

CAGTCAGTTTTAAGCAAGAGTACTTCT → gene 1

CTACGGATCAAGGGCTACTTTGACCAG → gene 2

GACAAGACAACCAAGAGACACTCATCC → gene 3

TGACACATTATACATCTCCACCATTGTG → gene 4

(I) Gene information re-annotation

Excluding values  
that do not exceed  
background

(II) Data filtering

(III) Probe selection

Probe 1

Probe 2

Probe 3

Selecting a single representative  
probe for each gene

Assigning samples to the regions  
of interest

(IV) Sample assignment

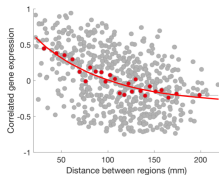
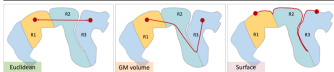
(VII) Accounting for spatial effects

Region x gene expression

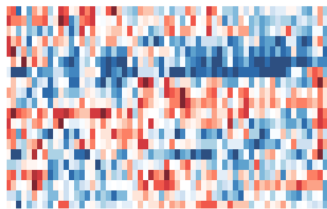
(VI) Gene filtering

(V) Data normalization

Accounting for  
inter-individual  
differences in  
gene expression

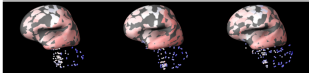


Region

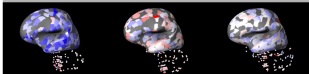


gene

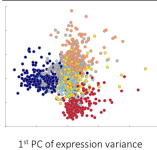
Consistently expressed gene – high DS



Inconsistently expressed gene – low DS



2<sup>nd</sup> PC of expression  
variance



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variance

