

Supplementary Materials

Supp. Table S1

Supplementary Table S1: Description of the ten resting state networks used.

Component from HCP parcellation time series from NetMats d25	Corresponding RSN from Smith et al. (2009)	Spatial correlation (Pearson's r)	Description (Harvard-Oxford and Cerebellar Atlas)	Label of network (Abbreviation)
1	2	.57	Occipital pole	Visual occipital (VisOcc)
2	4	.57	precuneus, cingulate g., superior frontal g., middle frontal g., middle temporal g., temporal pole, lateral occipital cortex (c.) hippocampus, frontal orbital c., cerebellum (crus I, II)	Default mode (DMN)
3	1	.63	Lingual gyrus, cuneus, cerebellum (VI), occipital pole, precentral g.	Visual medial (VisMed)
4	3	.55	lateral occipital c., temporal occipital fusiform c.	Visual lateral (VisLat)
5	9	.57	Various areas in frontal and parietal c. right	Frontoparietal right (FrontParR)
10	10	.53	Frontal and parietal areas left	Frontoparietal left (FrontParL)
14	6	.39	Precentral g., postcentral g., operculum, cerebellum (V, VI, VIII)	Sensorimotor (SensMot)
18	5	.36	Cerebellum (posterior lobe), amygdala, thalamus, hippocampus, cingulate g. (anterior)	Cerebellar (Cerebell)
19	7	.41	Superior temporal g., operculum, supramarginal g., thalamus, superior frontal g., hippocampus, temporal pole	Auditory (Aud)
21	8	.42	medial frontal areas, anterior cingulate, paracingulate	Executive control (Exec)

Supp. Table S2

Supplementary Table S2: Mean (SD) peak of HRF after stimulus onset in seconds for different interventions and nodes across 50 simulated datasets.

	< 0.4 s	0.4 s	0.8 s	1.1 s	1.4 s	1.7 s	1.9 s
Node 1	4.07(\pm 0.25)	4.30(\pm 0.31)	4.53(\pm 0.32)	4.68(\pm 0.31)	4.90(\pm 0.32)	5.15(\pm 0.40)	5.36(\pm 0.45)
Node 2	4.10(\pm 0.29)	3.89(\pm 0.31)	3.76(\pm 0.33)	3.67(\pm 0.25)	3.61(\pm 0.25)	3.57(\pm 0.26)	3.55(\pm 0.25)
Node 3	4.18(\pm 0.36)	4.19(\pm 0.31)	4.19(\pm 0.31)	4.19(\pm 0.31)	4.19(\pm 0.31)	4.19(\pm 0.31)	4.19(\pm 0.31)
Node 4	4.28(\pm 0.30)	4.47(\pm 0.36)	4.78(\pm 0.35)	5.03(\pm 0.31)	5.13(\pm 0.29)	5.27(\pm 0.38)	5.46(\pm 0.42)
Node 5	4.05(\pm 0.35)	3.86(\pm 0.25)	3.71(\pm 0.25)	3.57(\pm 0.28)	3.47(\pm 0.25)	3.43(\pm 0.23)	3.42(\pm 0.23)

Supp. Table S3

Supplementary Table S3: Peak offsets in seconds relative to first simulation (< 0.4 s)

	0.4 s	0.8 s	1.1 s	1.4 s	1.7 s	1.9 s
Node 1	+0.23	+0.46	+0.62	+0.84	+1.09	+1.29
Node 2	-0.21	-0.34	-0.43	-0.49	-0.53	-0.55
Node 3	+0.01	+0.01	+0.01	+0.01	+0.01	+0.01
Node 4	+0.19	+0.50	+0.75	+0.85	+0.99	+1.18
Node 5	-0.19	-0.35	-0.49	-0.58	-0.63	-0.63

Supp. Table S4

Supplementary Table S4: Total offset in seconds between nodes with increased/decreased lags.

	0.4 s	0.8 s	1.1 s	1.4 s	1.7 s	1.9 s
node 1 and 2	0.44	0.80	1.04	1.32	1.62	1.85
node 4 and 5	0.38	0.84	1.24	1.44	1.62	1.82
node 1 and 5	0.43	0.81	1.10	1.42	1.71	1.93