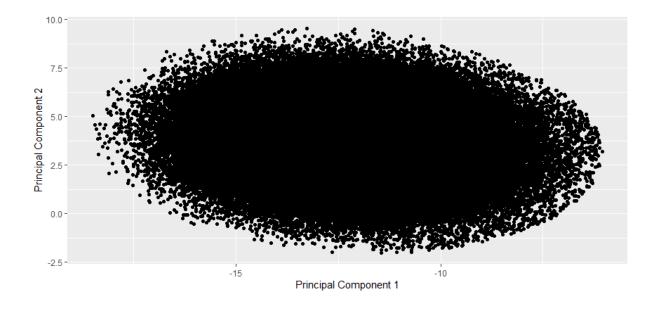
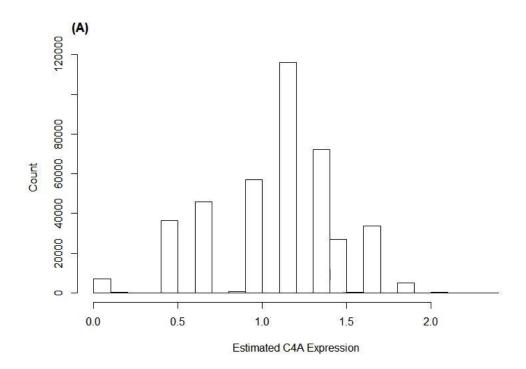
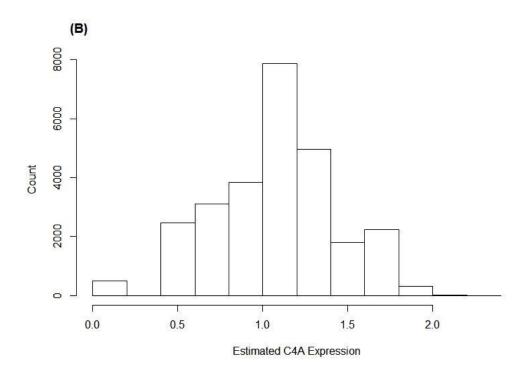
## **Supplementary Figures**

**Supplementary Figure 1.** Principal component scatter plot showing the distribution of individuals included from the full UK Biobank cohort (n = 329,773). The first and second principal components for each individual on the x and y axes, respectively

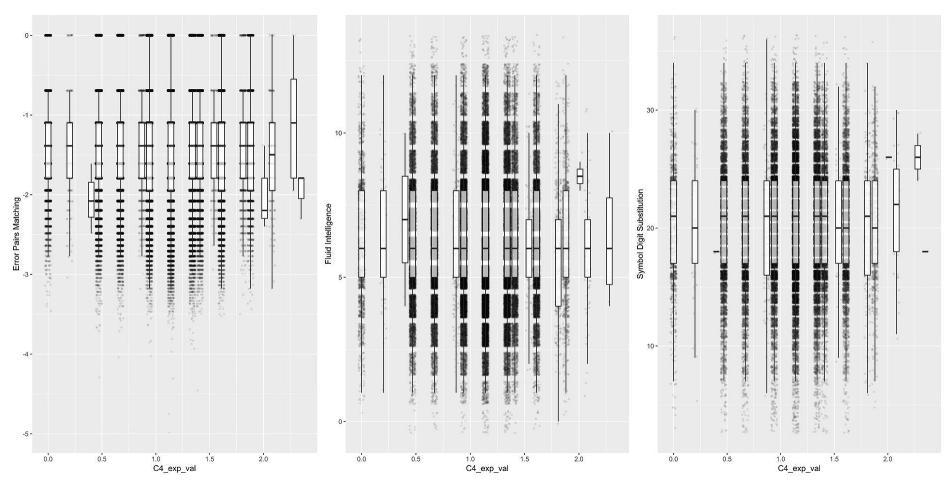


**Supplementary Figure 2.** Histograms showing the distribution of estimated C4A expression values in (A) the full UK Biobank cohort (n = 329,773) and (B) in the subset of the UK Biobank cohort with available imaging data (n = 27,087).

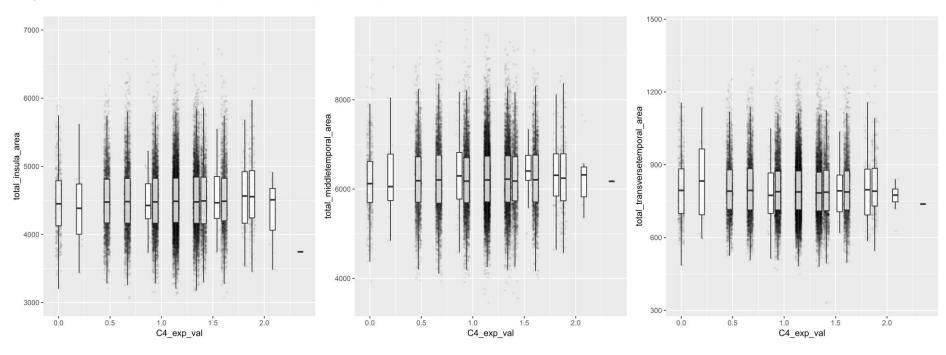




**Supplementary Figure 3.** Scatter plots for each of the cognitive tasks associated (FDR < 0.05) with estimated *C4A* expression. Box plots for each 'bin' of distinct estimated *C4A* expression values are also shown. Values for the cognitive tasks are plotted on the y-axis and estimated *C4A* expression (C4exp\_val) is plotted on the x-axis.



**Supplementary Figure 4.** Scatter plots for each of the regional cortical surface area measures associated (FDR < 0.05) with estimated *C4A* expression. Box plots for each 'bin' of distinct estimated *C4A* expression values are also shown. Values for cortical surface area are plotted on the y-axis and estimated *C4A* expression (C4exp\_val) is plotted on the x-axis.



**Supplementary Figure 5.** Scatter plots for each of the regional cortical thickness measures associated (FDR < 0.05) with estimated *C4A* expression. Box plots for each 'bin' of distinct estimated *C4A* expression values are also shown. Values for mean cortical thickness are plotted on the y-axis and estimated *C4A* expression (C4exp\_val) is plotted on the x-axis.

