

Supporting Information

Rudko et al. 10.1073/pnas.1306516111

Table S1. Parameters derived from fitting the higher-order R_2^* model in external capsule white matter

ROI location	C_0, s^{-1}	C_1, s^{-1}	C_2, s^{-1}	$\psi_0, ^\circ$	r
Left brain, S1	59.90 ± 0.11	2.70 ± 0.33	0.88 ± 0.32	11.92 ± 5.08	0.825
Right brain, S1	59.44 ± 0.16	1.52 ± 0.34	1.32 ± 0.52	6.56 ± 3.09	0.814
Left brain, S2	64.45 ± 0.28	1.42 ± 0.17	-0.35 ± 0.14	13.10 ± 5.45	0.642
Right brain, S2	64.69 ± 0.23	1.82 ± 0.31	-0.55 ± 0.45	22.64 ± 8.30	0.739
Left brain, S3	63.02 ± 0.15	1.20 ± 0.38	0.51 ± 0.33	19.84 ± 14.32	0.885
Right brain, S3	62.23 ± 0.27	1.18 ± 0.33	0.50 ± 0.44	11.50 ± 13.03	0.742

Data are shown for each of the three brain samples (e.g., S1 = brain sample 1). Pearson correlation coefficients (r) are given in the right-most column of the table. ROI, region of interest; R_2^* , effective transverse relaxation rate; C_0 , representing transverse relaxation rate constant; C_1 , isotropic perturber fraction; C_2 , anisotropic perturber fraction.