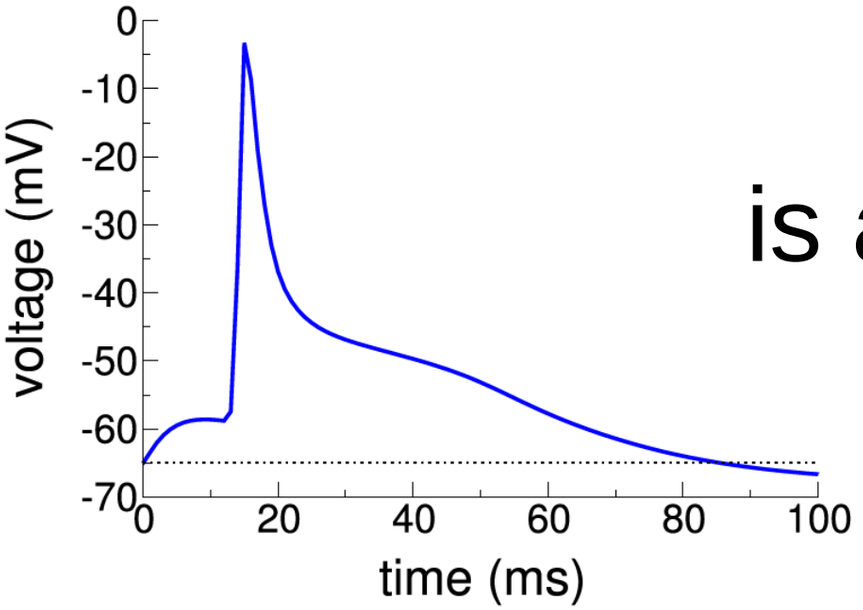
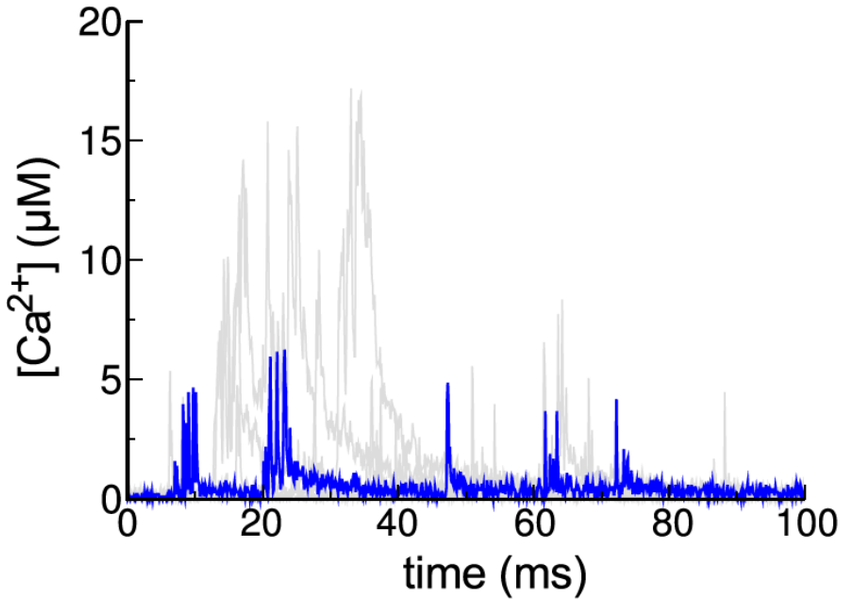
DBP2
Modeling Activation of CaMKII in Spines

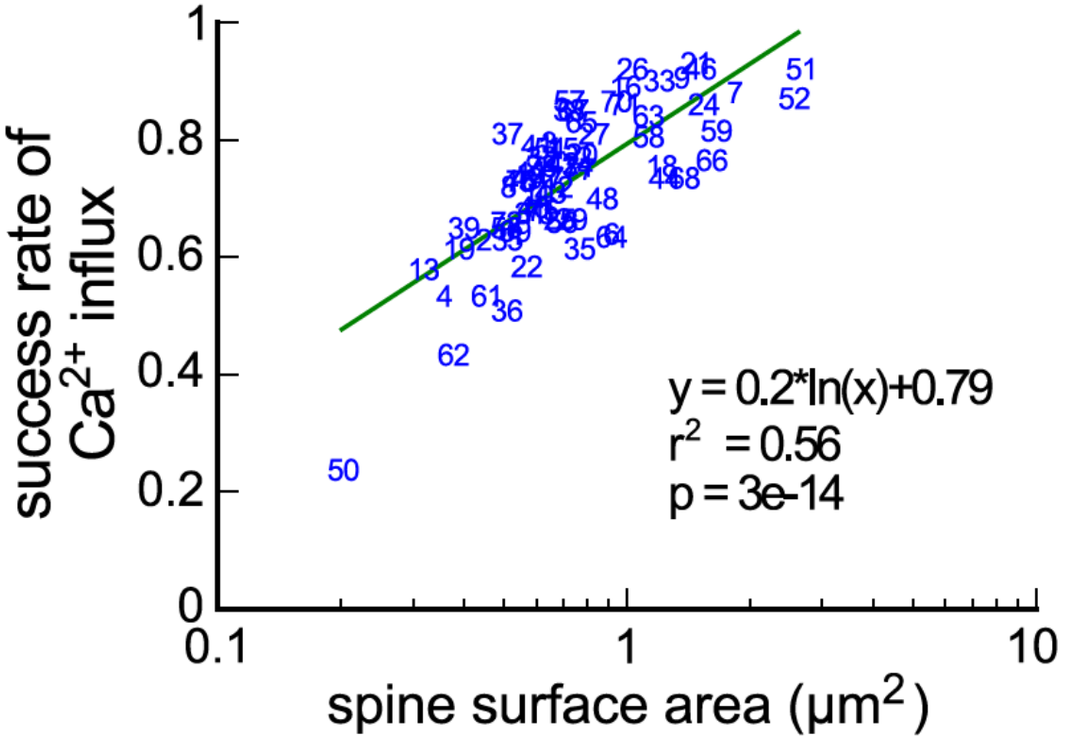
Mary Kennedy, CalTech

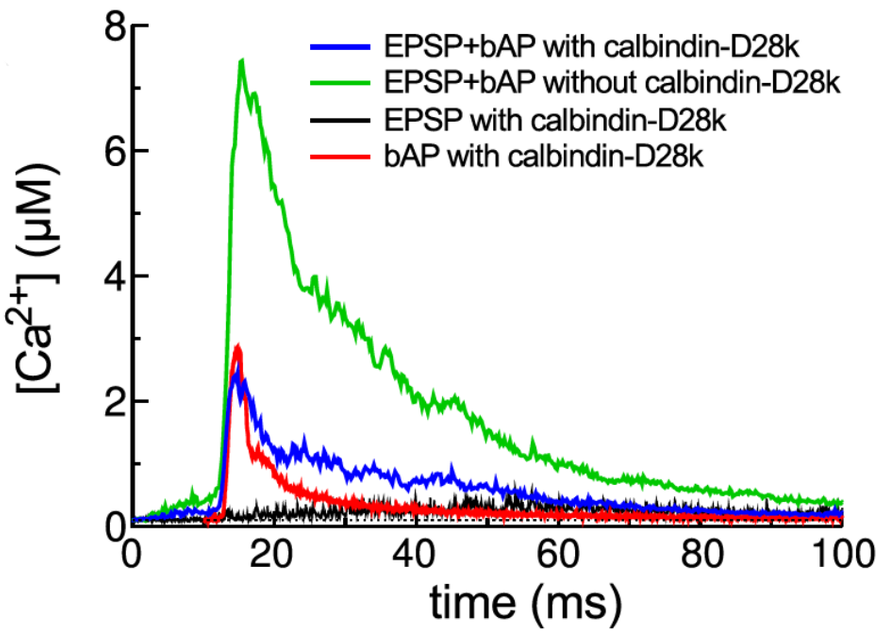
Movie: neuropil_pre_to_post.mov

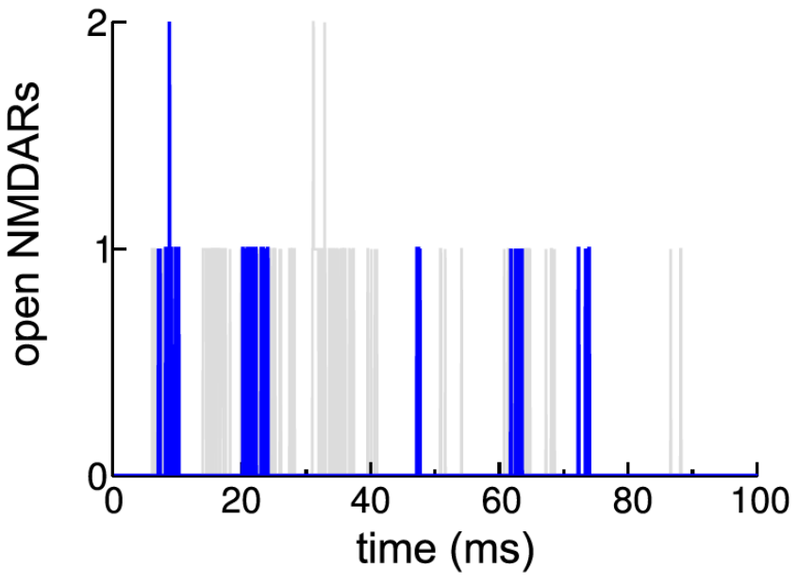
Failure of Calcium Influx is a Significant Source of Synaptic Variability



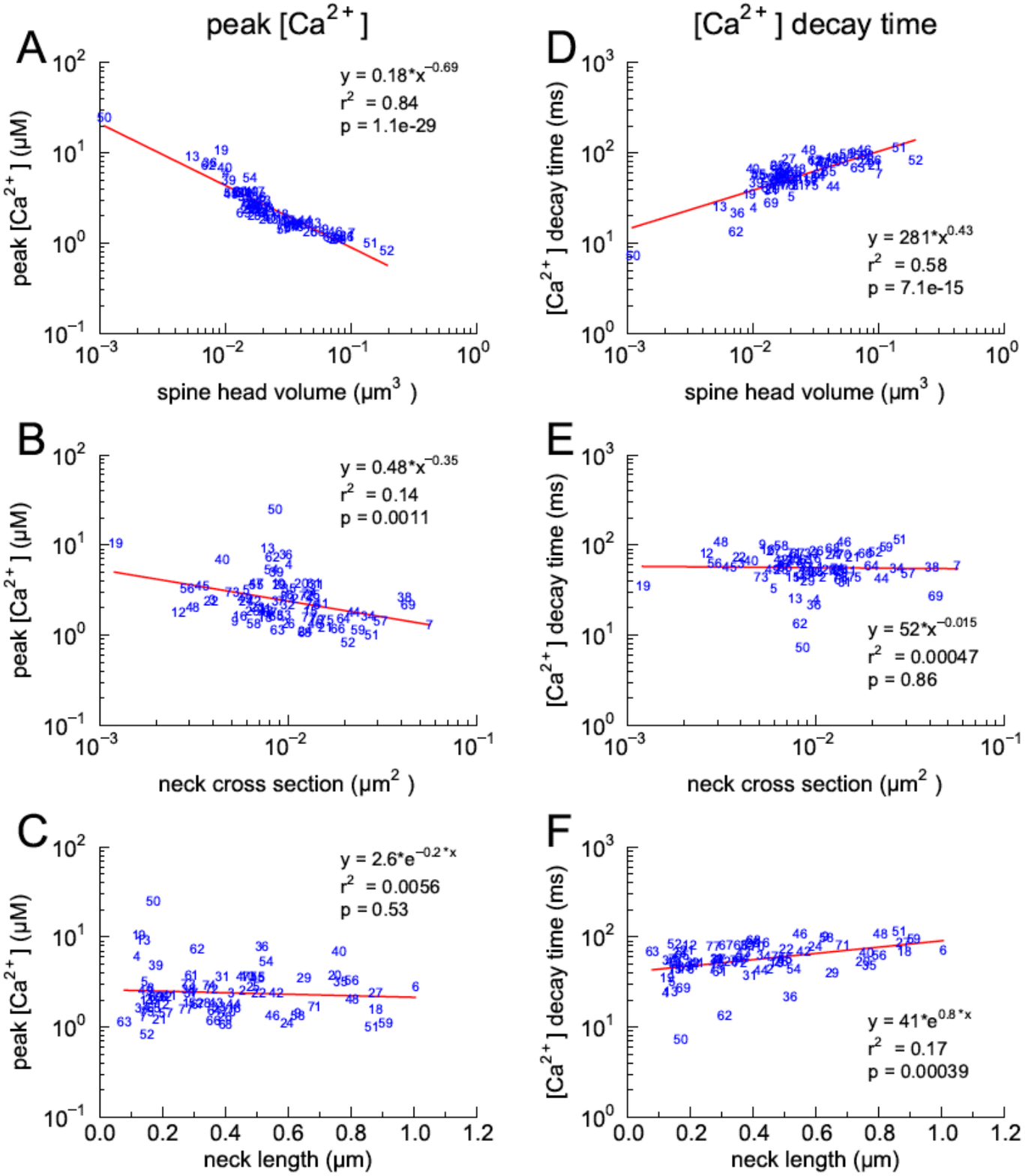




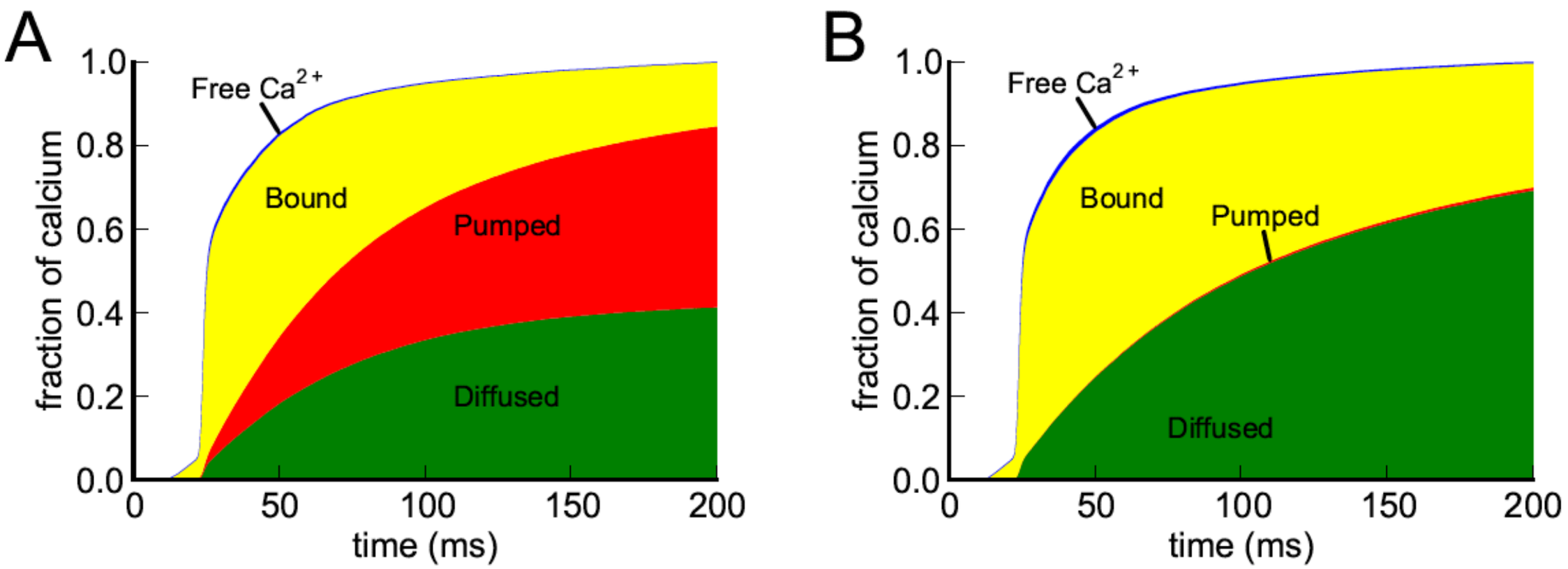




Time Course of Calcium Transient is Independent of Spine Neck Geometry



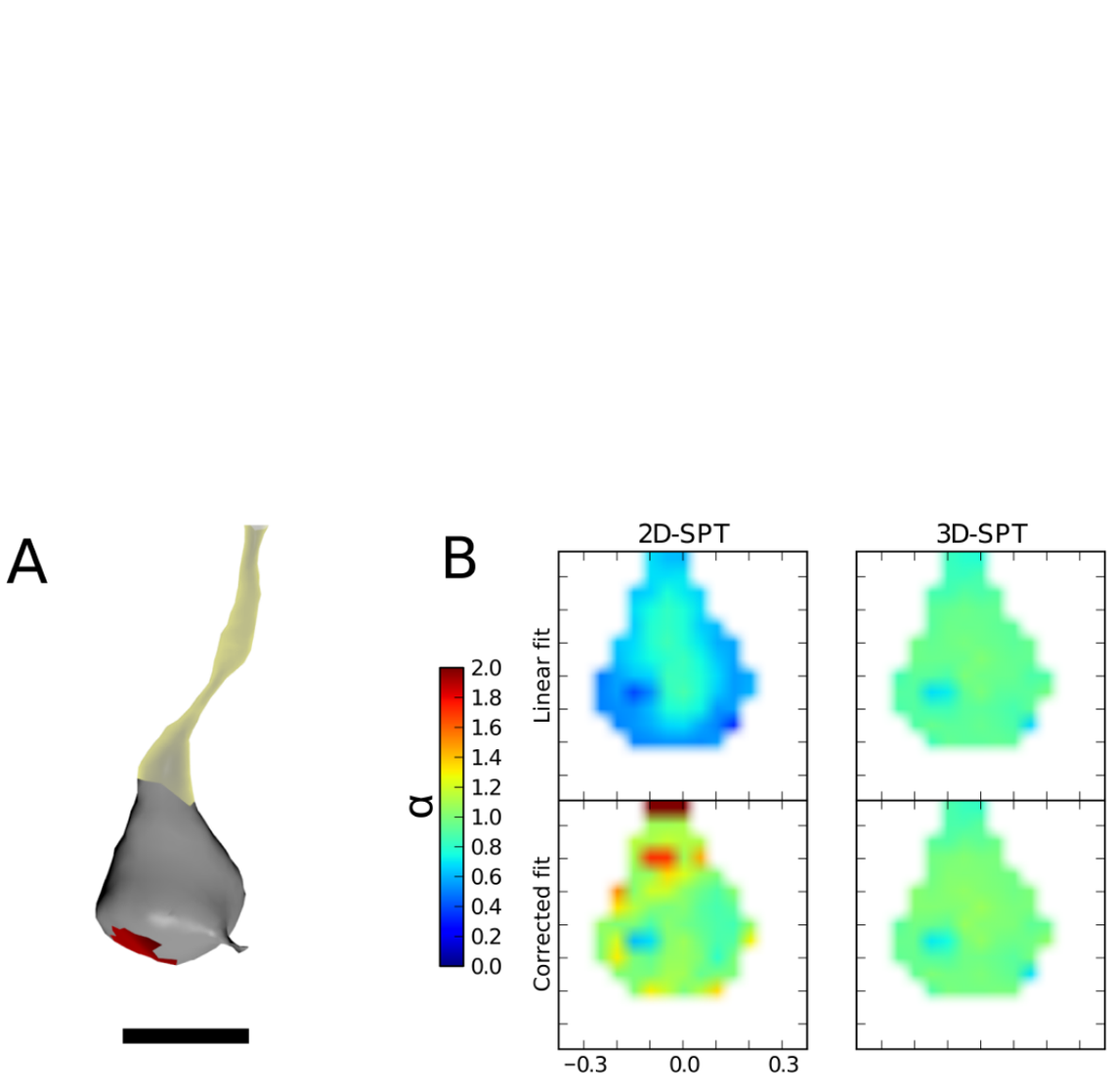
Calcium Pumps Isolate Calcium Transients

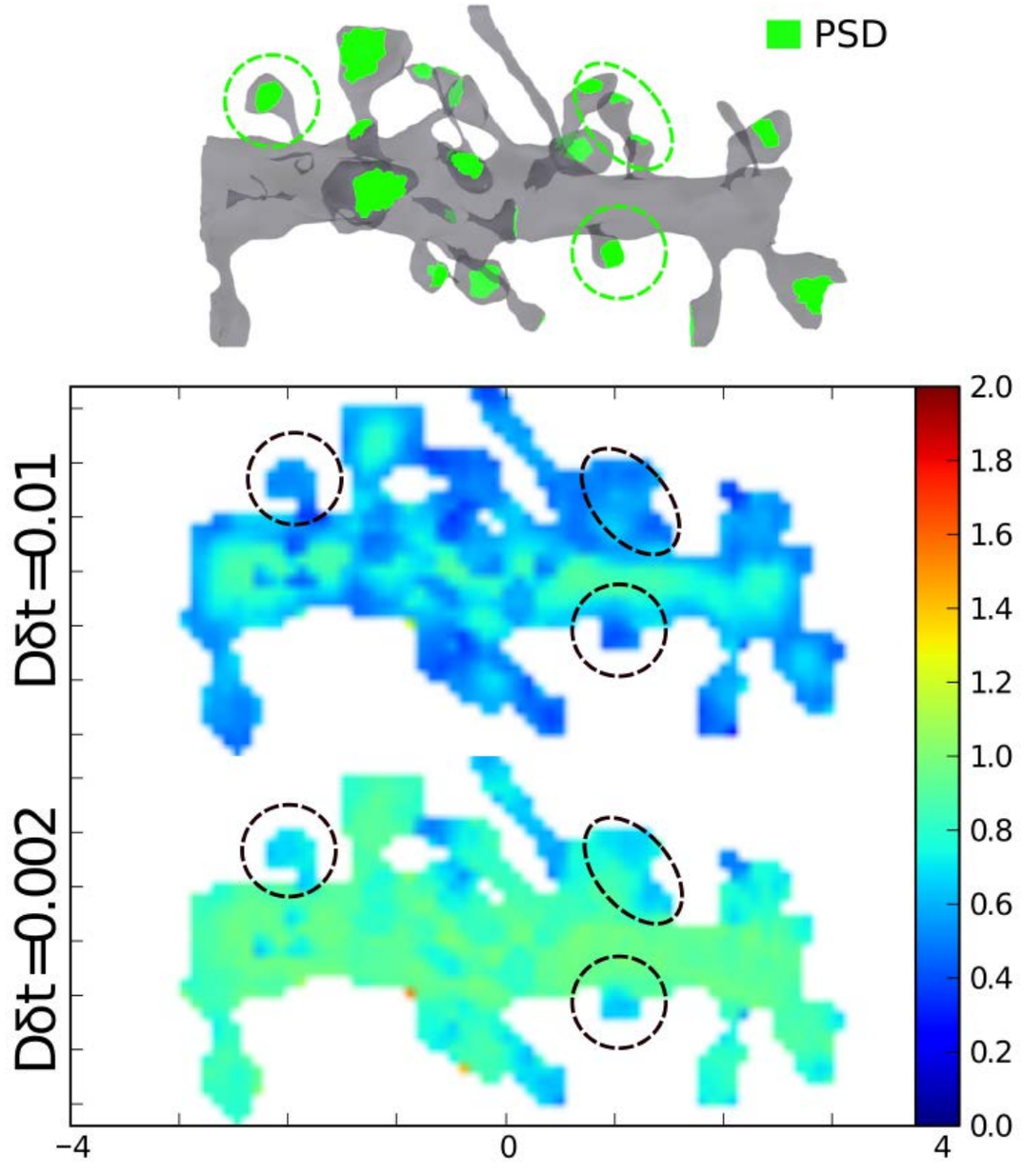


Next Steps

- Add CaM and CaMKII (in progress)
- Multiple stimuli at varying frequencies (in progress)

MCell enhances analysis of single particle tracking of surface diffusion and receptor clustering





By: Celian Bimbard