EEG signatures of Ca^{2+} resonance in cortical pyramidal neurons

from monkeys to the Big Brain

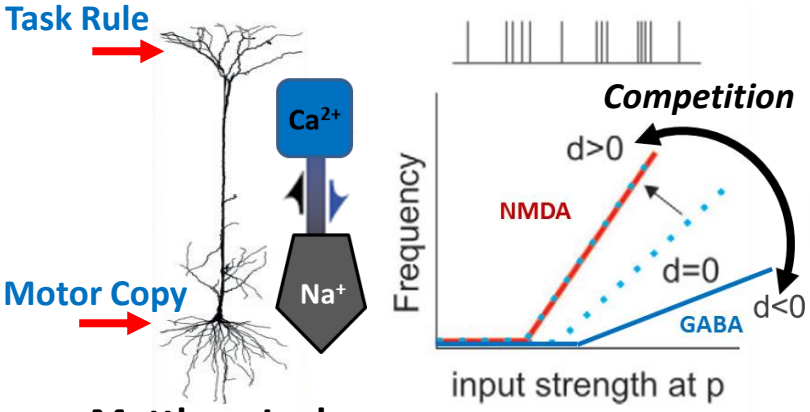
NIH R01-EY019882 P30-EY008126

Jorge Riera, Beatriz Herrera, Jeffrey D Schall, Jorge Bosch

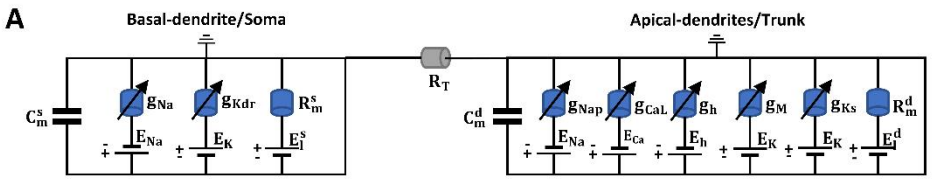
Performance Monitoring

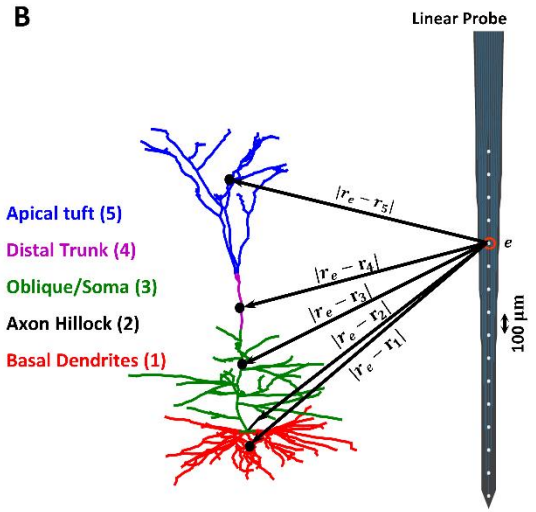
Mitigate Errors

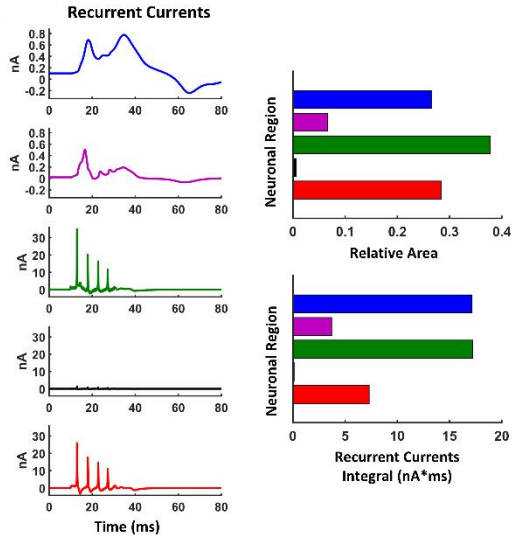
Layer 5 PCs Agranular Cortex

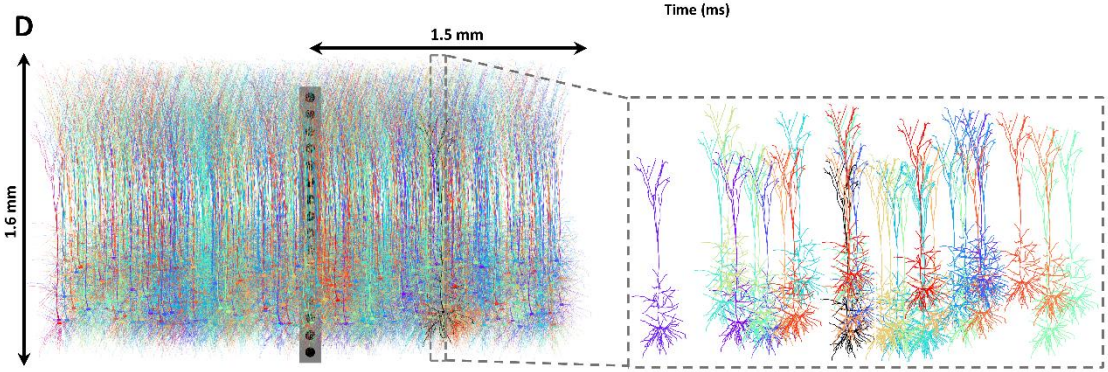


Matthew Larkum

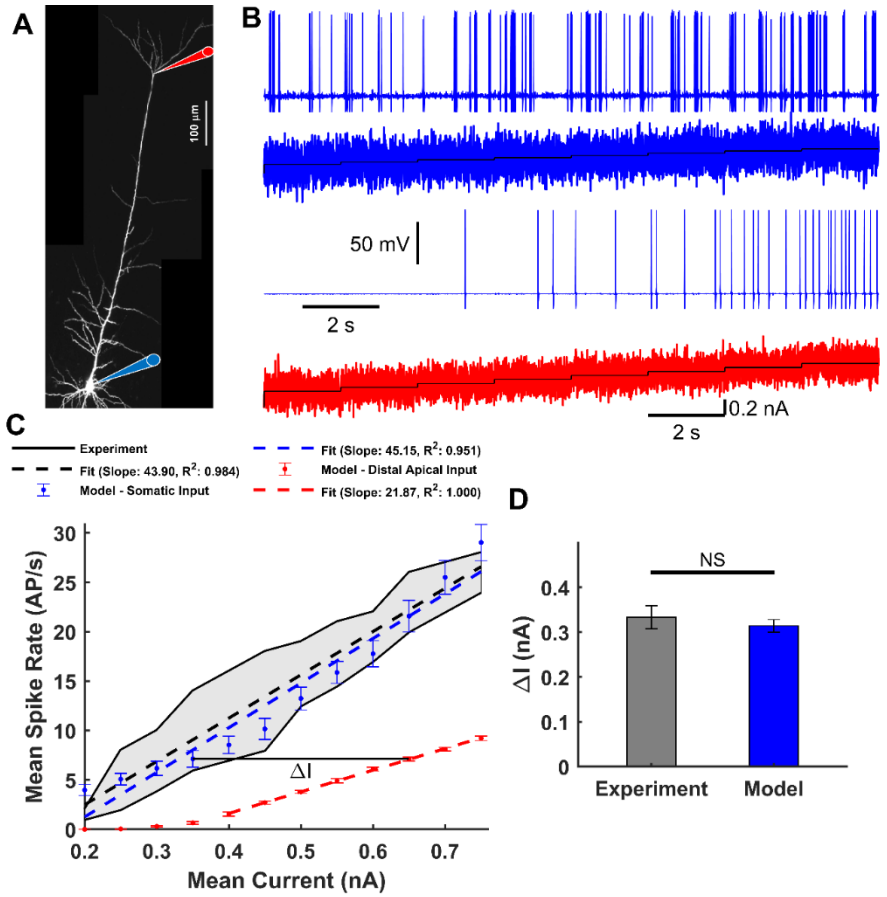




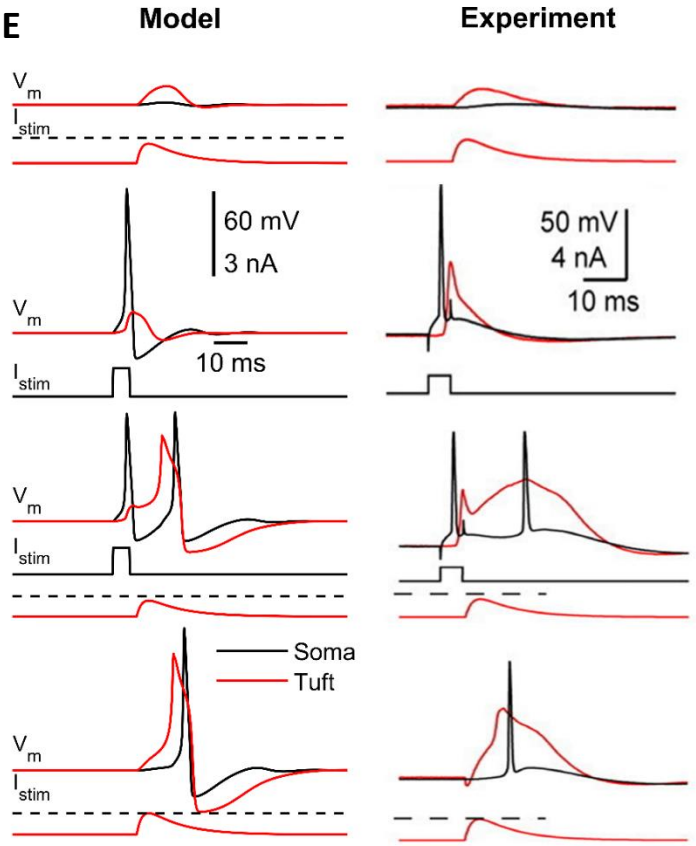




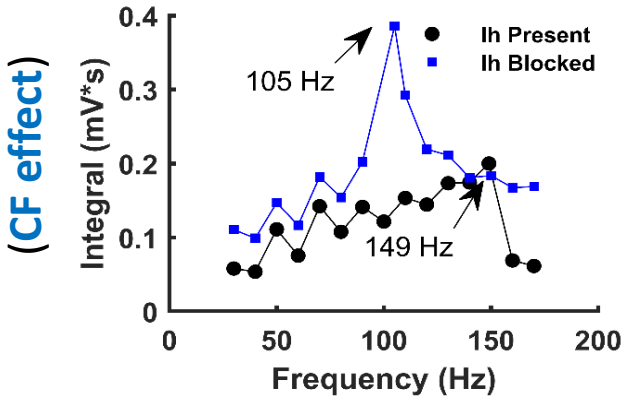
frequency – current curve (f-I curve)

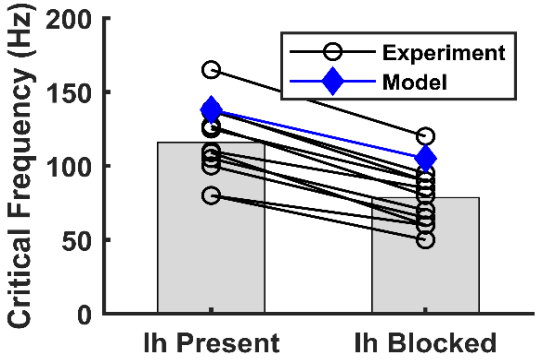


Backpropagation activated Ca^{2+} firing (BAC firing)

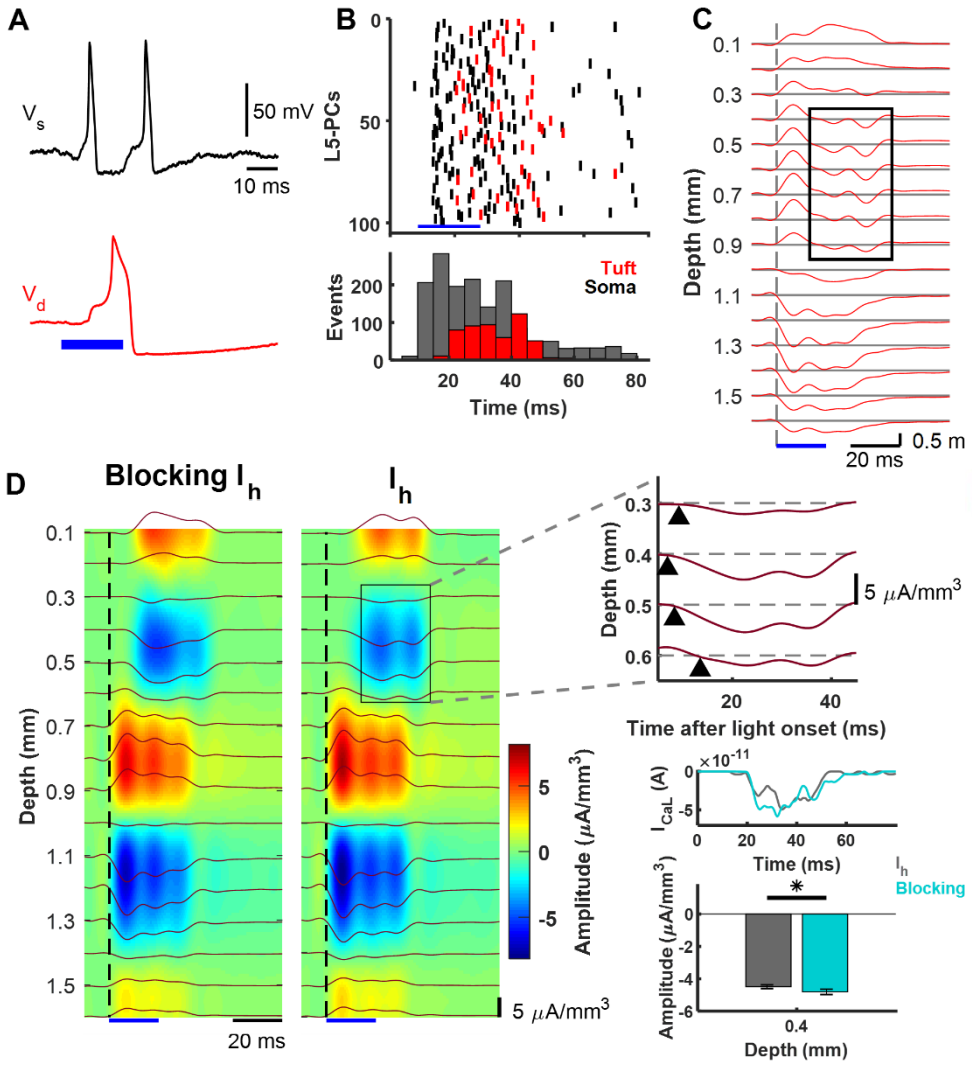


Critical frequency for Ca^{2+} spike genesis

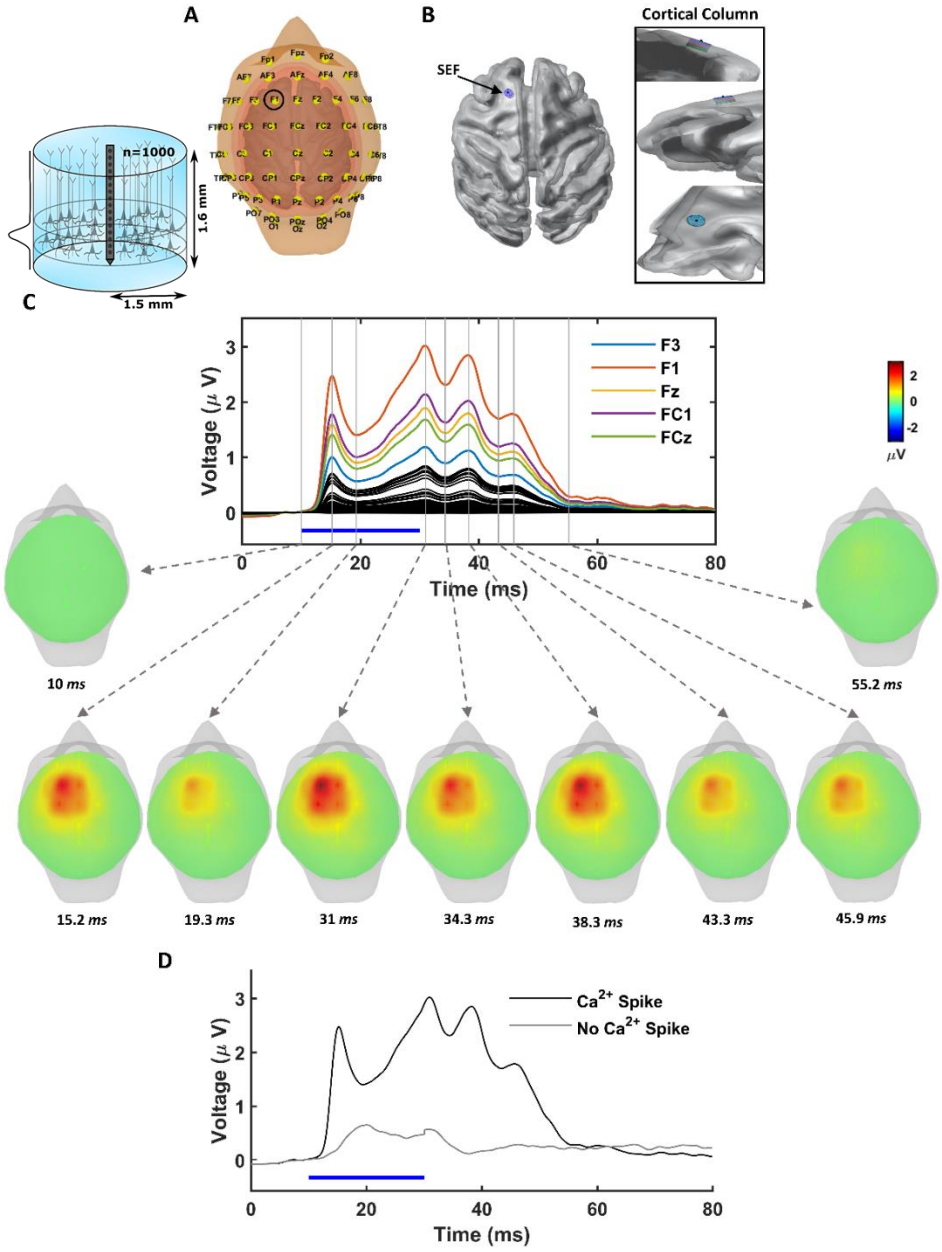




Optically-induced above CF current densities (CF-CSD)

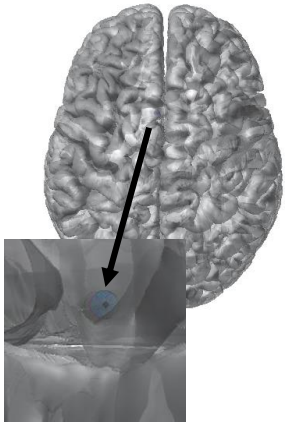


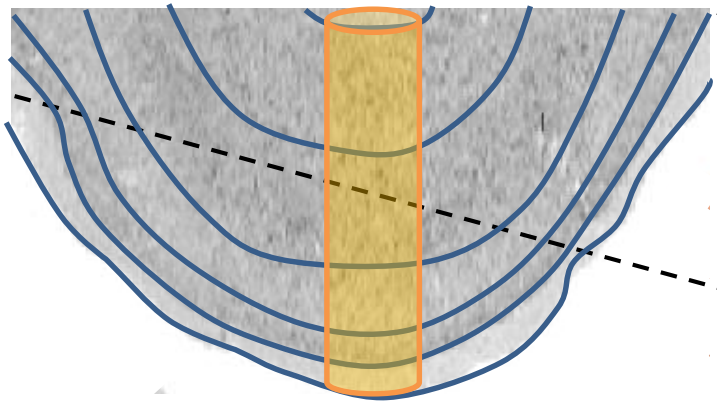
EEG Scalp Potentials Monkeys

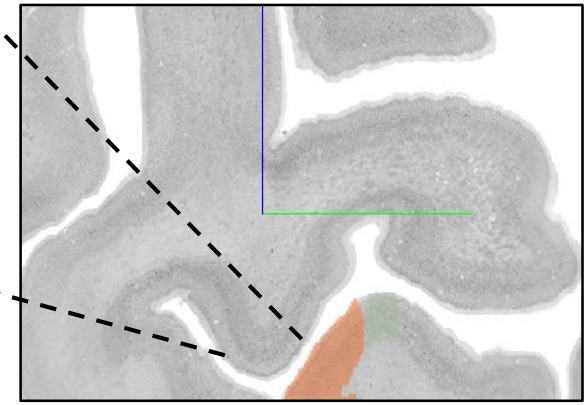


Big Brain Project

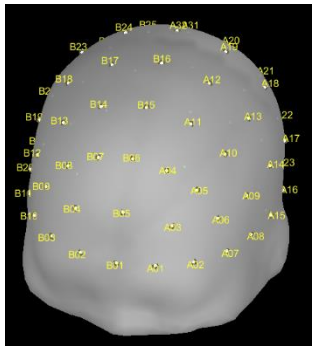
Layer-Based Segmentation



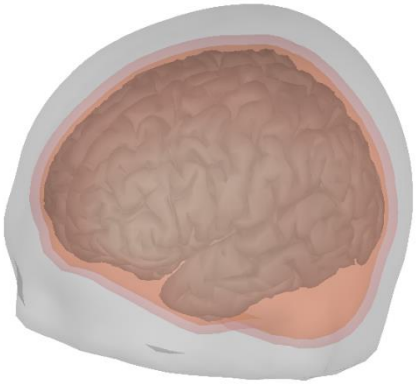




Pre supplementary motor area (pre SMA)
MNI Colin 27: Area 6ma (preSMA, mesial SFG)

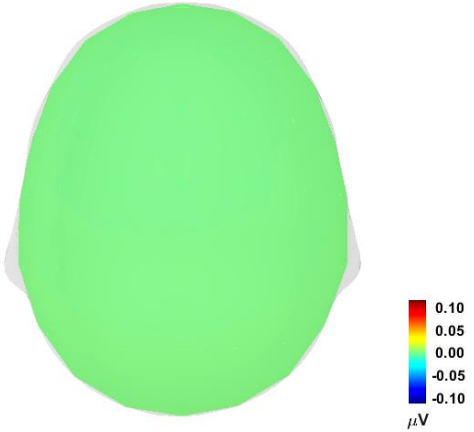


MNI Colin
Jorge Bosch

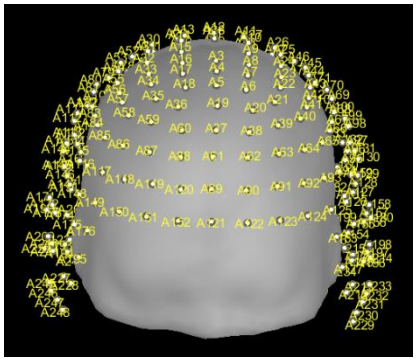


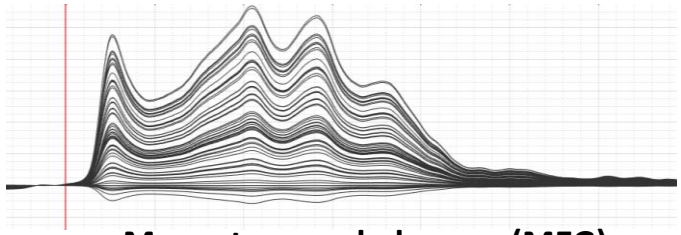
Volume Conductor Model

(EEG)

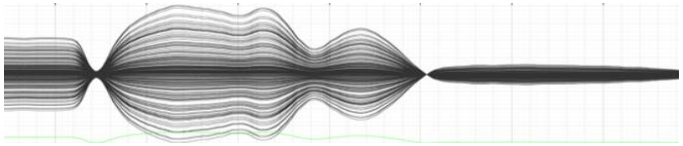


Electroencephalogram (EEG)





Magnetoencephalogram (MEG)



(MEG)