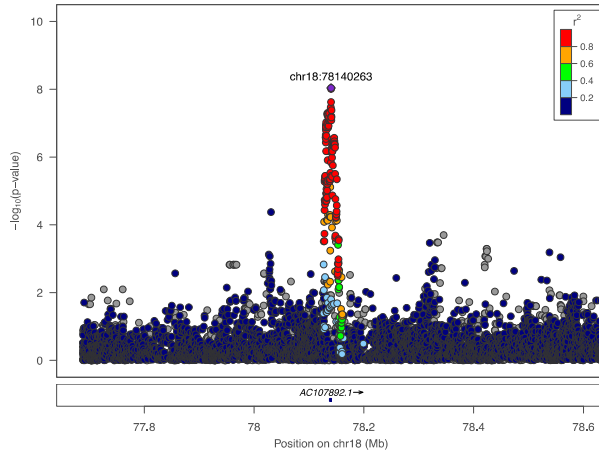
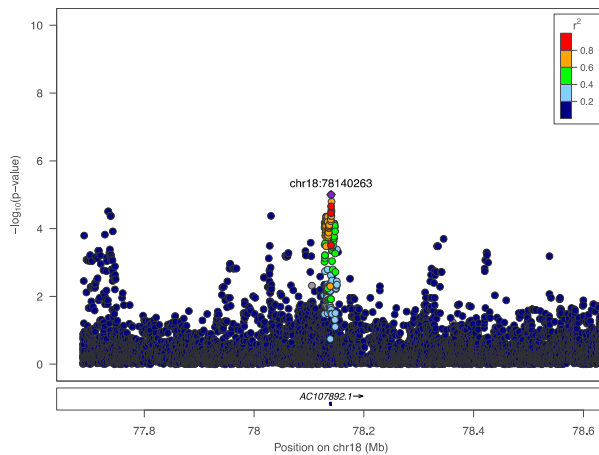


Supplemental Figure 1. Zoom plot displaying genome-wide association results for inter-hemispheric low theta coherence (P3-O1—P4-O2) in the (a) meta-analysis, (b) African ancestry, and (c) European ancestry subsample.

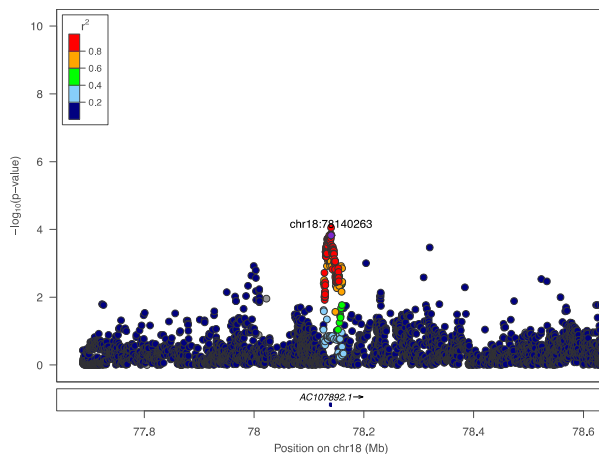
(a)



(b)

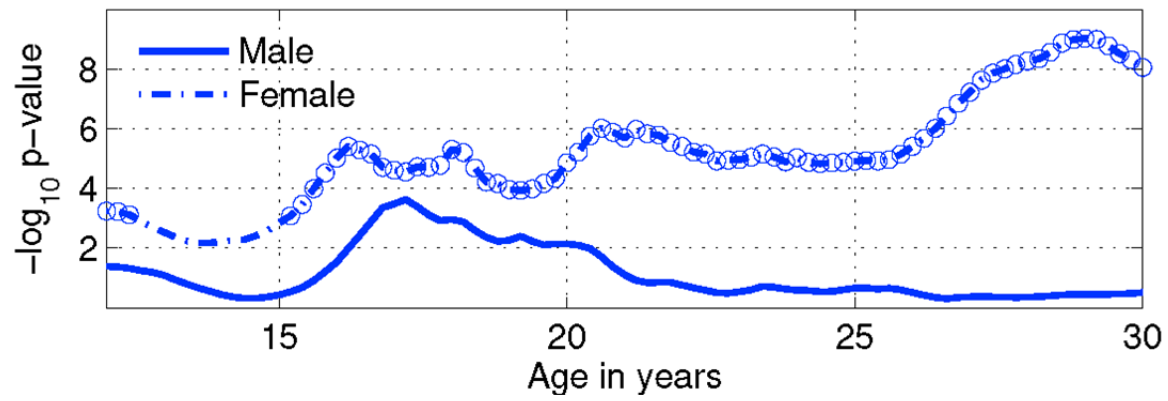


(c)

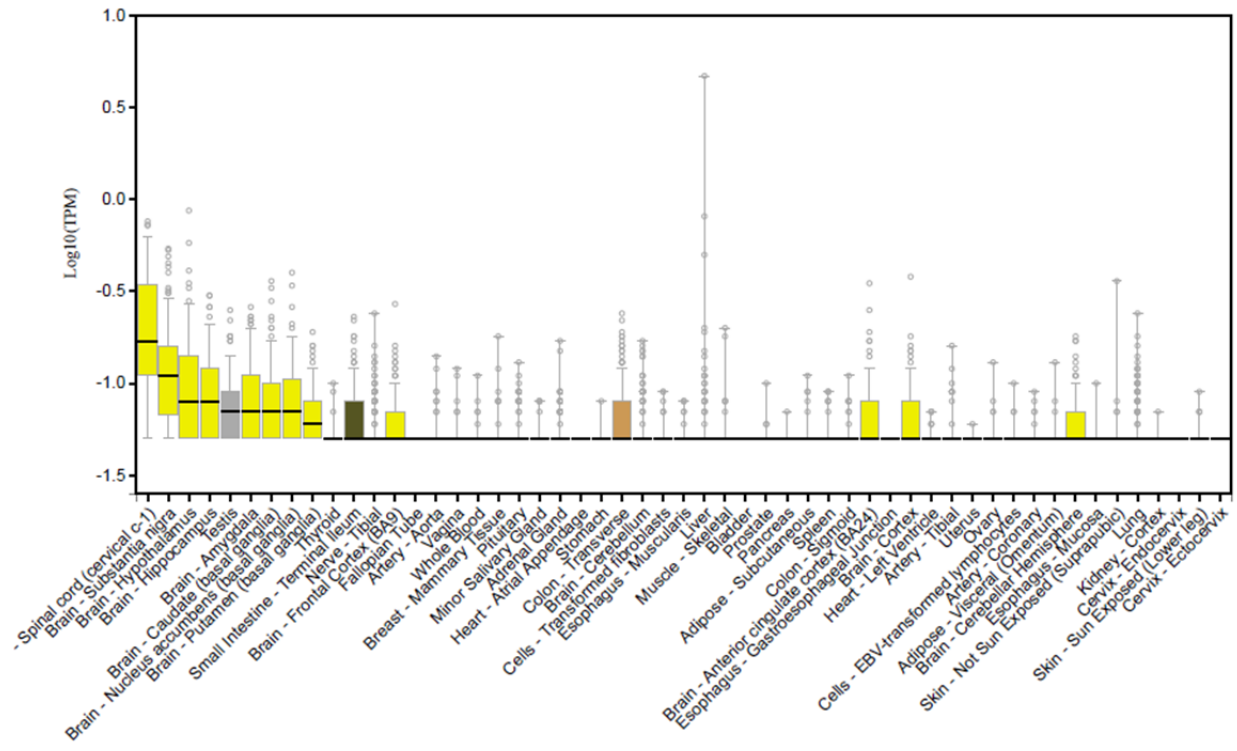


Supplemental Figure 1 Footnote: Association results for low theta electroencephalogram coherence on chromosome 18q23. Y axis denotes the $-\log_{10}$ (P-value) for association. X axis is the physical position on the chromosome (Mb, hg38). The most significantly associated SNP (rs12954372) is shown in purple. The extent of linkage disequilibrium (LD; as measured by r^2) between each SNP and the most significantly associated SNP is indicated by the color scale at the top left. Larger values of r^2 indicate greater LD. LD is based on hg38 1000 Genomes.

Supplemental Figure 2. Associations of rs12954372 with developmental trajectories of low theta bipolar EEG coherence (P3-O1--P4-O2) are observed within females in early adulthood (dotted lines) but not males (solid lines) in a longitudinal subsample of COGA (N: 2,316)

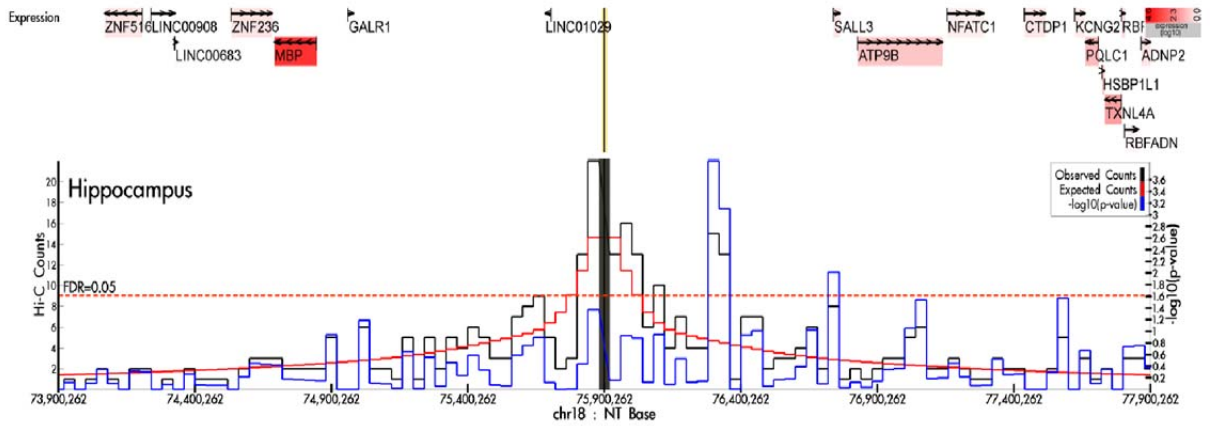


Supplemental Figure 3. Expression of *AC107892.1* in Genotype-Tissue Expression (GTEx)

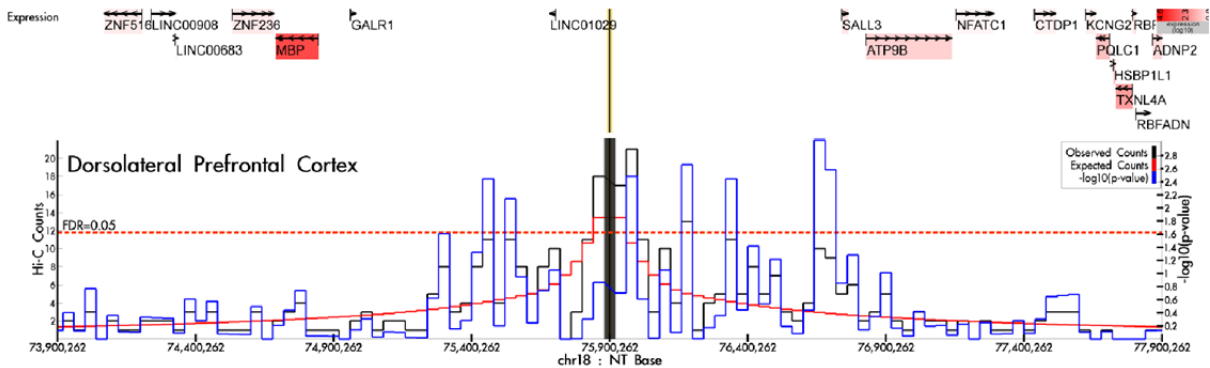


Supplemental Figure 4. rs12954372 interacts with *Myelin Basic Protein (MBP)* in hippocampal (panel a) and dorsolateral prefrontal cortex (panel b) tissue

A. Hippocampus Tissue

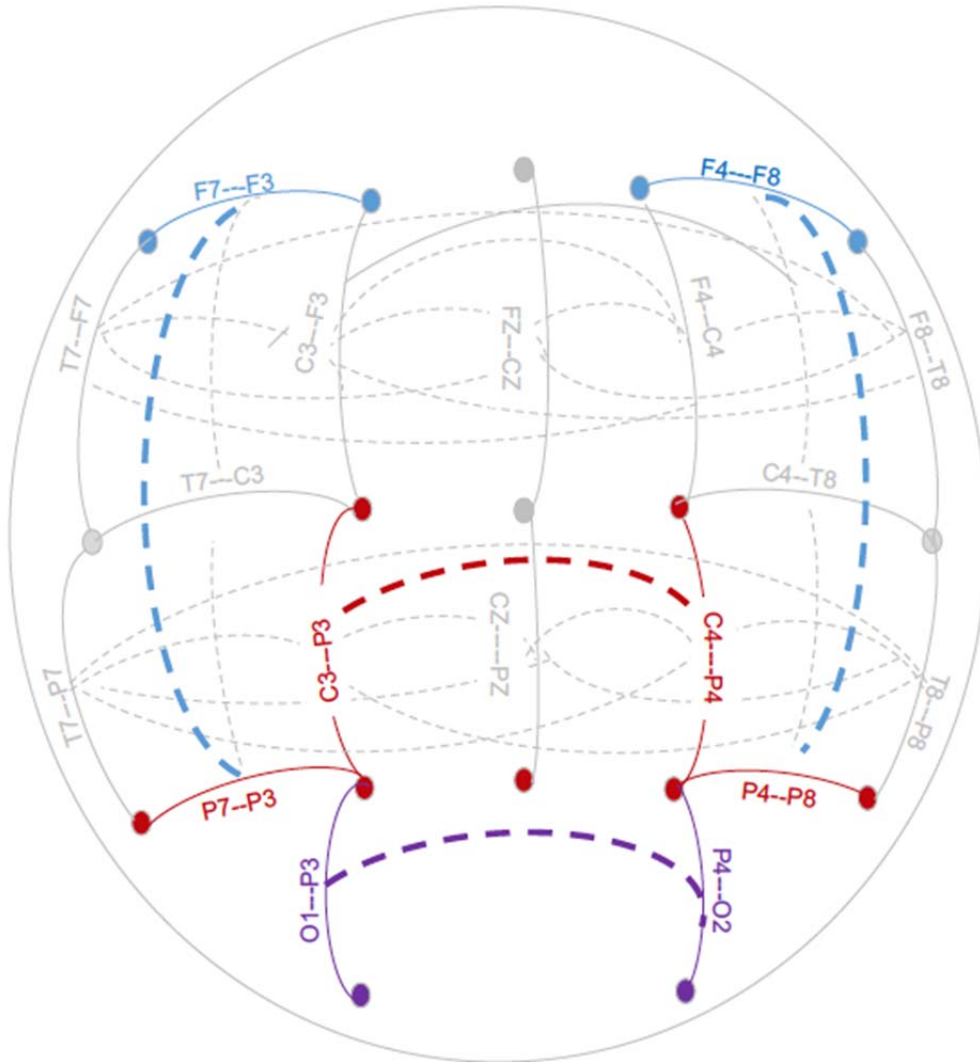


B. Dorsolateral Prefrontal Cortex Tissue



Footnote: High-confidence chromatin interaction statistics were obtained from hippocampal tissue and dorsolateral prefrontal cortex tissue in embryonic neural progenitor cell lines through HUGIn (Hi-C Unifying Genomic Interrogator). Long range chromatin interactions were anchored on top associated variants and computed statistical significance of contact at each locus.

Supplemental Figure 5. Schematic of the bipolar electrode pairs (connected with solid lines) and coherence pairs (connected with dotted lines) derived between bipolar electrode pairs. Parietal-occipital sagittal coherence pairs are represented in purple; P4-O2--P3-O1. Central-parietal sagittal coherence pairs are represented in red; C4-P4--C3-P3. Intra-hemispheric lateral coherence pairs are represented in blue; P7-P3--F7-F3, P8-P4--F8-F4.



Supplemental Figure 6. Q-Q Plot for genome-wide meta-analysis association results for interhemispheric low theta coherence (P3-O1—P4-O2)

