

# Saving VIPER ?

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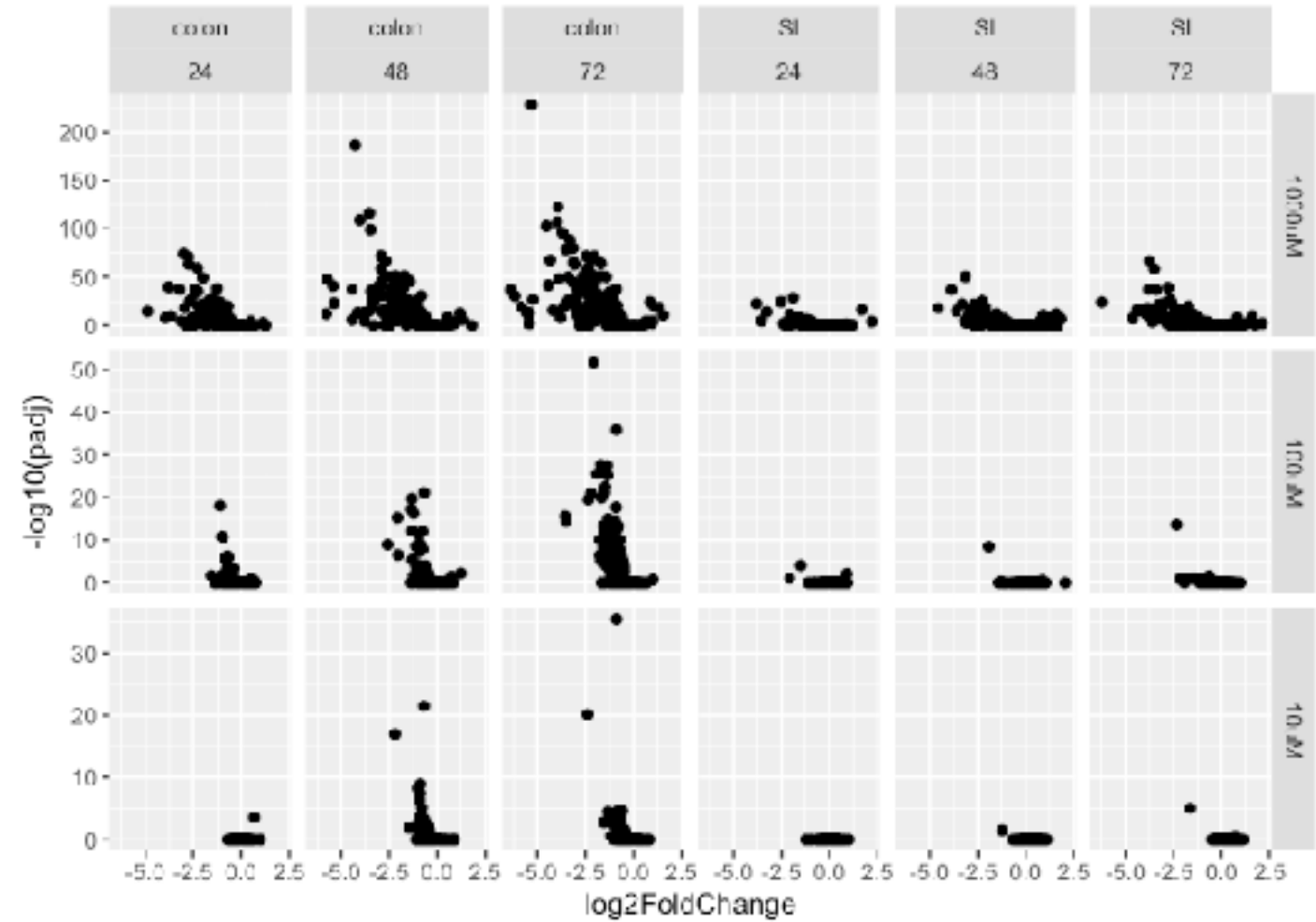
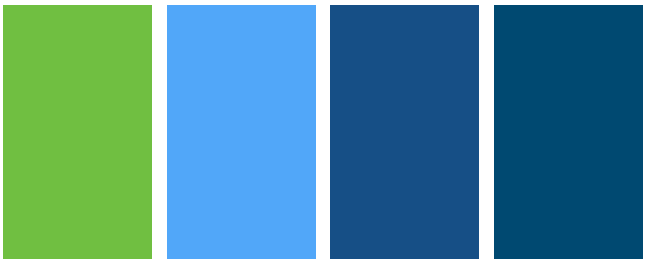
EMBL - University Hospital Heidelberg Molecular Medicine Partnership Unit



Input:

Samples

Genes

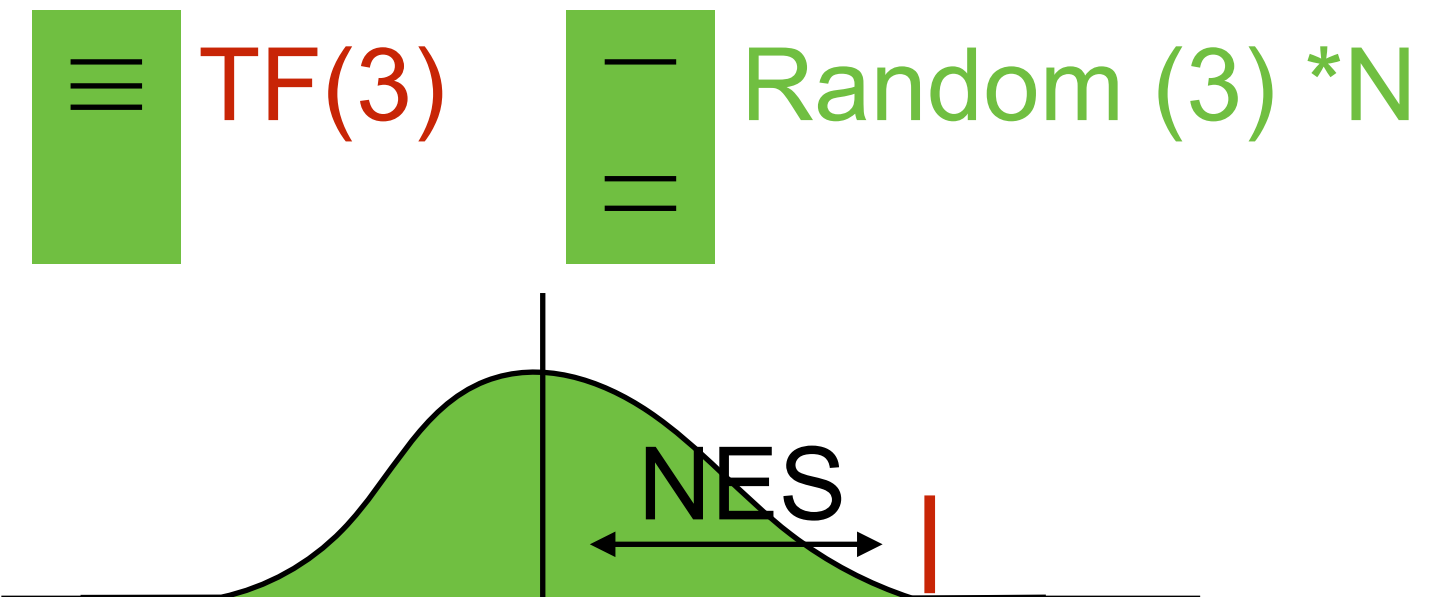


# Input:



## Viper: (simplified)

Sample 1

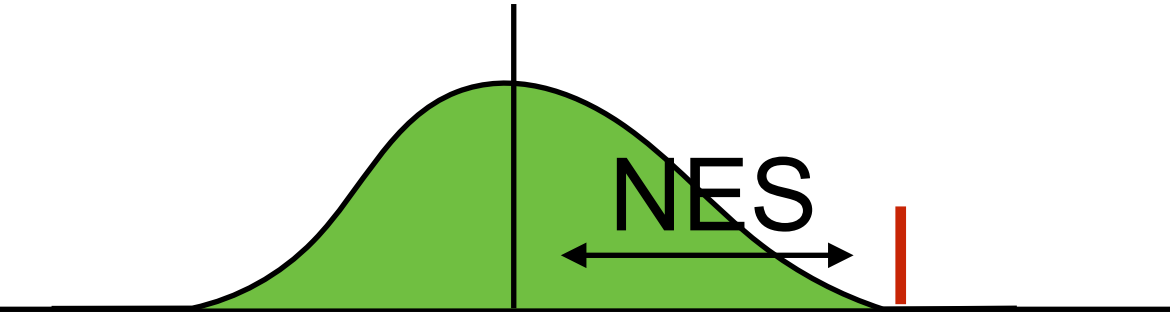


Input:

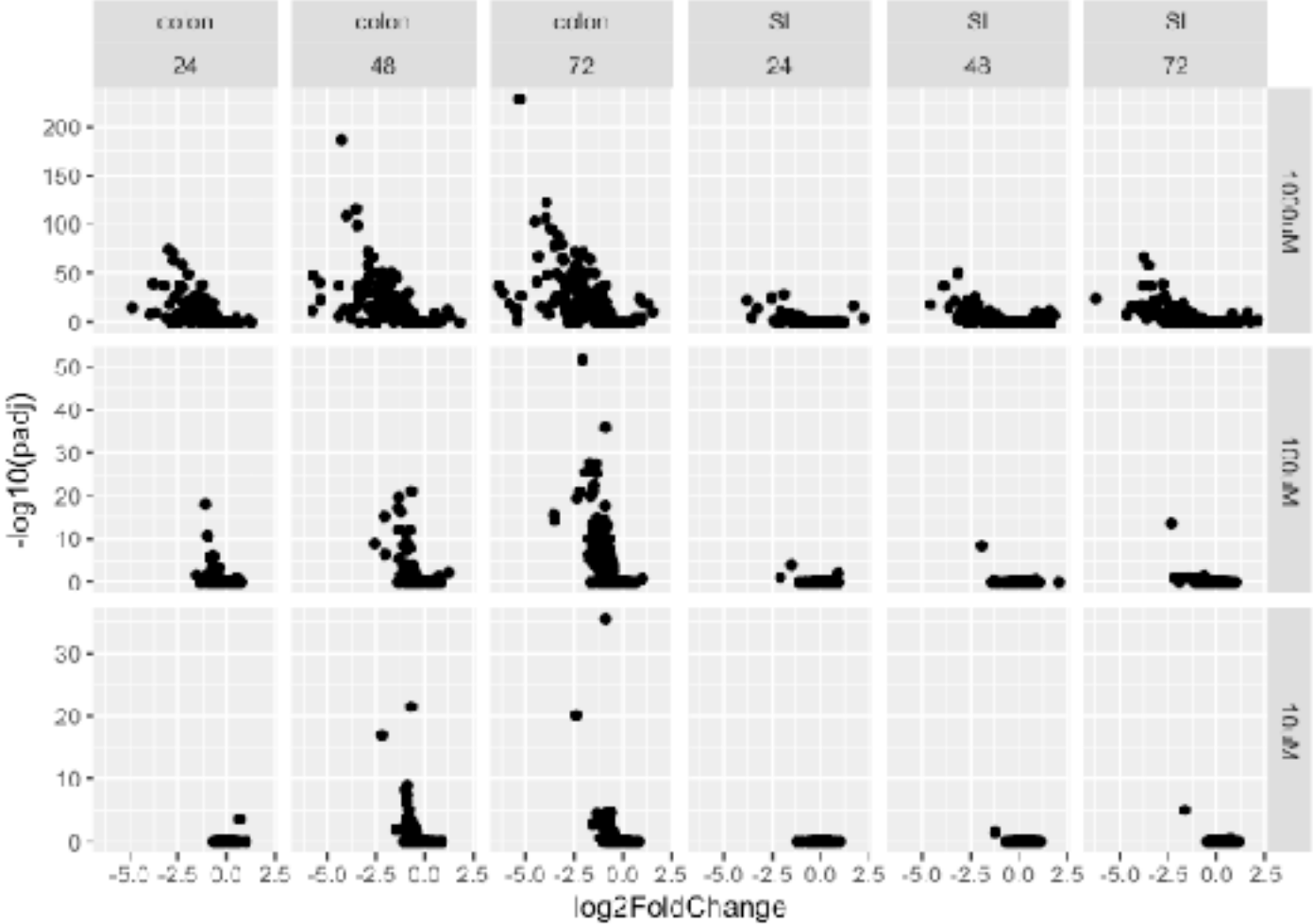
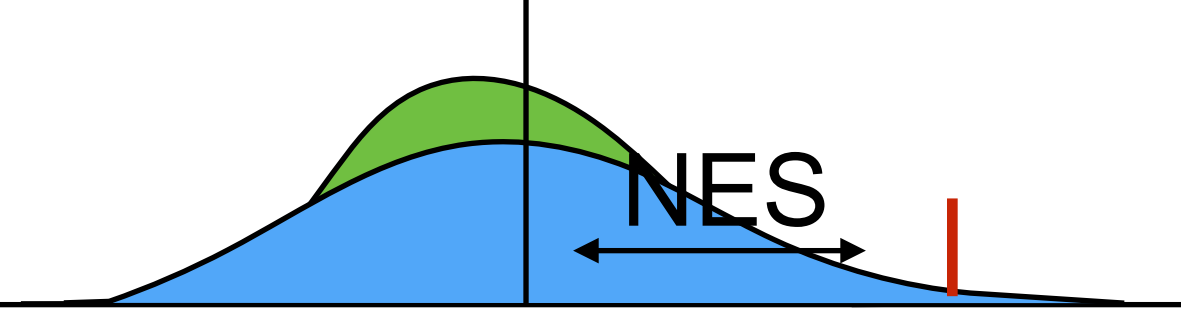


Viper: (simplified)

Sample 1

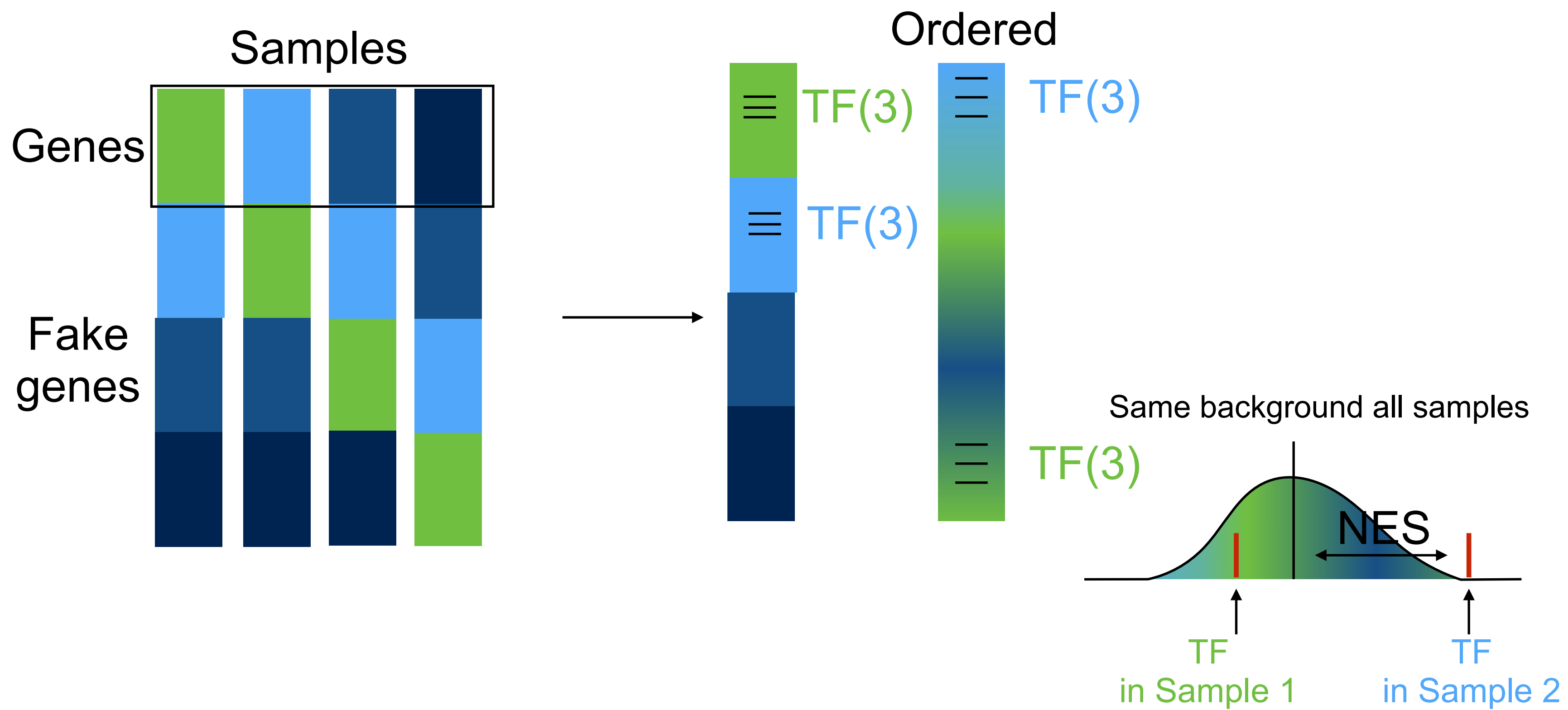


Sample 2



Null distribution is based on the sample

# How to force a common background?



NES can be compared because the null distribution is identical.