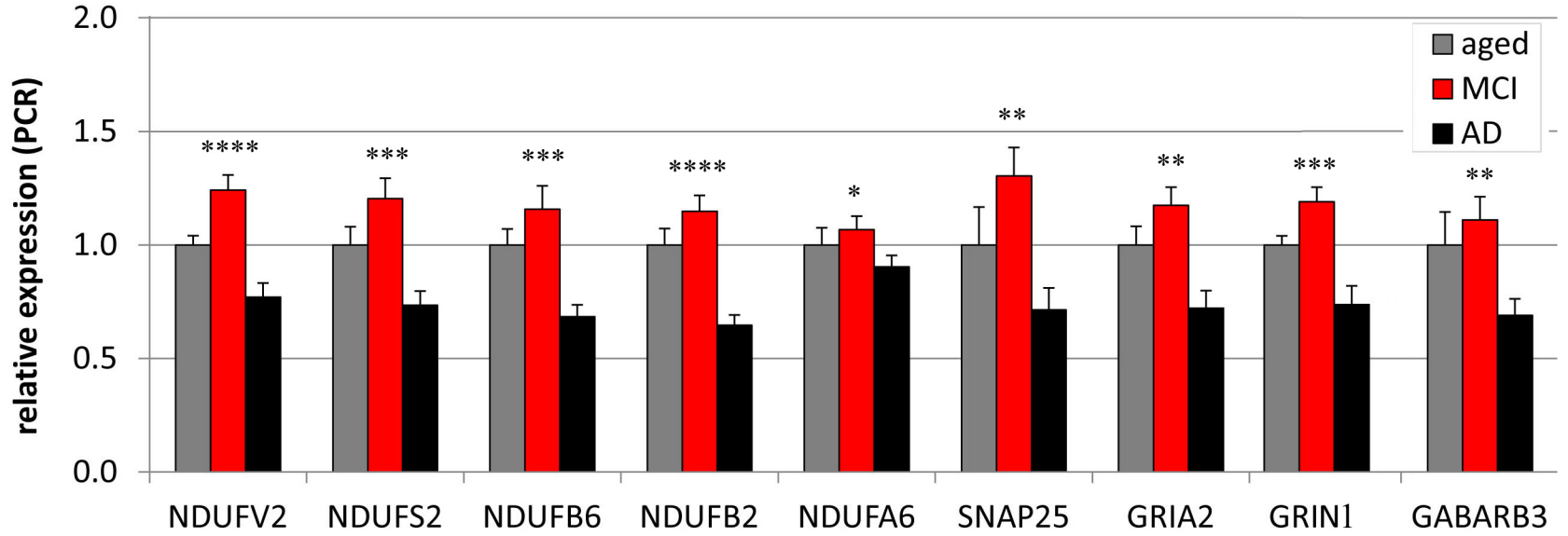
Supplemental Figure 1 Quantitative RT-PCR was used to analyze gene expression patterns in SFG tissue for a subset of synaptic and mitochondrial bioenergetics genes. Multiple gene components of the mitochondrial complex NADH:ubiquinone oxidoreductase were assessed (NDUFA6, NDUFB2, NDUFB6, NDUFV2, NDUFS2) as well as 4 synapse-related genes (SNAP25, GRIA2, GRIN1, GABARB3). * $p<0.05$, ** $p<0.01$, ***$p<0.005$, ****$p<0.001$ MCI vs AD.

Supplemental Figure 2 Strong correlations between gene expression and MMSE in MCI in the EC and HC were found for the dopaminergic neurotransmitter receptor 5(DRD5), cell adhesion molecule 1 (CADM1), cofilin 2 (CFL2), S100B, and bridging integrator 1/amphiphysin 2 (BIN1). Significance threshold: $p<0.05$.

Supplemental Figure 1



Supplemental Figure 2