(A) Distribution of in.degree centrality (B) in the pathway under simulation max **q75** median min 1 2 3 Centrality of all nodes Centrality **** 10 15 Simulated score (C) Histogram of simulated scores in the pathwa using in.degree centrality as weight 0.25 0.20 0.15 Density 0.10 0.05 0.00 5 10 15

Simulated score

(D) Graph view of the pathway

