Input Similarity Blue histogram: Random Cluster Labels (n=100 shuffles) Red line: ovilN connectome mean Cluster 2 Cluster 1 Cluster 3 Cluster 4 Cluster 5 300 | 300 300 150 200 Cluster 1 200 200 200 100 100 100 100 100 50 0 0 0 0 0 0.03 0.04 0.025 0.030 0.035 0.035 0.030 0.04 0.06 0.025 0.030 0.035 200 300 300 150 200 Cluster 2 200 200 100 100 100 100 50 0 0 0 0.03 0.035 0.02 0.03 0.04 0.02 0.03 0.030 0.040 400 300 Ⅎ 200 300 150 Cluster 3 200 200 100 100 50 100 0 0 0.05 0.035 0.040 0.030 0.035 0.03 0.04 0.030 100 150 75 Cluster 4 100 50 50 25 0 0.025 0.050 0.075 0.03 0.04 150 Cluster 5 100

50

0

0.04

0.06