

Supplementary Materials

Fluctuation Imaging of LRRK2 Reveals That the G2019S Mutation Alters Spatial and Membrane Dynamics

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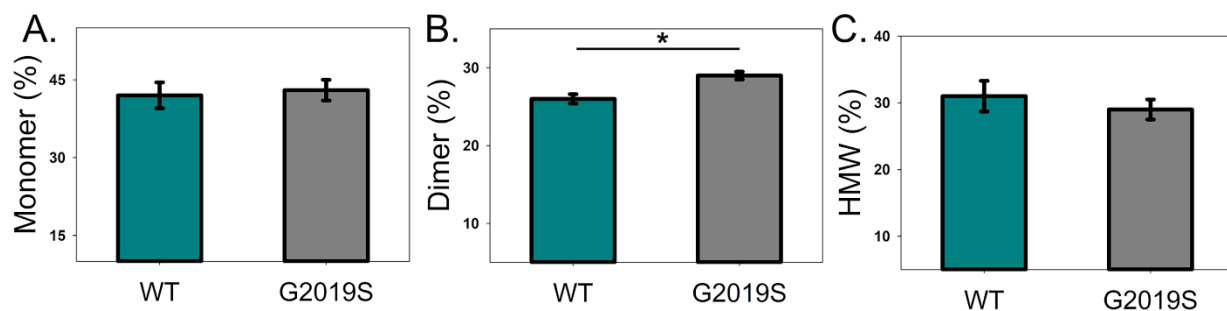


Figure S1. G2019S LRRK2-GFP is associated with significantly higher levels of dimer on the plasma membrane. Bar graphs of average self-association percentages of monomer (a), dimer (b), and higher molecular weight (HMW) species (c) as a function of contribution to total number of pixels per image associated with oligomerization values up to 6. Statistical analysis was performed using a two-sample *t*-test at an alpha level of 0.05. $n \geq 50$ cells per group.

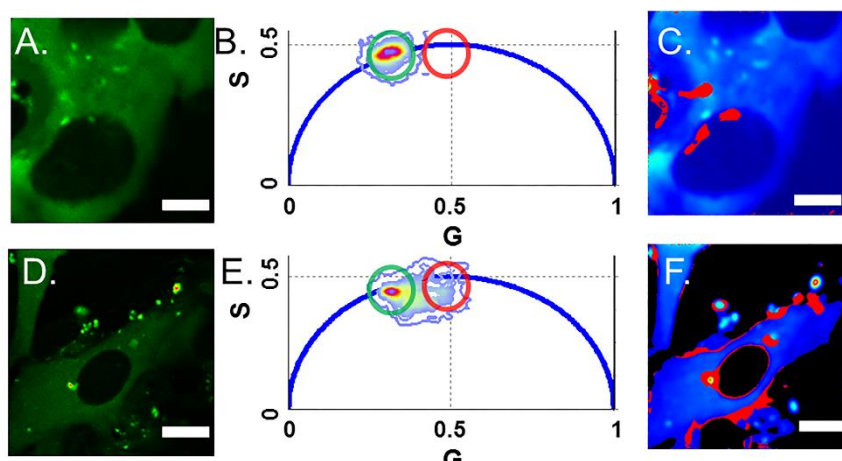


Figure S2. Forster resonance energy transfer (FRET) analysis shows that G2019S LRRK2-GFP has an increased amount of interaction with EndoA1-mCherry. a and d) Fluorescence lifetime imaging microscopy (FLIM) images of WT LRRK2-GFP (top) and G2019S LRRK2-GFP (bottom) when co-expressed with EndoA1-mCherry. Scale bar is 15 μm . b and e) Phasor plots from WT LRRK2-GFP and G2019S LRRK2-GFP containing points associated with GFP lifetime (green circles) and quenched pixels of LRRK2 interacting with EndoA1 (red circles). c and f) Spatial organization of the selected phasor points from (b and e) overlaid onto their corresponding images (a and d).