Dear Dr. Aaron Berard,

We are resubmitting the invited article 'Modeling of Synaptic Plasticity in Three Dimensional Dendritic Spines'. Here, we described our methods to develop a three dimensional model of a dendritic segment with dendritic spines for modeling synaptic plasticity. The constructed mesh can be used for computational modeling of AMPA receptor trafficking in long-term synaptic plasticity using the software Blender with CellBlender and MCell.

In this revised version, we addressed the comments to increase the clarity of the protocol; we reduced the highlighted section and reduced the number of pages of the protocol. We included three supplementary figures in the additional supplementary file.

With my best regards,

Dr. Fabio M. Simoes de Souza