Supplementary data:

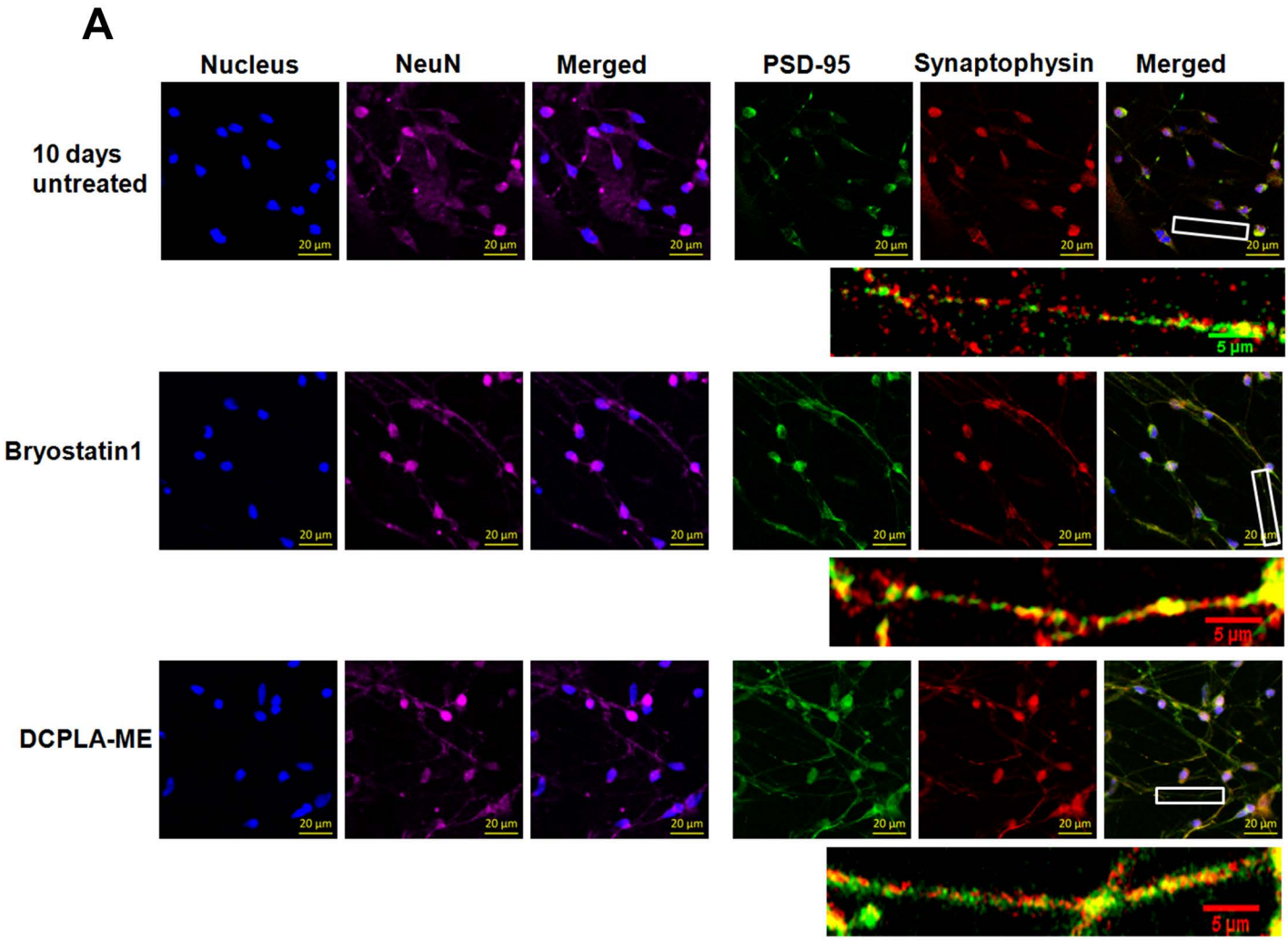
PKC epsilon Promotes Synaptogenesis through Membrane Accumulation of the Postsynaptic Density Protein PSD-95

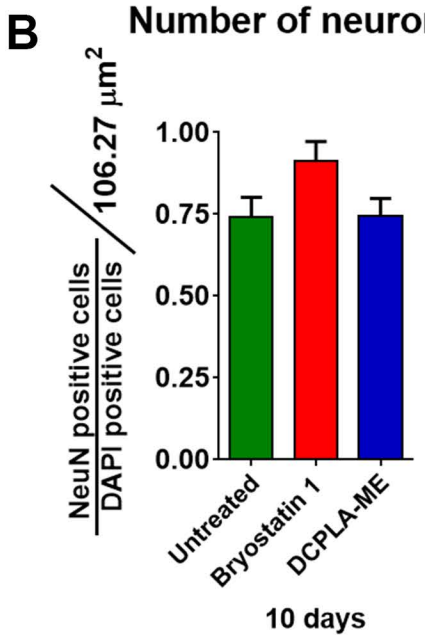
Abhik Sen, Jarin Hongpaisan, Desheng Wang, Thomas J. Nelson and Daniel L. Alkon.

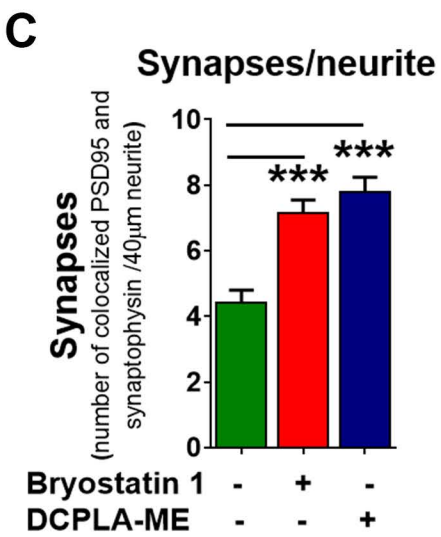
Blanchette Rockefeller Neurosciences Institute,
8 Medical Center Drive, Morgantown, WV 26505, USA.

Supplementary figure legend:

Supplemental Figure 1: PKCε induced increase in synapse number is independent of neuronal density. A. Confocal images of untreated, DCPLA-ME (100 nM), and bryostatin 1 (0.27 nM), treated primary human neurons **(**10 days). Each condition is represented by seven panels. Six square panels represents nucleus (DAPI-blue), NeuN positive neurons (magenta), merged for DAPI and NeuN, PSD-95 (green), synaptophysin (red) and merged image from nucleus, PSD-95 and synaptophysin respectively. The rectangular panel represents magnified image of a 40μm neurite. **B**. Number of NeuN positive cells normalized to number of DAPI stained nucleus. Bryostatin 1 and DCPLA-ME treatment do not affect the number of neurons. **C.** Synapses were quantified by the number of colocalized PSD-95 and synaptophysin signals. PKCε activation increased synapse number ($F_{(2,30)}$=19.73; ANOVA P<0.0001, n=10 neurites). Data are represented as mean ± SE of at least three independent experiments (Student's t-test, **P*<0.05and ***P*<0.005).







Supplementary Figure .1