Supporting Information:

Detection of α-Synuclein Amyloidogenic Aggregates *In Vitro* and in Cells using Light-Switching Dipyridophenazine Ruthenium(II) Complexes

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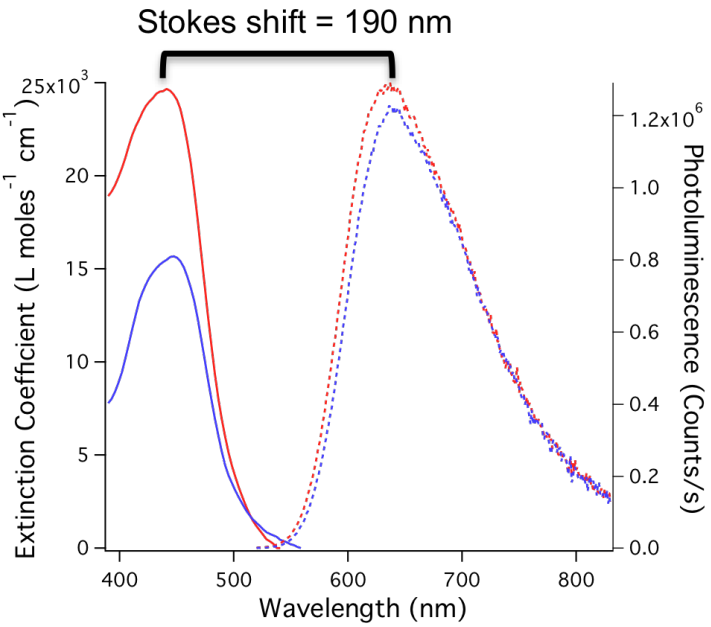


Figure S1. Absorption and emission spectra of dipyridophenazine ruthenium (II) complexes. UV-Vis absorption spectra (full lines) and photoluminescence spectra upon 440 nm excitation (dashed lines) for 4.3 μM solutions of $[Ru(bpy)_2dppz]^{2+}$ (blue) and $[Ru(phen)_2dppz]^{2+}$ (red) in acetonitrile.

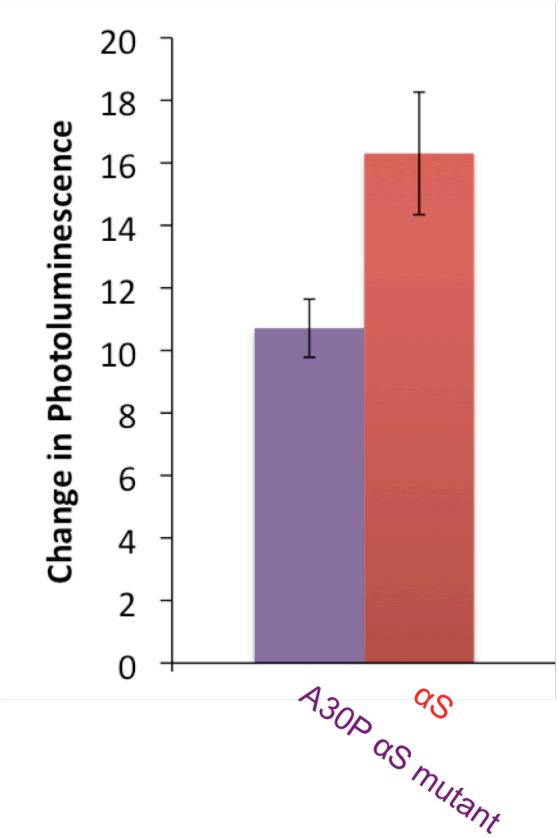


Figure S2. *In vitro* detection of A30P α S fibrils using $[Ru(phen)_2dppz]^{2+}$. Change in photoluminescence intensity of $[Ru(phen)_2dppz]^{2+}$ for the transition from monomeric to fibrillar state of A30P αS (violet) and αS (red).

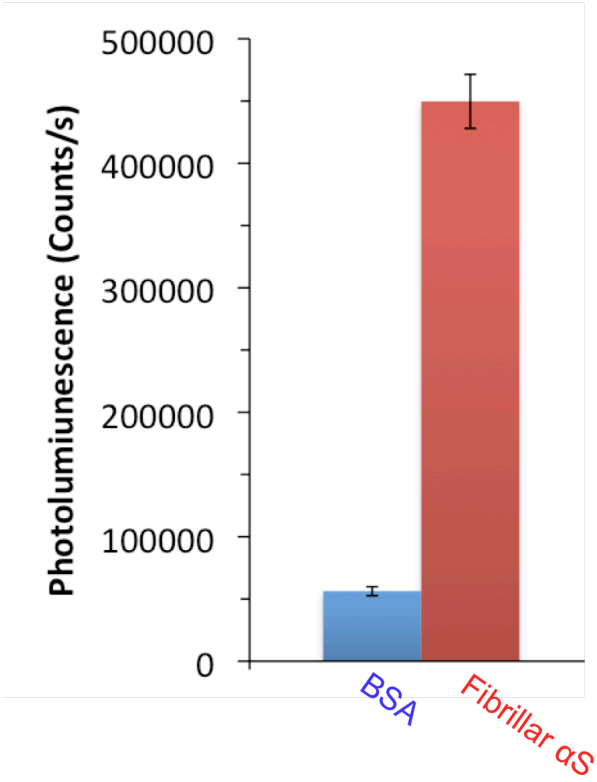
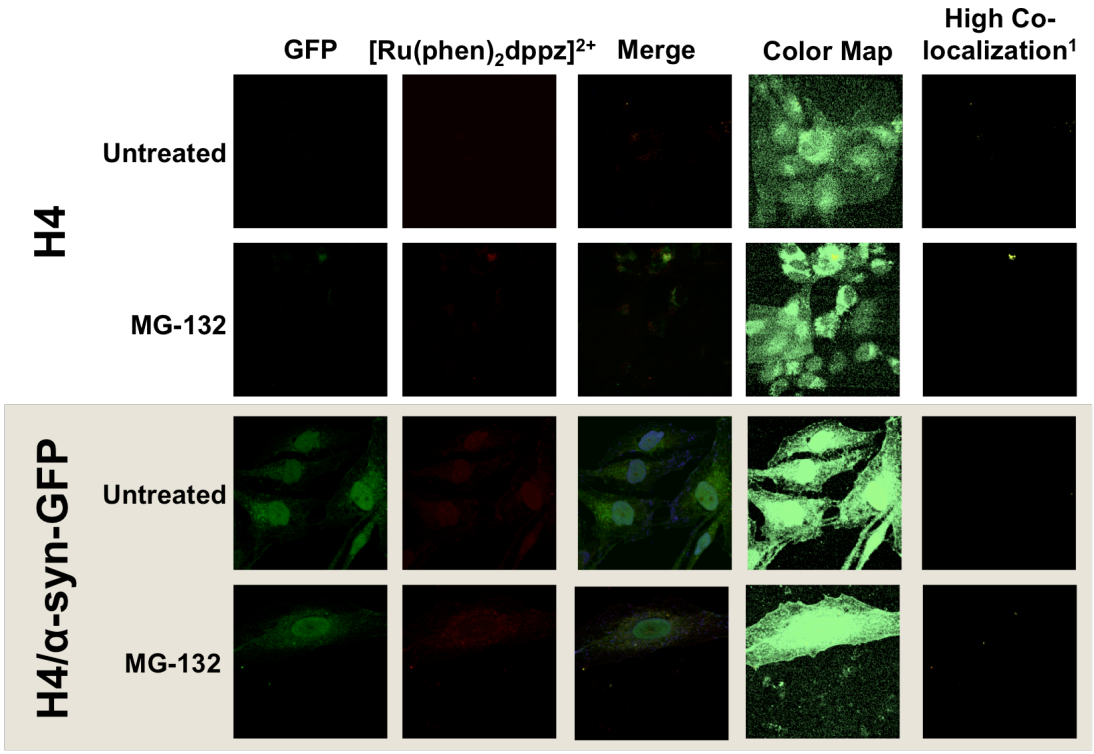


Figure S3. Comparison of the photoluminescence of intensity BSA and $[Ru(phen)_2dppz]^{2+}$. Absolute photoluminescence intensities of $[Ru(phen)_2dppz]^{2+}$ in the presence of BSA and fibrillar αS (1250 μg/mL).



[1] Images filtered using color threshold to display positive correlation (Hue range 1-60).

Figure S4. $[Ru(phen)_2dppz]^{2+}$ spectra do not overlap with GFP. Fluorescence microscopy images of H4 and H4/α-syn-GFP cells untreated and treated with MG-132 (2 μM) for 16 hr. $[Ru(phen)_2dppz]^{2+}$ was not added to cells in order to determine if GFP fluorescence is observed in the channel used to detect $[Ru(phen)_2dppz]^{2+}$, demonstrating lack of spectra overlap.