

**Supplementary Fig. 1:** Histograms showing the distribution of a) node robustness and b) node specificity after randomizations. 0 indicates low robustness and 1 indicates high robustness, while 0 indicates high specificity and 1 indicates low specificity. After removing nodes for a robustness of at least 0.4 and a specificity of at most 0.4, we filtered out 19102 nodes. c) node robustness and d) node specificity distributions of nodes after filtering predicted nodes for insufficient robustness or specificity.