

**Table S4. Spearman correlation of participation coefficient with functional similarity.**

	func. similarity
<b>Human-hq</b>	<b>-0.65</b> ( $1e-58$ )
<b>Yeast-hq</b>	<b>-0.27</b> ( $4e-09$ )
<b>Fly</b>	<b>-0.21</b> ( $3e-10$ )
<b>Athal</b>	<b>-0.21</b> ( $4e-07$ )
<b>Ecoli</b>	-0.03 ( $6e-01$ )
<b>Human-all</b>	<b>-0.27</b> ( $6e-19$ )
<b>Yeast-all</b>	<b>-0.59</b> ( $3e-54$ )

All correlations except one are significant ( $p < 0.05$ ) and are shown in bold. See also Tables S1, S3 and S2.