

CHEMPHYSICHEM

Supporting Information

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A FRET Sensor for Non-Invasive Imaging of Amyloid Formation in Vivo

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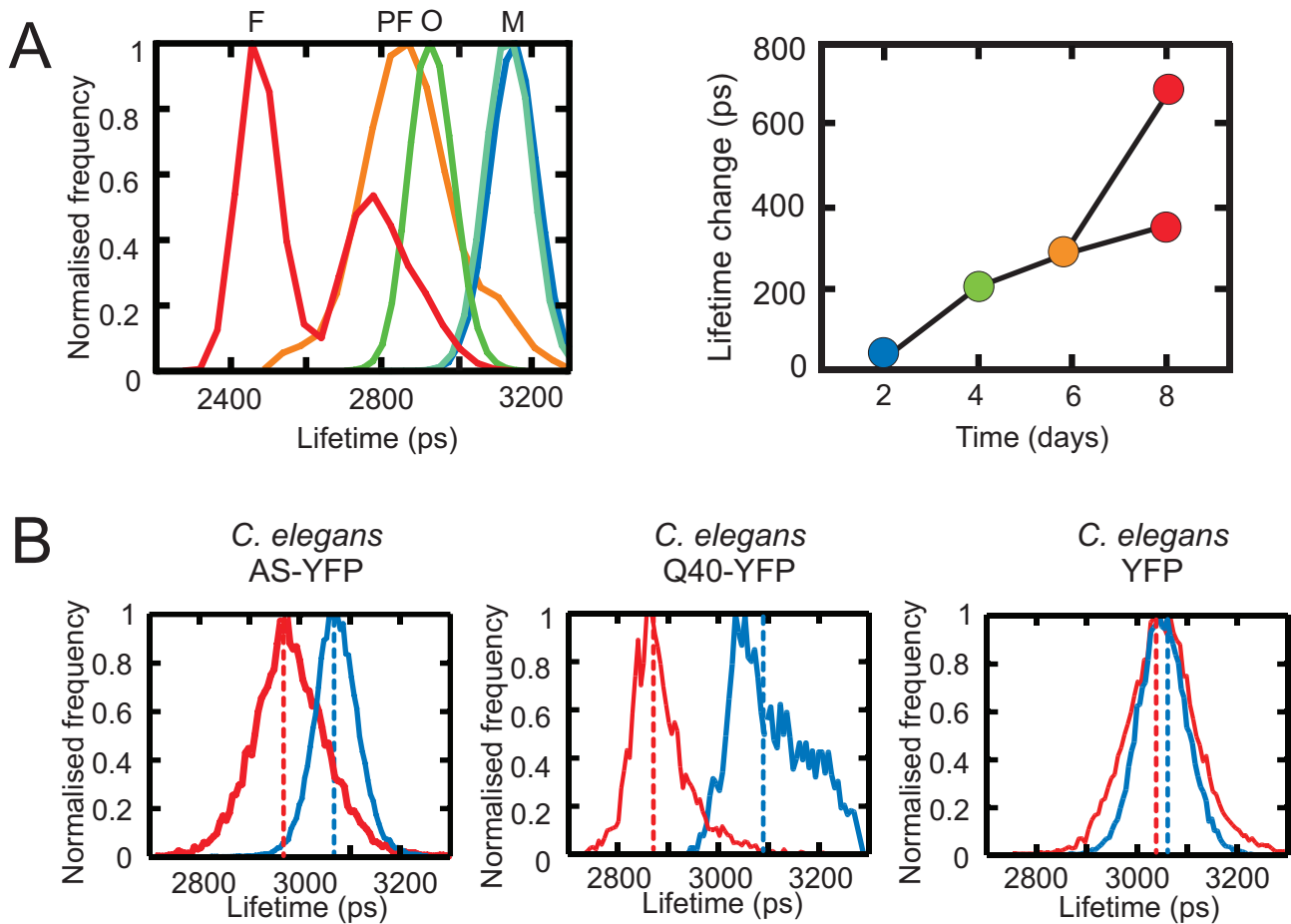


Figure Supplementary 1. A. Left: Histograms of the fluorescence lifetime of AS-YFP recorded at days 0 (cyan), 2 (blue), 4 (green), 6 (orange), and 8 (red) of the aggregation assay *in vitro*. The letter code on the top axis reflects the nature of the species identified by TEM and probed by fluorescence lifetime: M, monomer; O, oligomer; PF, pre-fibrillar aggregates; F, amyloid fibril. Right: Observed mean lifetime changes of AS-YFP between day 0 and day 8 of the aggregation assay. The curve connects the mean lifetime changes of AS-YFP at days 0 to 8, whereas the diversion at day 8 reflects the mean lifetimes of the two distinct peaks observed. **B.** Left: Lifetime histograms of the whole anterior part of AS-YFP transgenic *C. elegans* at day 5 (blue) and day 11 (red). Centre: Lifetime histograms of the whole anterior part of Q40-YFP transgenic *C. elegans* at day 5 (blue) and day 11 (red). Right: Lifetime histograms of the whole anterior part of the control YFP-transgenic *C. elegans* at day 5 (blue) and day 11 (red).