

Table S3. Spearman correlation of betweenness centrality with participation and functional similarity of hubs in the network.

	participation	func. similarity
Human-hq	0.83 ($2e-123$)	-0.62 ($6e-52$)
Yeast-hq	0.60 ($1e-44$)	-0.43 ($7e-22$)
Fly	0.62 ($2e-92$)	-0.09 ($5e-03$)
Athal	0.51 ($1e-38$)	-0.09 ($3e-02$)
Ecoli	0.39 ($6e-13$)	0.09 ($1e-01$)
Human-all	0.83 ($1e-263$)	-0.19 ($2e-09$)
Yeast-all	0.70 ($1e-86$)	-0.54 ($9e-44$)

All correlations except one are significant ($p < 0.05$) and are shown in bold. See also Tables S1, S2 and S4.