

**Table S1 : RichMind results for case study 1 using 7 functional brain network reported in [1] as annotations ; Class abbreviations: VN=visual network, SMN=sensori-motor network, DMN=default-mode network, FPCN=fronto-parietal control network**

Enriched inter-class connection	HG- based q-value	Permutation based q-value	Frequency ratio	# Underlying connections
VN-VN	2.46E-08	0.3192	4.6958	29
DMN-FPCN	1	<0.0075	0.9225	16
SMN-VN	0	<0.0075	4.0277	49

## References

1. Yeo BT, Krienen FM, Sepulcre J, Sabuncu MR, Lashkari D, et al. (2011) The organization of the human cerebral cortex estimated by intrinsic functional connectivity. *Journal of Neurophysiology* 106: 1125-1165.