Unravelling amyloid formation paths triggered by anionic vesicles of Parkinson's disease protein, α-synuclein

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Supplementary Figures 1-3

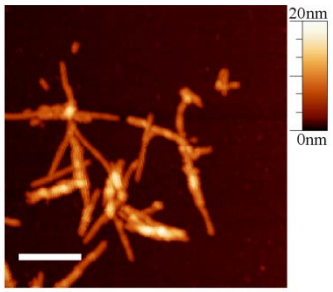

Figure S1. AFM of aS amyloid fibrils obtained after incubation of aS monomers at 37 °C for 3 days in the presence of a glass bead of 2 mm. Scale bar 400 nm.

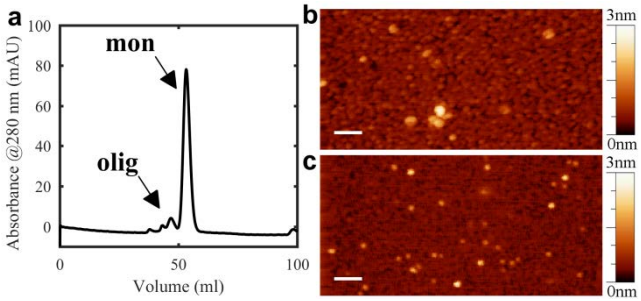

Figure S2. Size exclusion chromatography of aS oligomers. (a) SEC of freeze-dried aS dissolved in 20 mM phosphate buffer, pH 6.5. (b,c) AFM images of the oligomer fraction of aS dissolved in urea (b) or in buffer (c); scale bars 100 nm; height color-scale is present on the right.

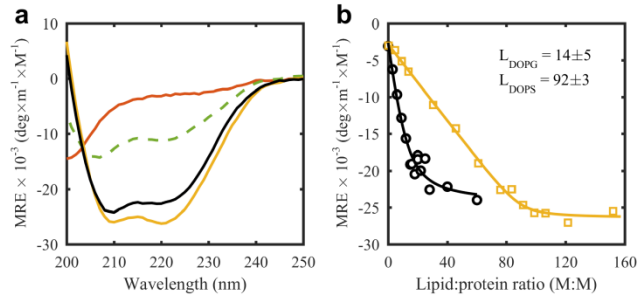

Figure S3. CD spectroscopy of aS, consisting of monomers and a small fraction of oligomers, binding to lipid vesicles. (a) CD spectra of 5 μM aS alone (red) and 5 μM aS in the presence of 200 μM of DOPG (black) vesicles and 200 μM (dashed green) and 530 μM (yellow) of DOPS lipid vesicles. (b) Mean residue ellipticity at 222 nm upon titration of DOPG (black, circles) and DOPS (yellow, squares) vesicles into solution of 5 μM aS; experimental data is shown as symbols and one-step binding model fit is shown as solid lines.