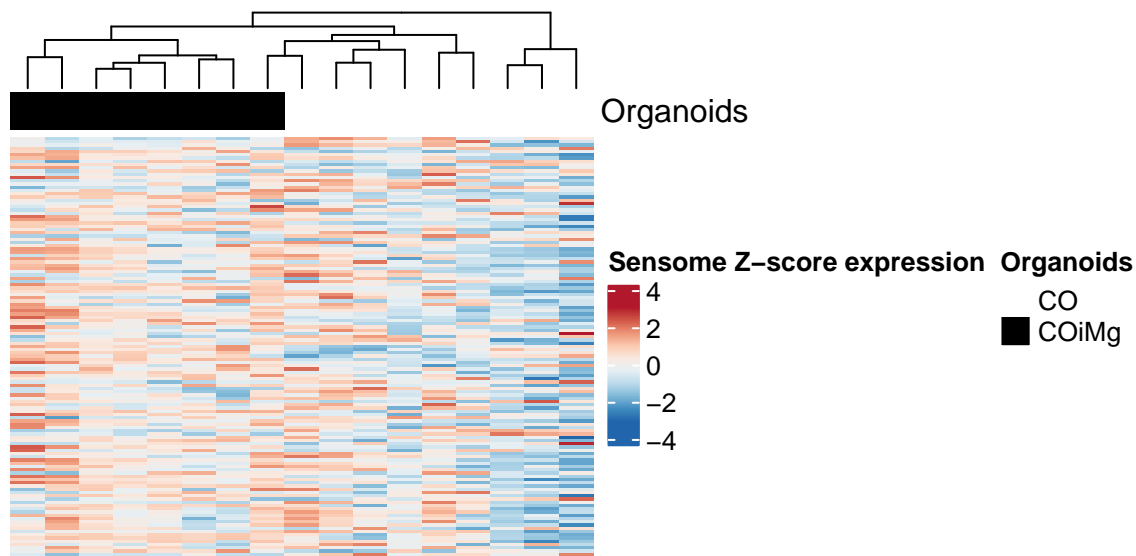
[1] "Phagocytic heatmap"



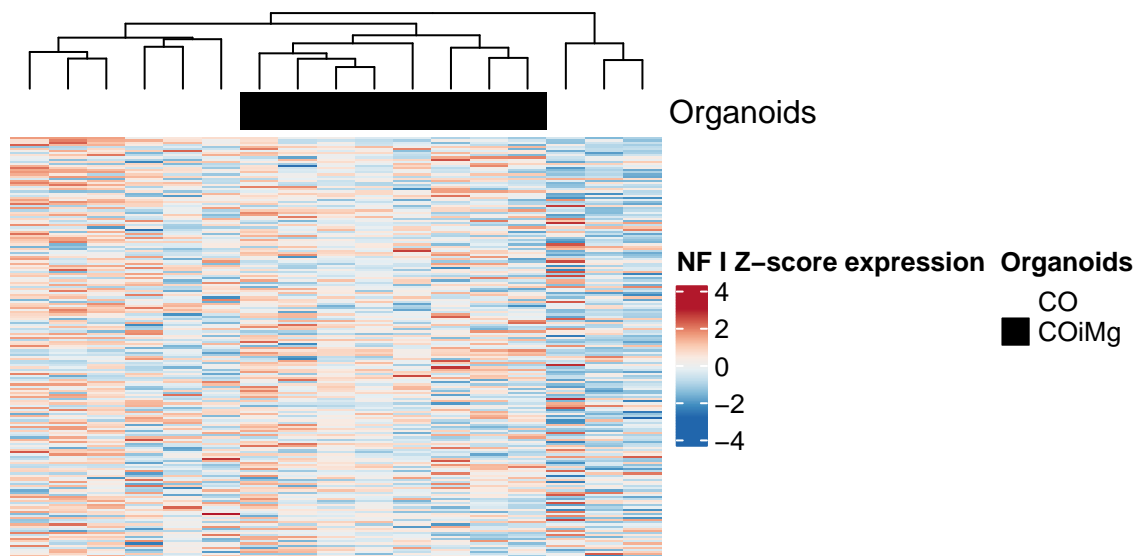
[1] "Microglia heatmap"



[1] "Sensome heatmap"



[1] "Neuroinflammatory I heatmap"



IFN γ CO vs COiMG

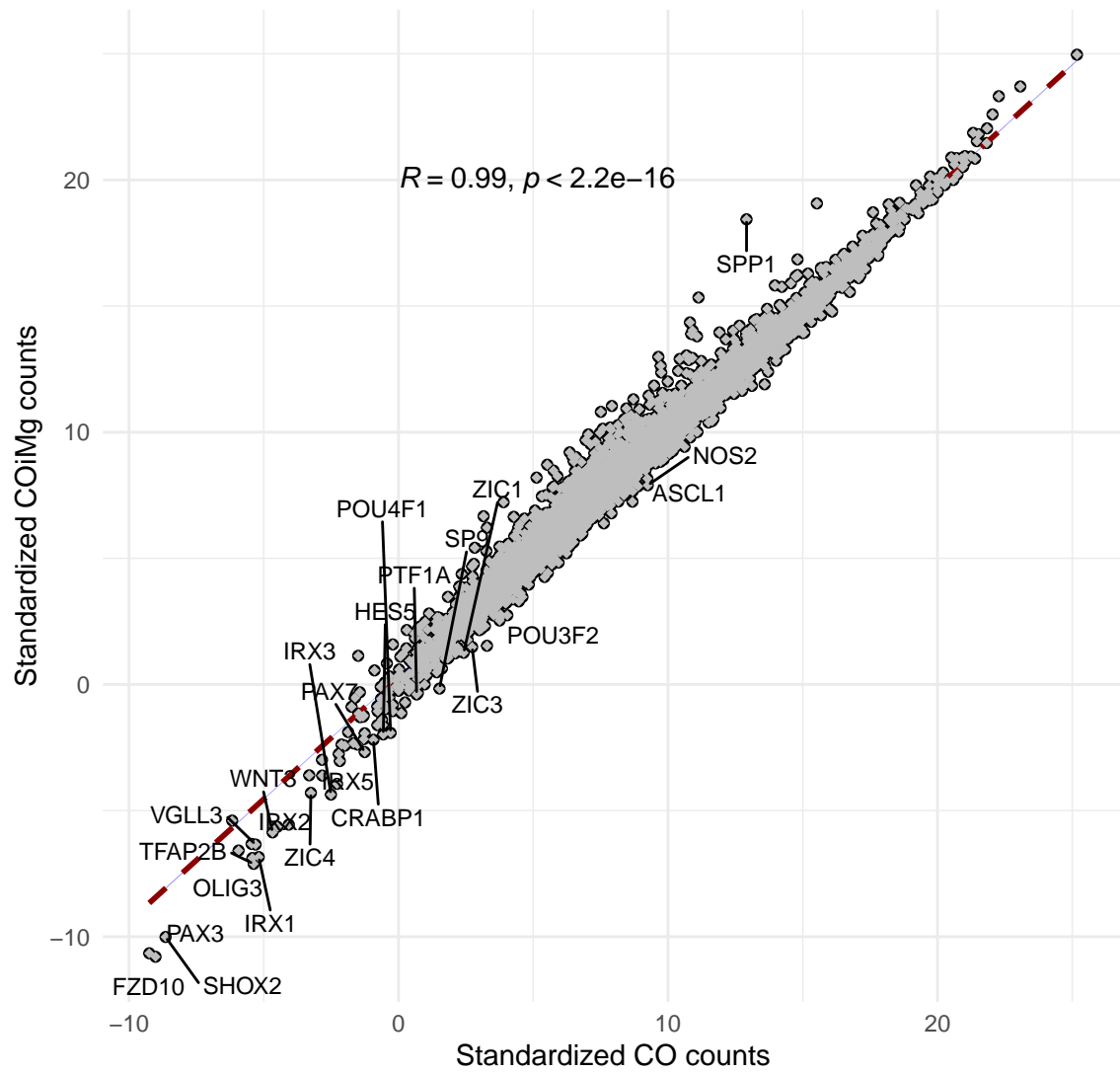
##		M13	M14	M15	M21	M27	M33	F9
##	M16	0.9888853	0.9750494	0.9854099	0.9860980	0.9844882	0.9665080	0.9772695
##	M17	0.9882932	0.9689689	0.9821487	0.9803589	0.9830655	0.9582293	0.9703453
##	M18	0.9853977	0.9796923	0.9773084	0.9801409	0.9848437	0.9628487	0.9773172
##	M24	0.9893057	0.9799679	0.9870001	0.9855227	0.9831987	0.9708646	0.9793361
##	M30	0.9839439	0.9849775	0.9782459	0.9812581	0.9760353	0.9881220	0.9857833
##	M36	0.9808666	0.9739084	0.9819043	0.9848451	0.9726188	0.9723869	0.9735683
##	F15	0.9896431	0.9848594	0.9858859	0.9880105	0.9875725	0.9839841	0.9898616
##	F16	0.9736695	0.9781072	0.9730415	0.9772165	0.9707696	0.9863550	0.9842931
##	F17	0.9837642	0.9760274	0.9815035	0.9841363	0.9823853	0.9590486	0.9744931

```
##          F10
## M16 0.9820133
## M17 0.9788688
## M18 0.9814824
## M24 0.9853527
## M30 0.9823925
## M36 0.9794674
## F15 0.9870064
## F16 0.9753547
## F17 0.9794916
```

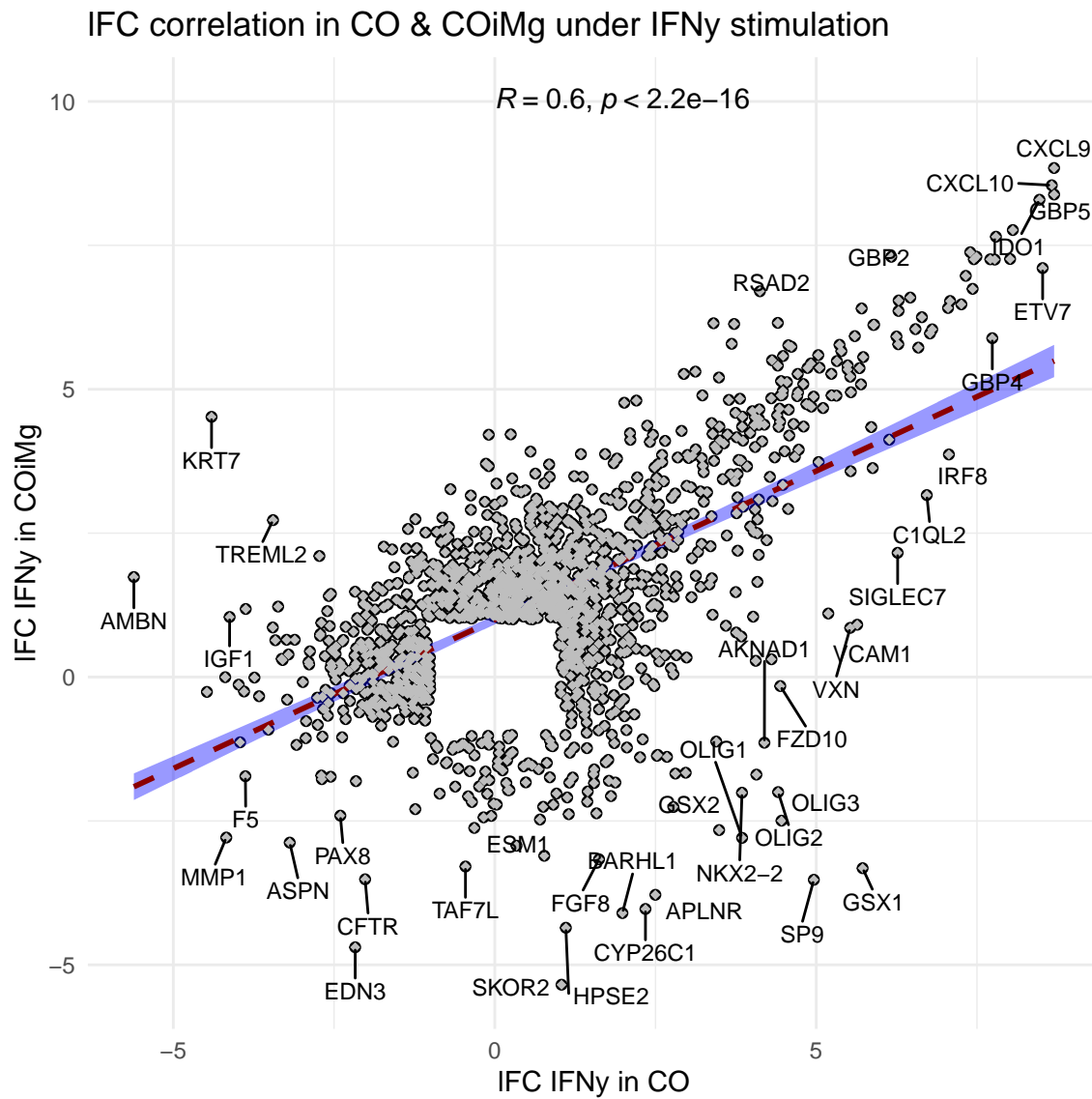
```
##          0%          25%          50%          75%          100%
## -5.52300947 -0.16864063 0.01132637 0.16271150 1.86109744
```

```
## [1] "DLX6"      "NOS2"      "TFAP2B"    "MGST1"     "PAX7"      "KITLG"     "ASIC4"
## [8] "NAALAD2"    "MOXD1"     "LRP2"      "SLC32A1"   "TOX3"      "WNT3"      "FZD10"
## [15] "SPP1"       "ONECUT2"   "PAX3"      "GAD2"      "ASCL1"     "ZFXH3"     "GREB1L"
## [22] "C1QL2"      "DLX1"      "SFRP2"     "TENM2"     "CDH8"      "POU4F1"    "ZIC1"
## [29] "ROBO3"      "WNT7A"     "ZIC3"      "H4C8"      "VCAM1"     "NDST3"     "CRABP1"
## [36] "PTF1A"      "GBX2"      "SHOX2"     "IRX1"      "IRX2"      "HSPA6"     "LRRN3"
## [43] "WFIKK2"     "ZIC4"      "PRIMA1"    "IRX5"      "OLIG3"     "IRX3"      "GSX2"
## [50] "FIGN"       "BGN"       "SOX1"      "POU3F2"    "PCDH18"    "GREB1"     "POU3F4"
## [57] "HES5"       "TOX"       "HSPA1B"    "HSPA1A"    "VGLL3"     "TRIM71"    "UBD"
## [64] "SP9"        "OR2I1P"    "H4C14"     "H2BC8"
```

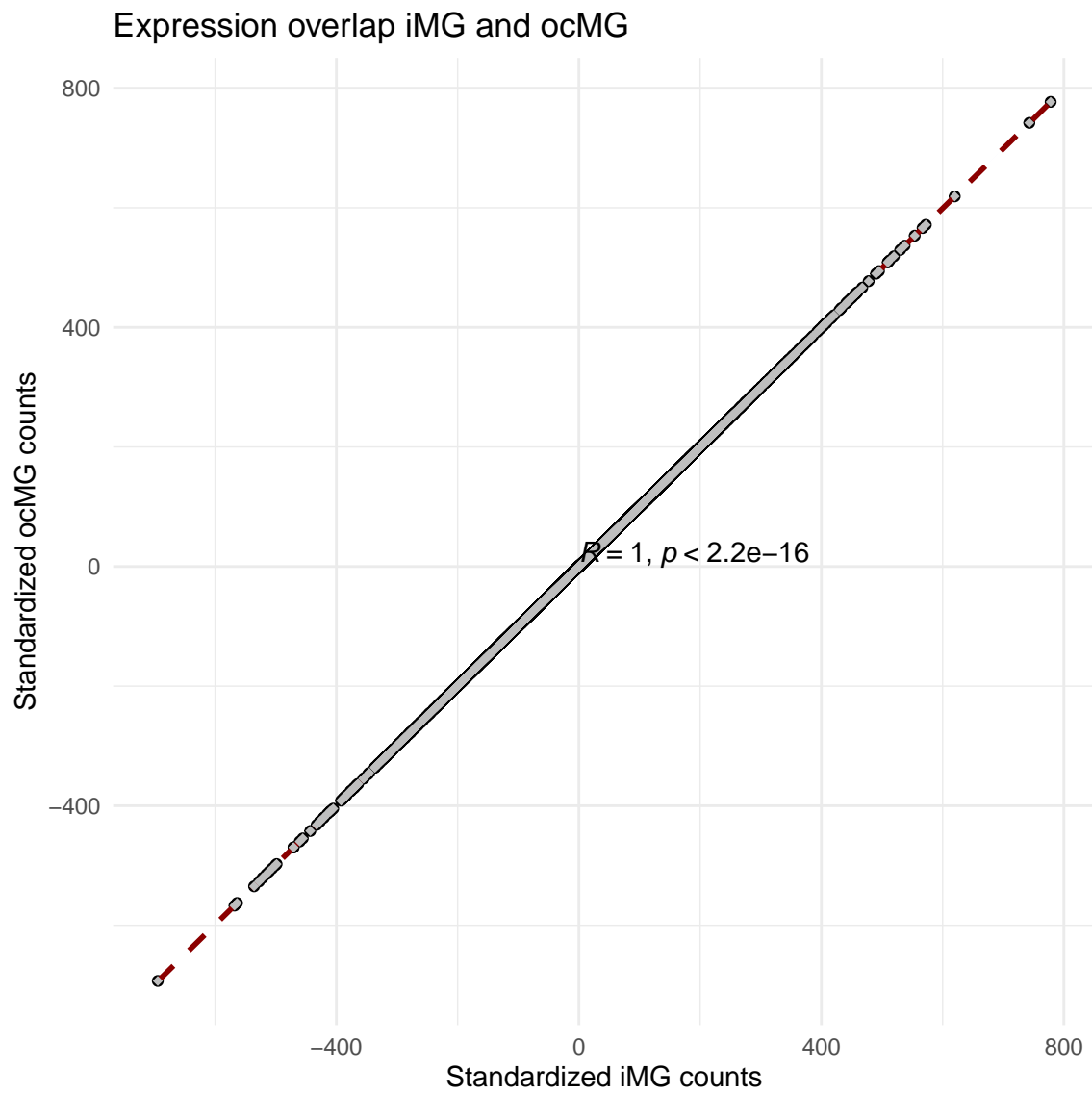
Expression overlap CO vs COiMg under IFN γ stimulation



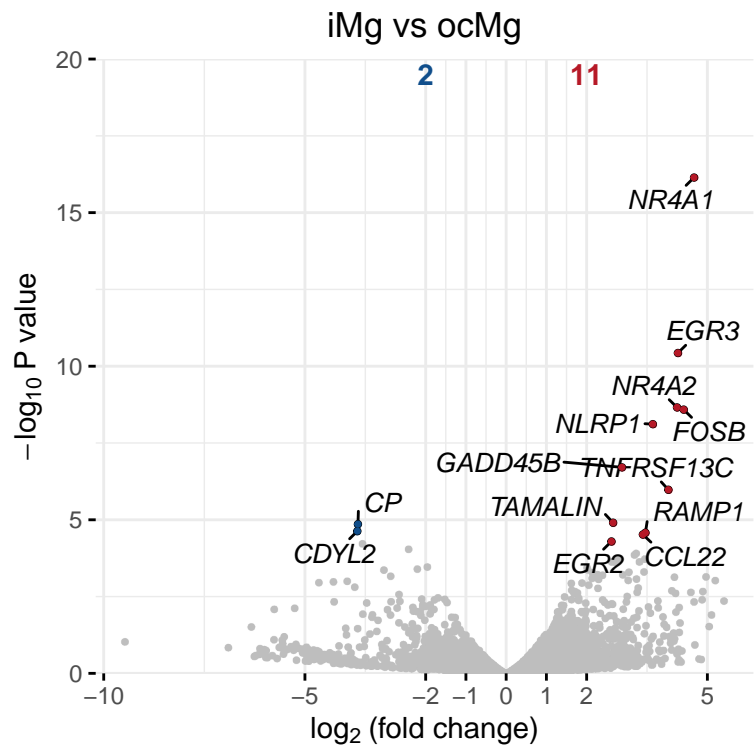
CO vs COiMg IFC correlation plot



iMG vs ocMG

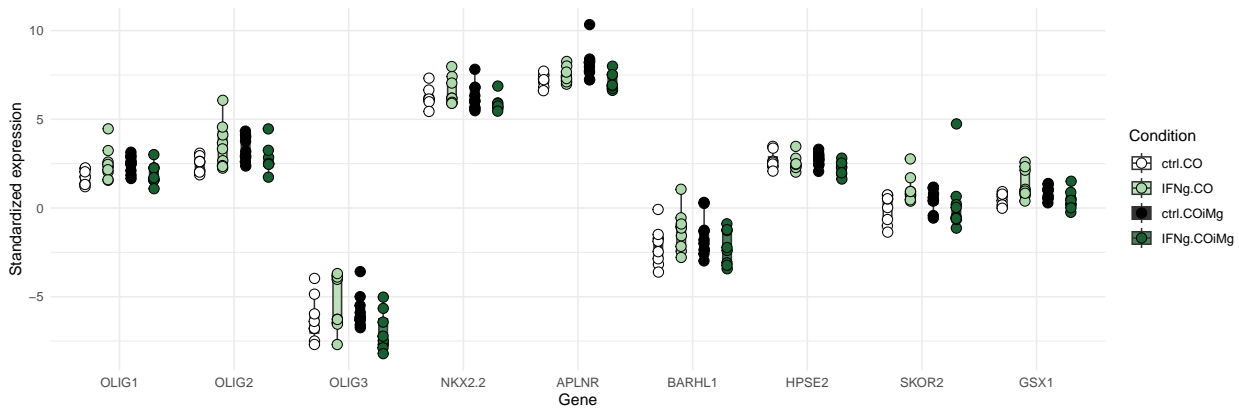


Volcano

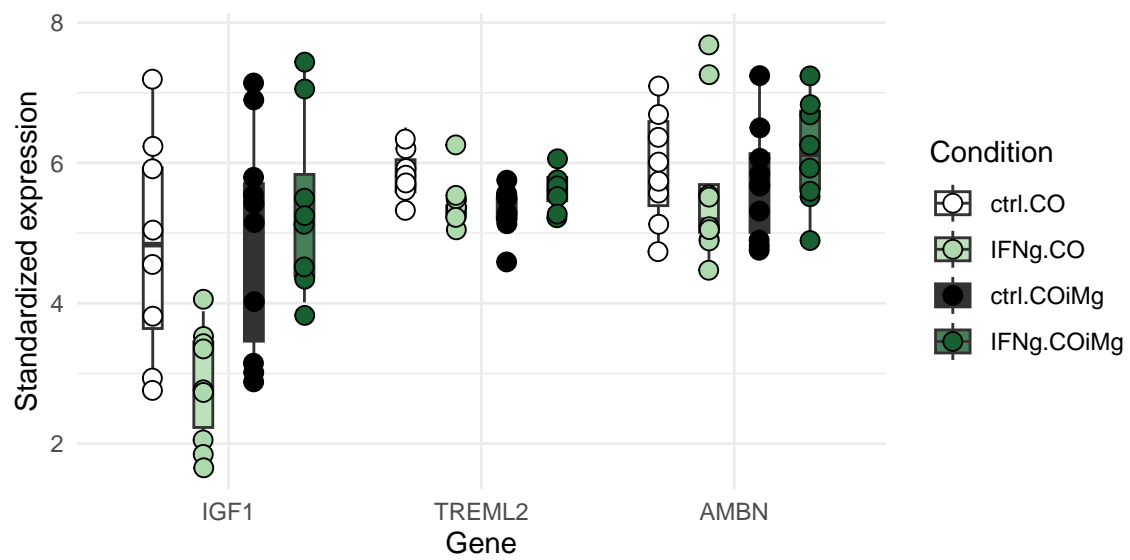
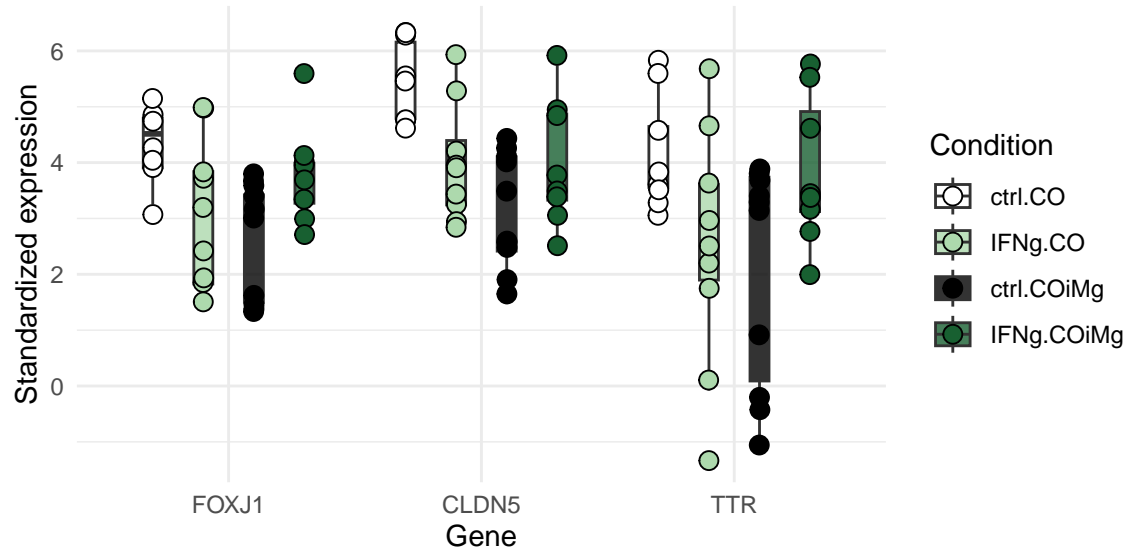


Interaction boxplots

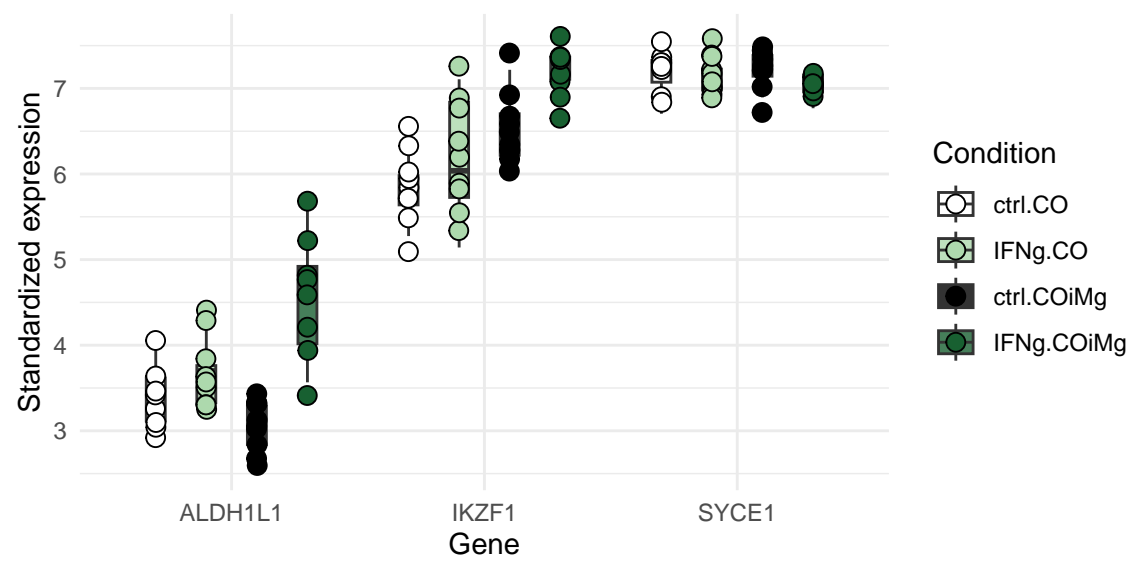
A



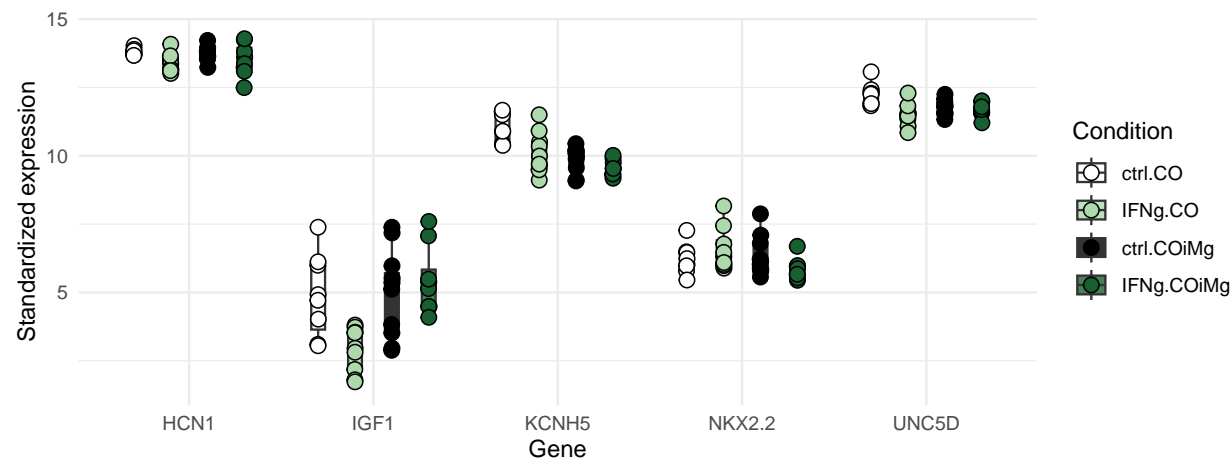
B



SFARI response to IFN γ (COiMg genes)



SFARI response to IFN γ (CO genes)



SFARI enrichment in IFN γ :

