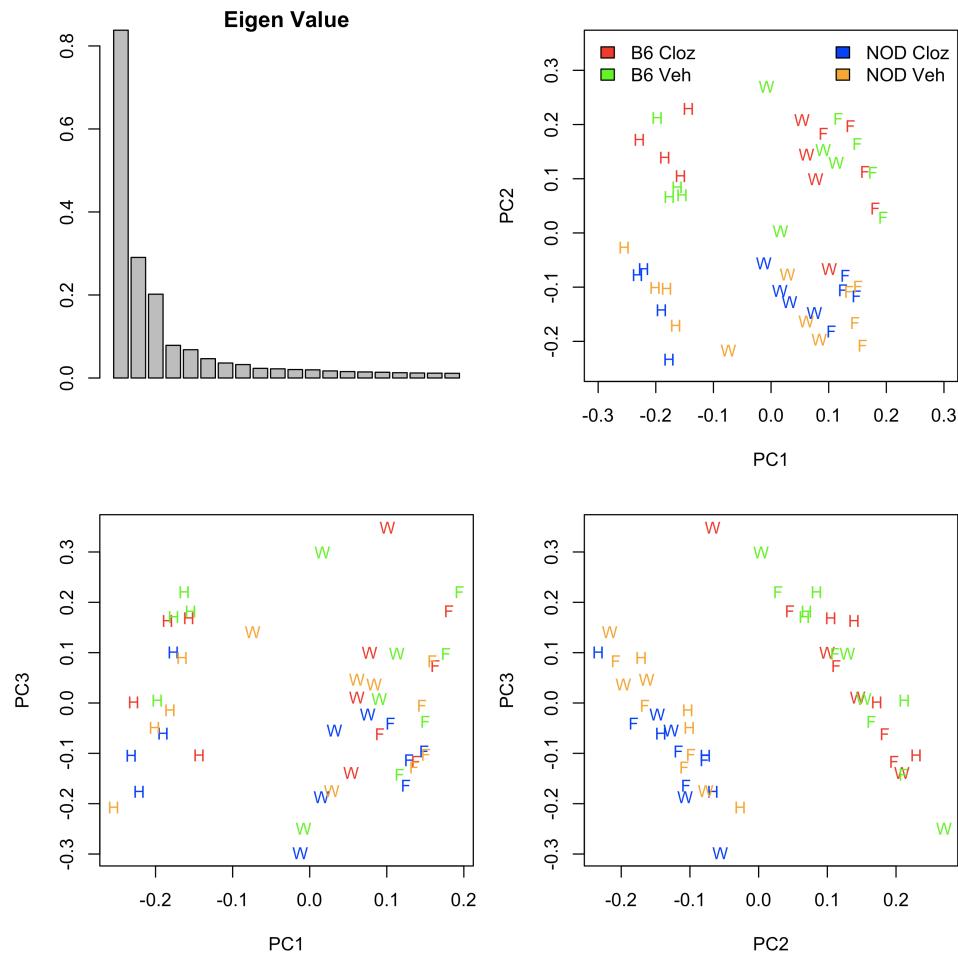


(a) Eigenvalues and projection plots for the first three PCs.



(B) R<sup>2</sup> between the five covariates and the first 9 PCs. The covariate left/right indicate the sample is from left or right hemispheres.

left/right	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9
drug	0	0	0.03	0.11	0	0.12	0.12	0.18	0.01
strain	0.01	0.79	0.19	0.01	0	0	0	0	0
region	0.94	0	0.02	0.04	0.07	0.01	0.39	0.02	0.01
day	0.04	0.06	0.02	0	0.42	0	0.02	0.01	0.03

**Figure S5** PCA for gene expression from 1.0ST cartridge arrays.