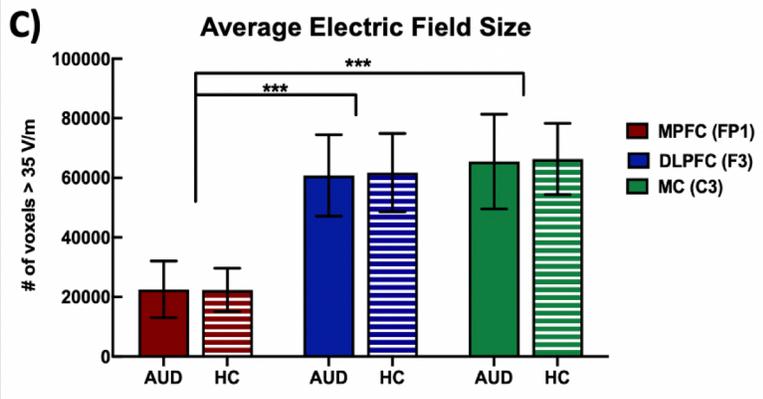
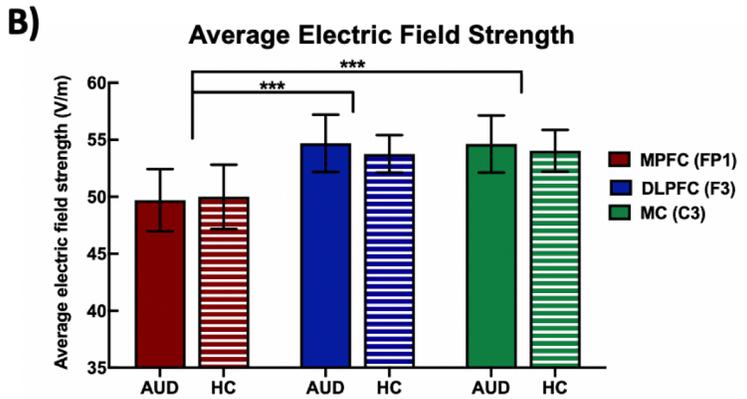
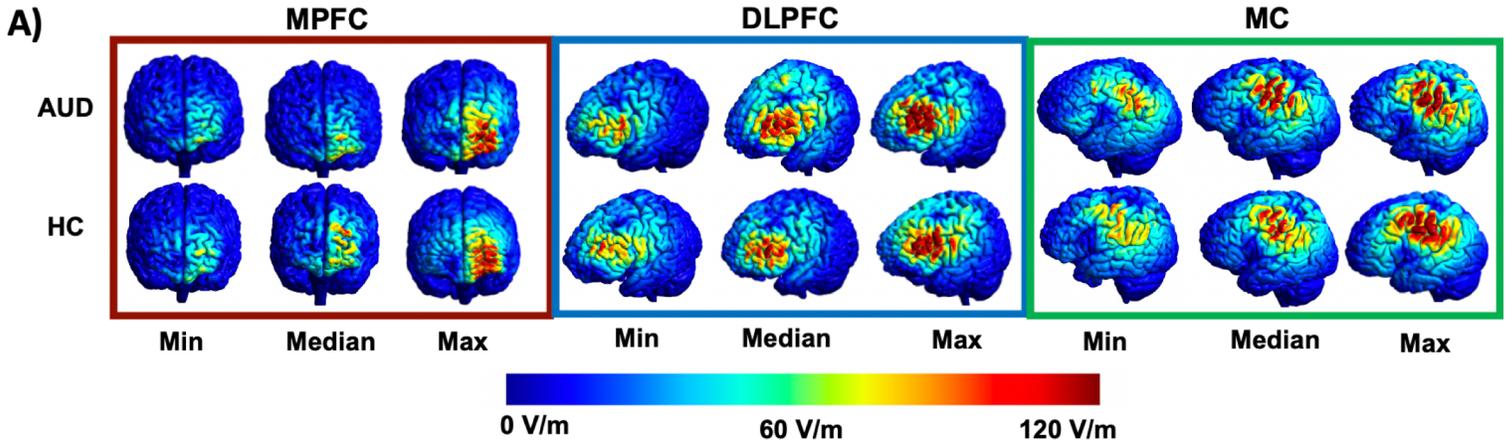


CBI's Image of the Month

June, 2021

Courtesy of Dan McCalley, Graduate Student in Dr. Hanlon's lab, Dept. of Psychiatry



TMS electric field characteristics do not differ among individuals with Alcohol Use Disorder (AUD, n=44) and age-matched healthy controls (n=44). Gray matter atrophy commonly occurs within the prefrontal cortex of AUD users. We hypothesized that relative to healthy controls, individuals with AUD would have a greater distance from the scalp to the cortex, thereby decreasing the strength of TMS reaching the cortex. A) Representative TMS-induced electrical field models among individuals with AUD (top row) and age-matched healthy control (HCs, bottom row). Individuals with the weakest, median and strongest electrical fields within each group did not demonstrate qualitative differences at the MPFC (maroon square), DLPFC (navy square) or motor cortex (green square). Color bar provided below for scale of TMS-induced voltage/meter. B) Average electrical field strength did not significantly differ between AUD and HCs. However, the MPFC (FP1), experienced the weakest electric field strength on average. C) Average electrical field size did not significantly differ between AUD and HCs. Error bars for panels B and C represent standard deviation.