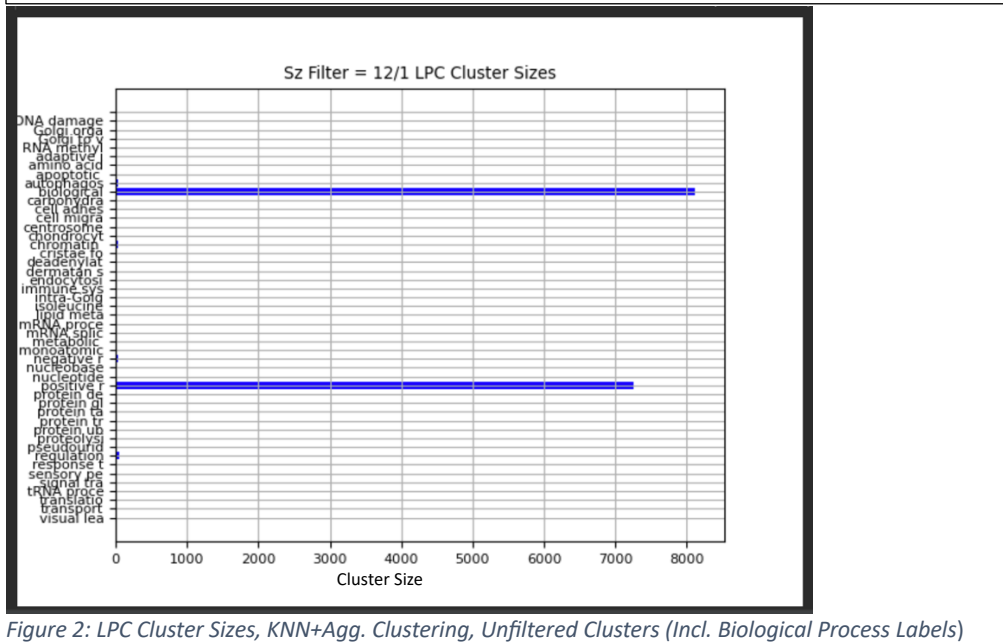
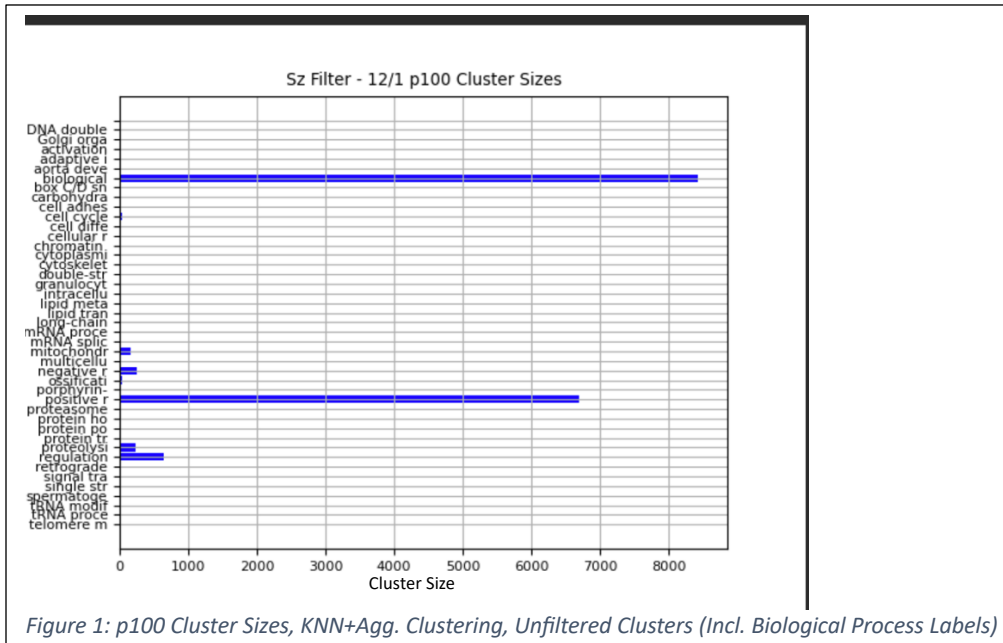


Appendix

Method I - KNN + Agglomerative Clustering



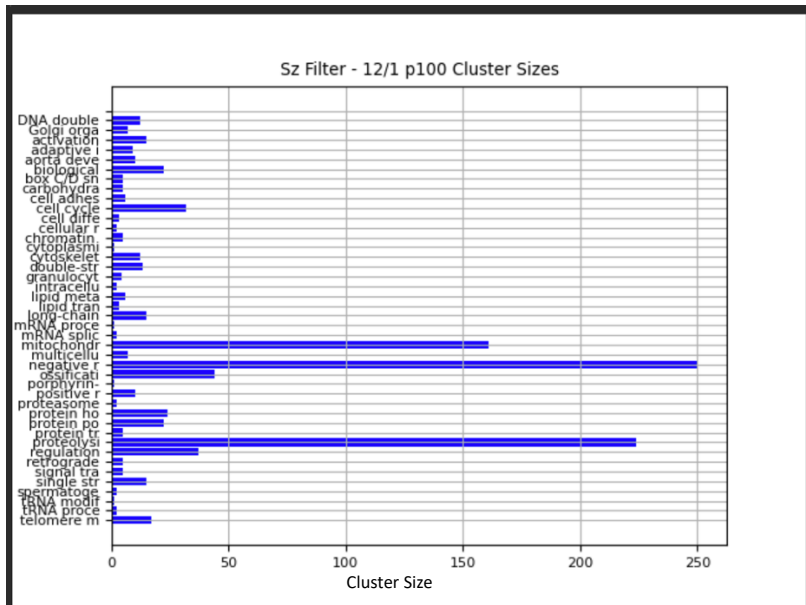


Figure 3: p100 Cluster Sizes Except 4 Largest, KNN+Agg Cluster

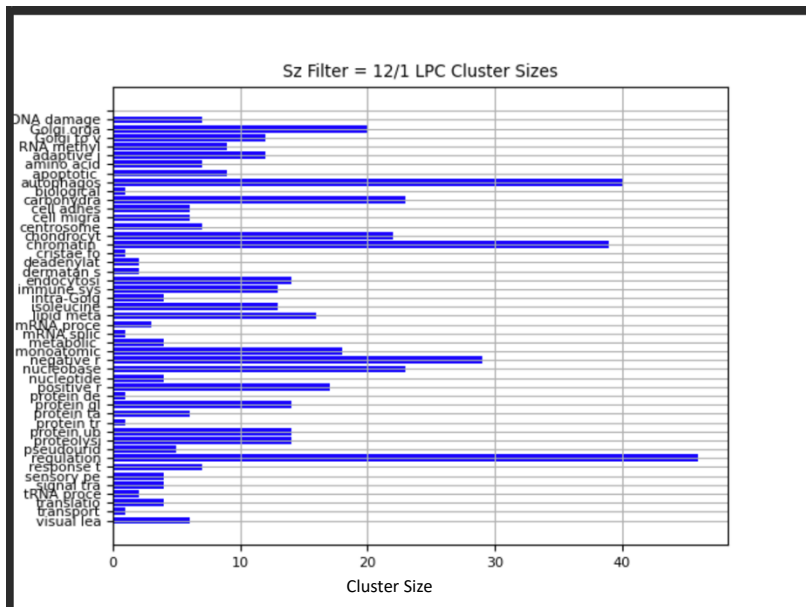


Figure 4: LPC Cluster Sizes Except 4 Largest, KNN+Agg Cluster

Method II - Community Walktrap (*igraph*)

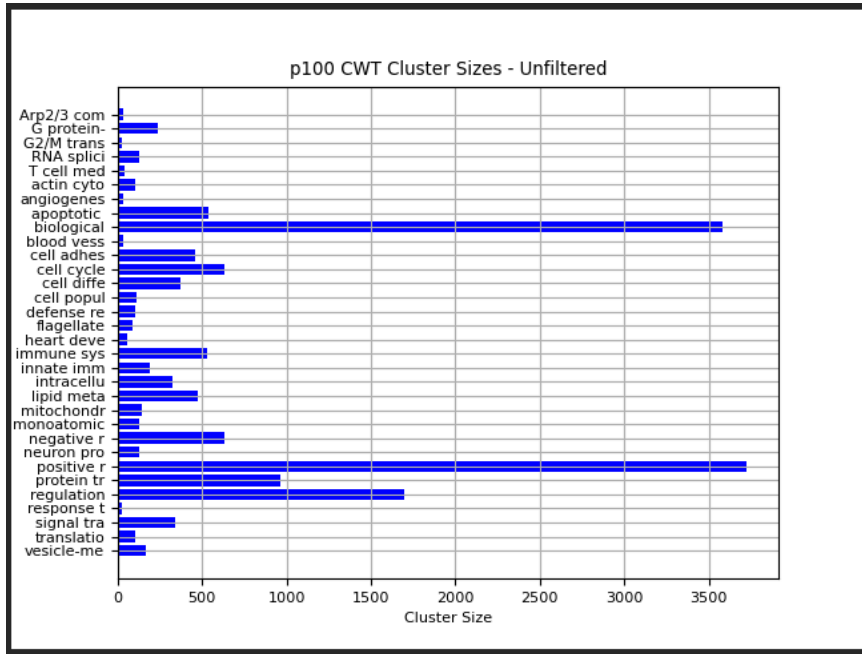


Figure 5: P100 Cluster Sizes, All Clusters, CWT Algorithm

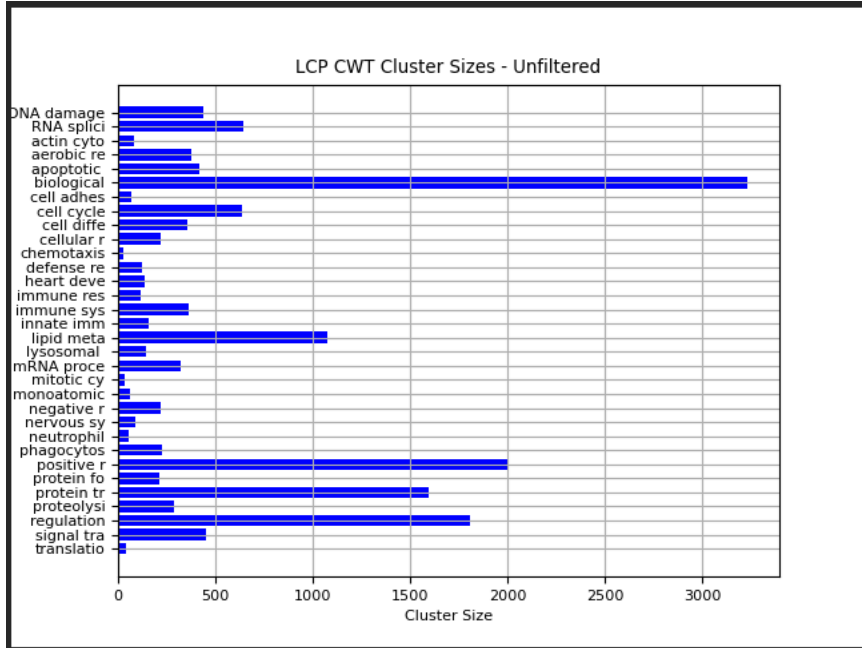


Figure 6: LPC Cluster Sizes, All Clusters, CWT Algorithm

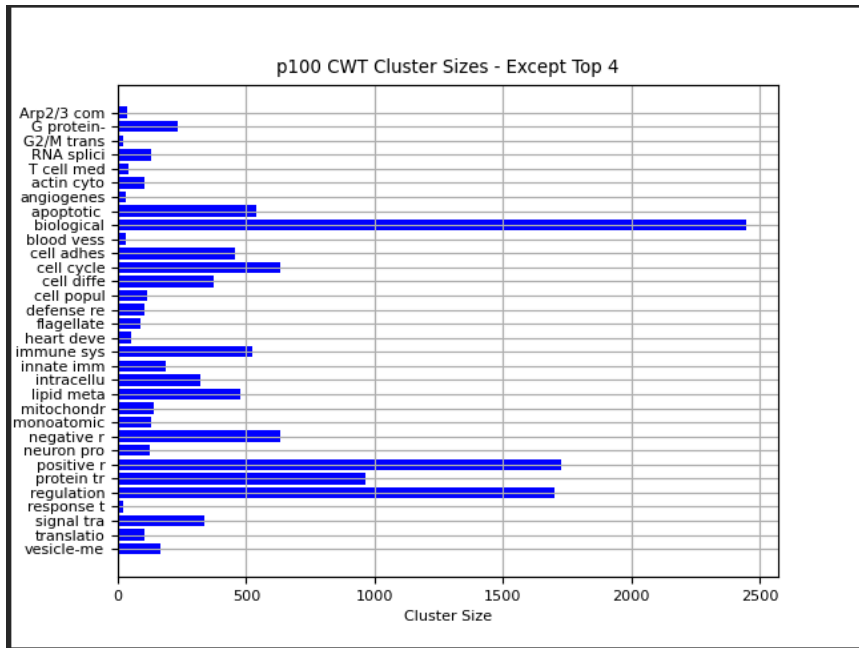


Figure 7: P100 Cluster Sizes, Excluding 4 Largest, CWT Algorithm

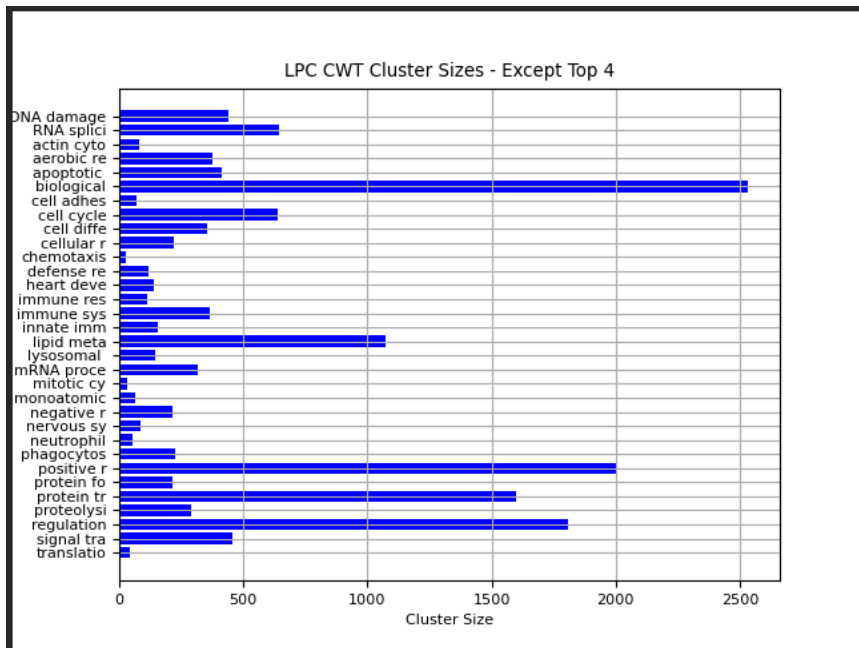


Figure 8: LPC Cluster Sizes, Excluding 4 Largest, CWT Algorithm

Fig. 9: Where genes in p100 clusters end up in LPC clusters:

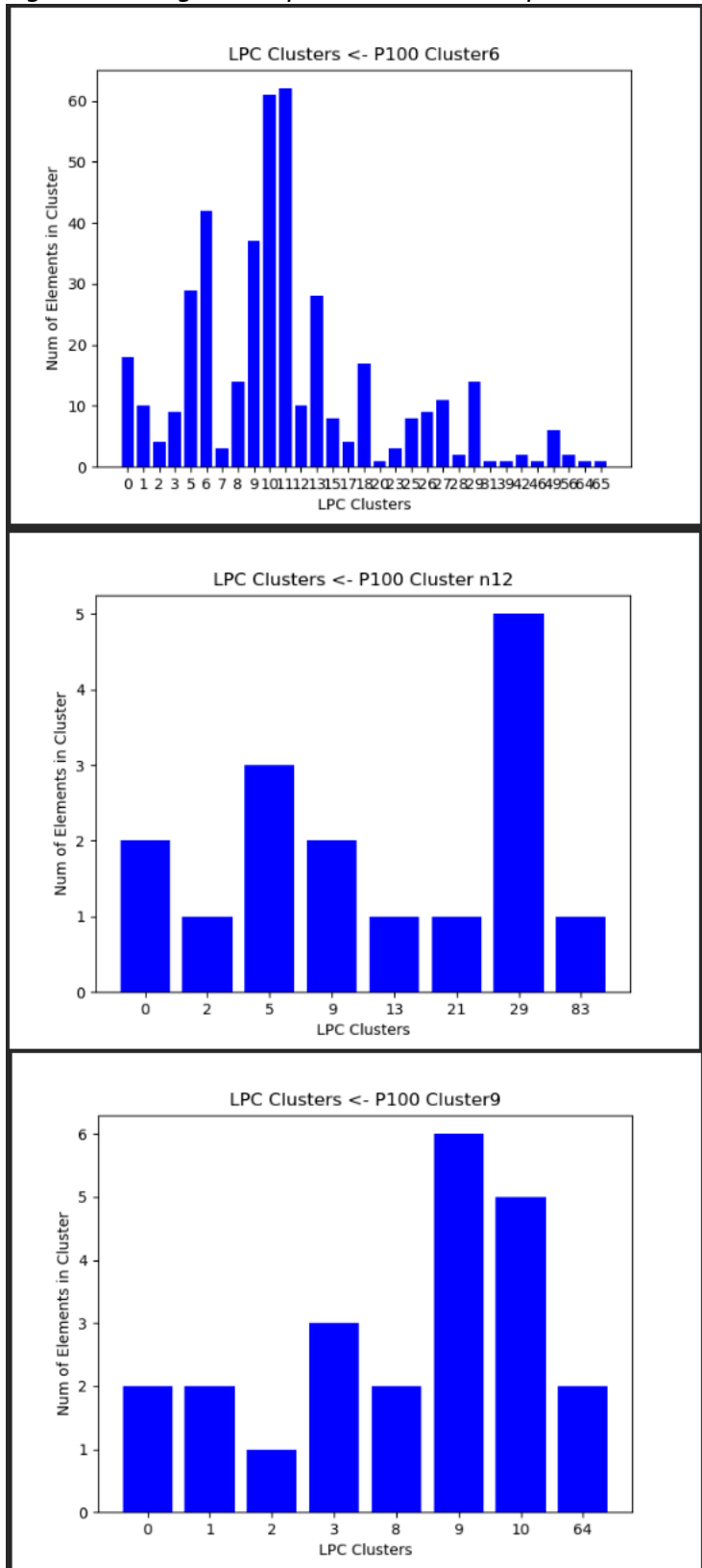


Figure 9: Cluster Label of P100 Cluster Genes (Cluster No.s 6, 9, 12) in as Appearing In LPC Clustering

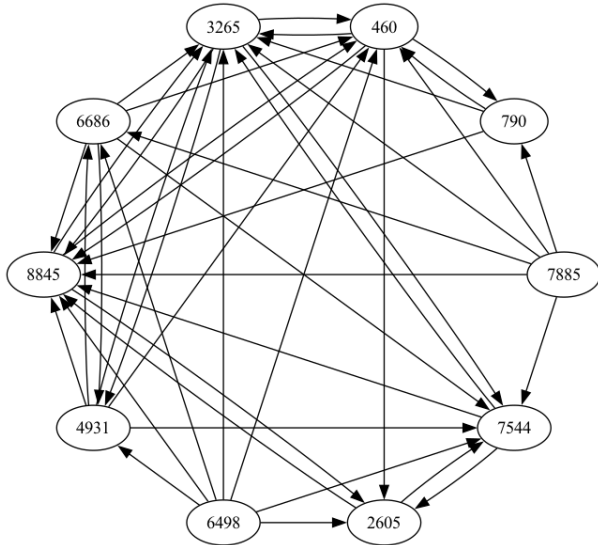


Figure 10: Interconnectivity of Top 10 Genes (Nodes with Highest Degree) in p100 KNN Graph by CWT Method

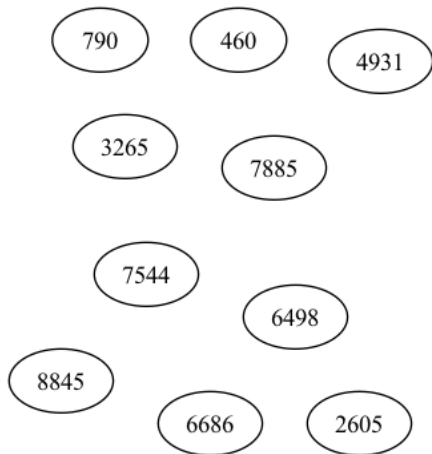


Figure 11: Interconnectivity of the Genes in Figure 1, As Expressed in the LPC KNN Graph by CWT Method (No Edges)

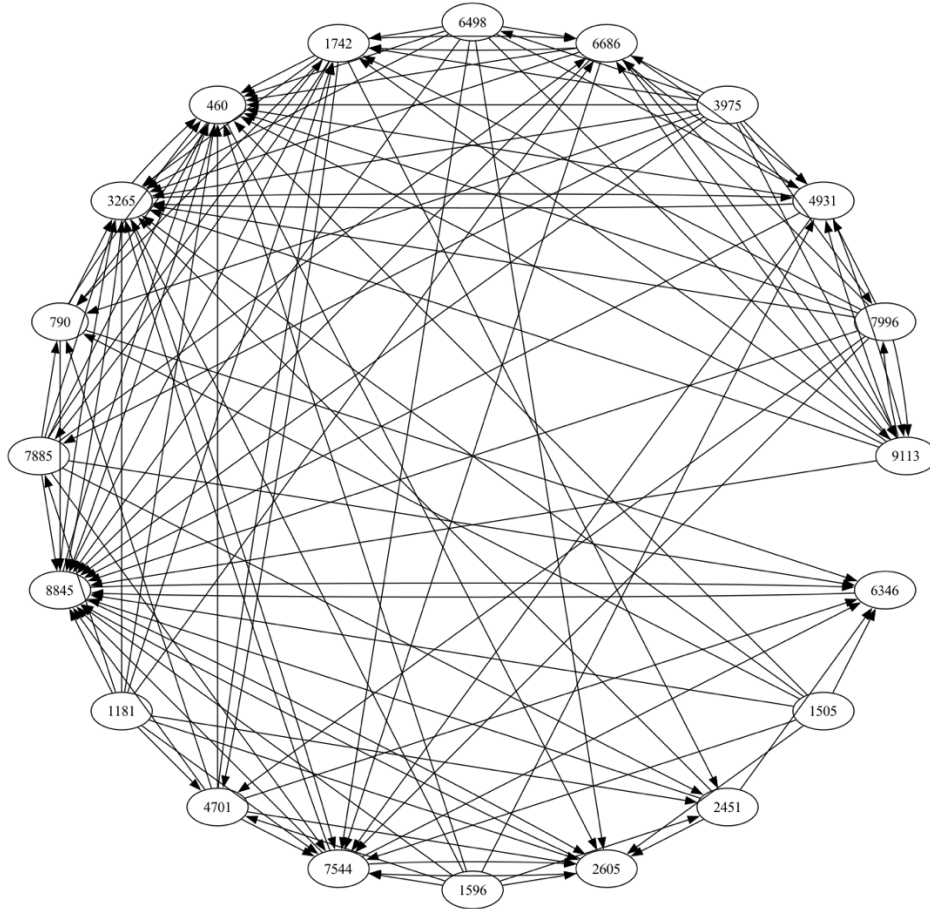


Figure 12: Interconnectivity of Top 20* Genes (Nodes with Highest Degree) in p100 Graph by CWT Method

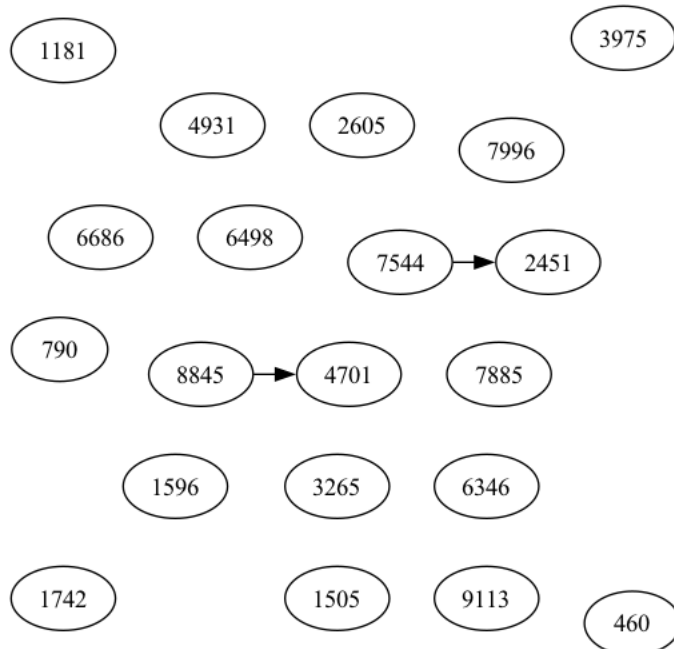


Figure 13: Interconnectivity of the Genes in Figure 3, As Expressed in the LPC Graph by CWT Method (2 Edges)

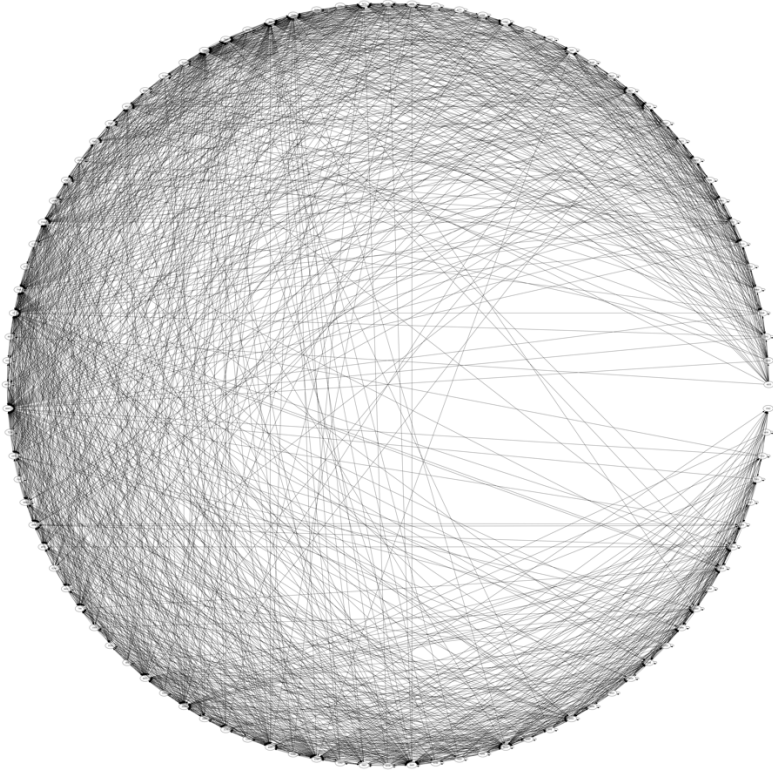


Figure 14: All Nodes and Edges, p100 Data, CWT Algorithm, Circular Layout

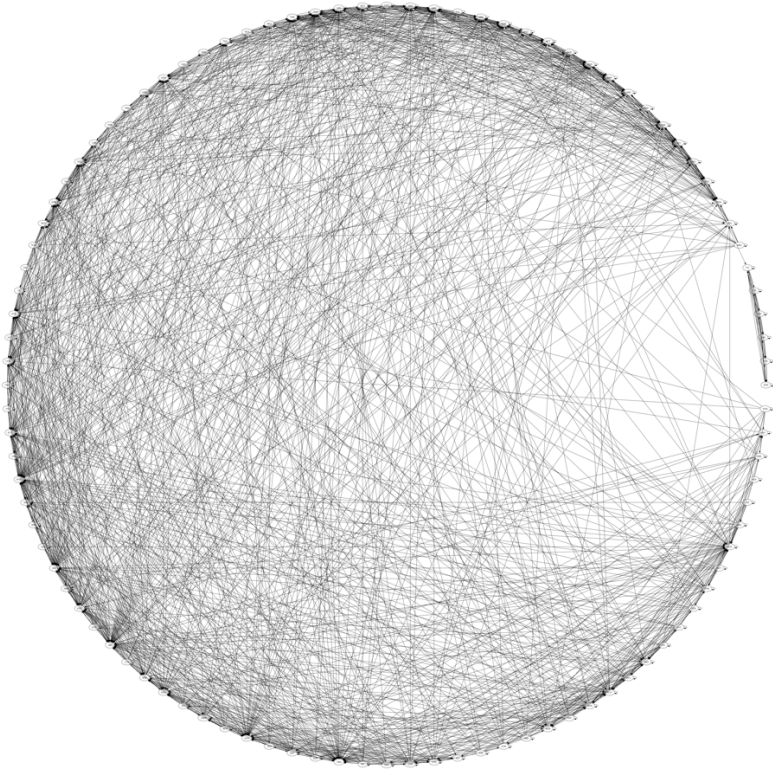


Figure 15: All Nodes and Edges, LPC Data, CWT Algorithm, Circular Layout

Method III - cDSD + KNN

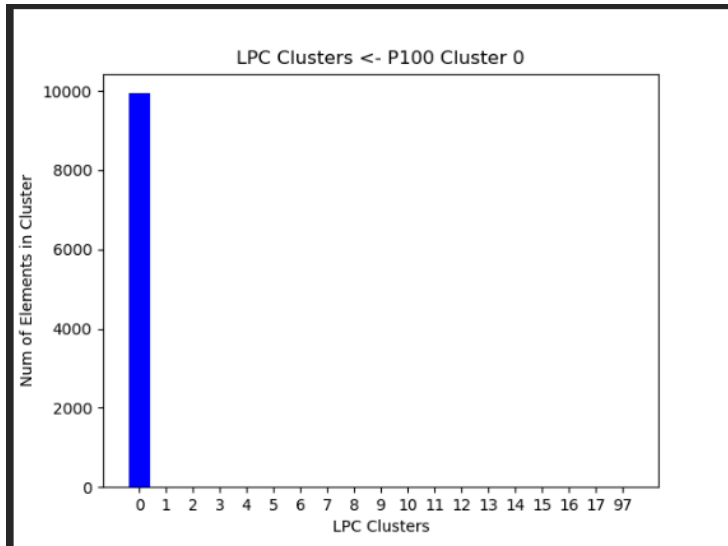


Figure 16: LPC Cluster of P100 Cluster 0 Genes, cDSD + KNN (Nearly All In Same Cluster, Cluster Is Massive)

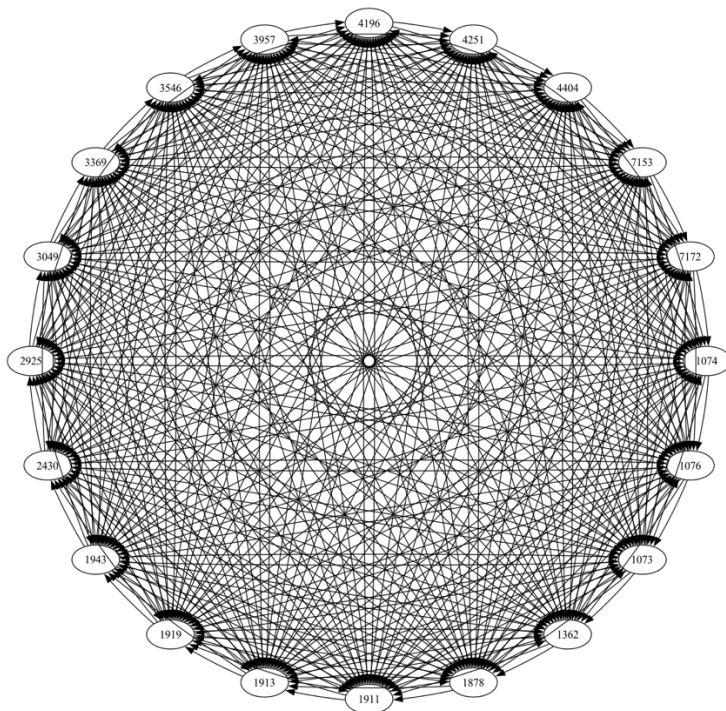


Figure 17: Interconnectivity of Top 20* Genes (Highest Degree) in p100 Graph by cDSD + KNN Method (Highly connected)

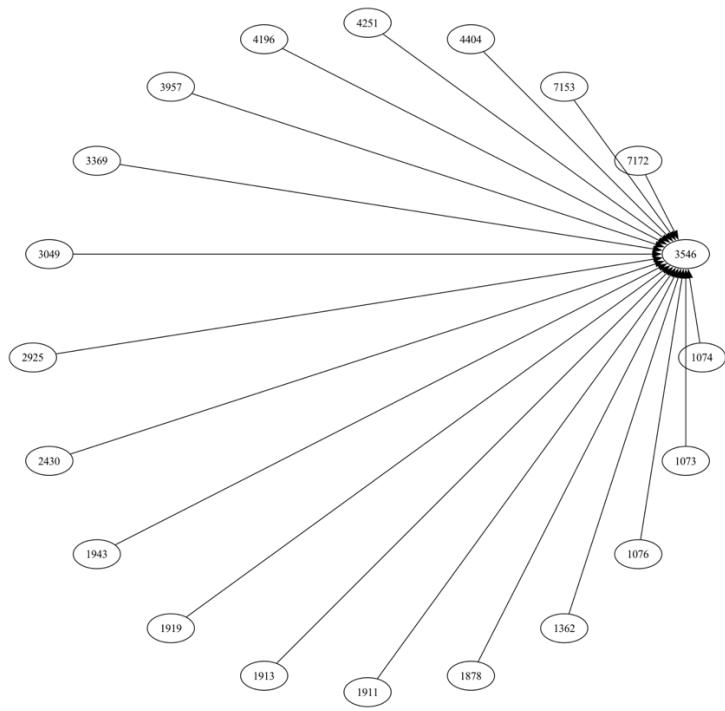


Figure 18: Interconnectivity of Top 20* Genes (Nodes with Highest Degree) in LPC Graph by cDSD + KNN Method

Stability Validation

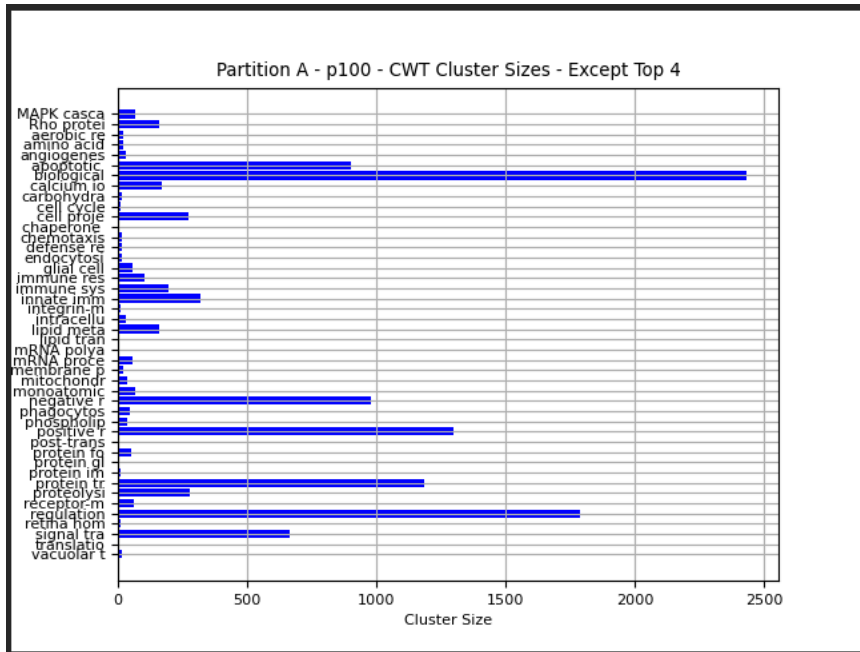


Figure 19: Cluster Sizes of Larger (67%) P100 Partition GRN-KNN, Filtered Top 4 Clusters, CWT Algorithm

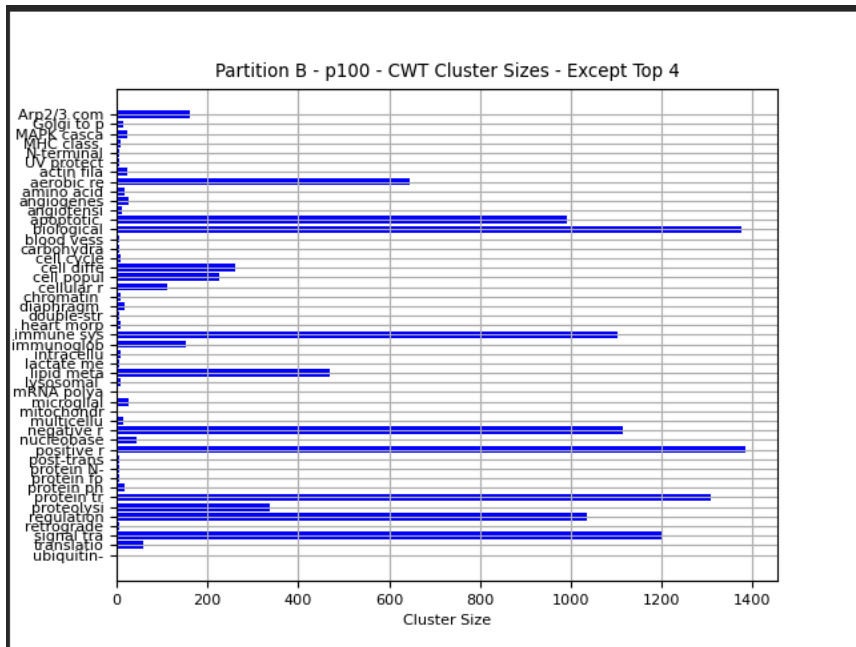


Figure 20: Cluster Sizes of Smaller (33%) P100 Partition GRN-KNN, Filtered Top 4 Clusters, CWT Algorithm

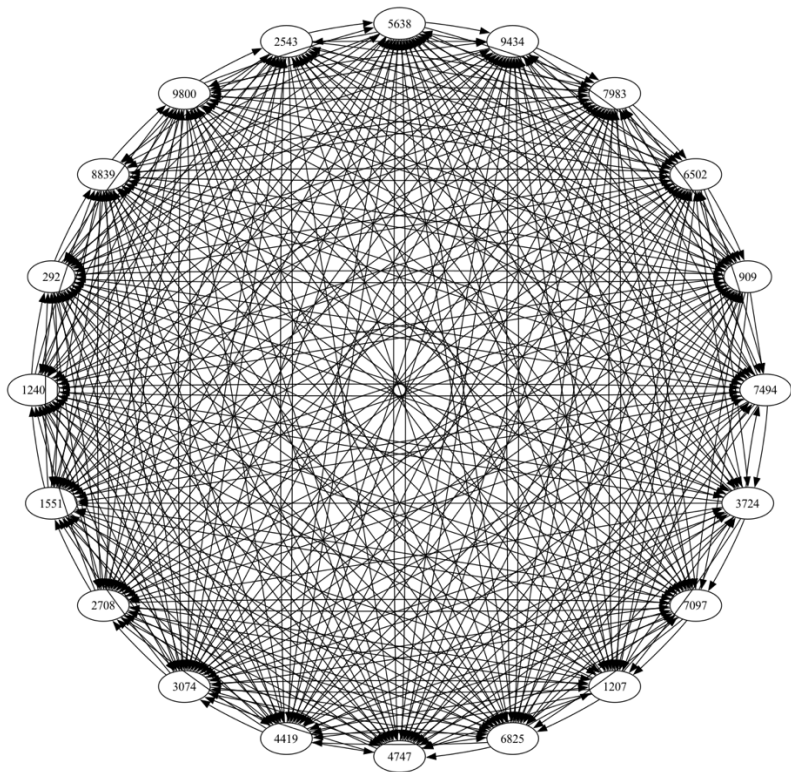


Figure 21: Partition A, P100 Data, Top 20 Nodes By Degree

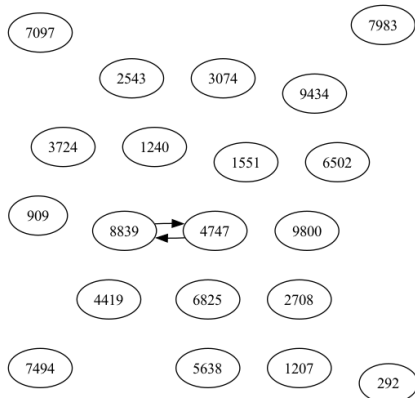


Figure 22: Partition B, P100 Data, Top 20 Nodes By Labels from Partition A (Fig. 8), By Degree

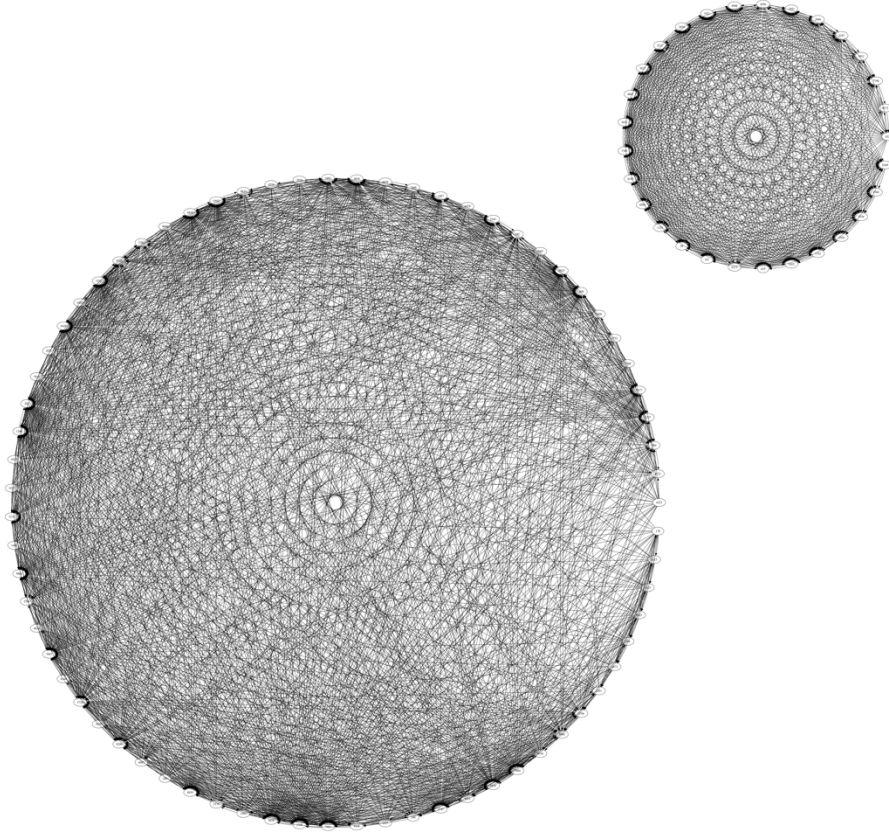


Figure 23: Partition A, P100 Data, Top 100 Nodes By Degree (Separate Circles are Naturally Disconnected Clusters)

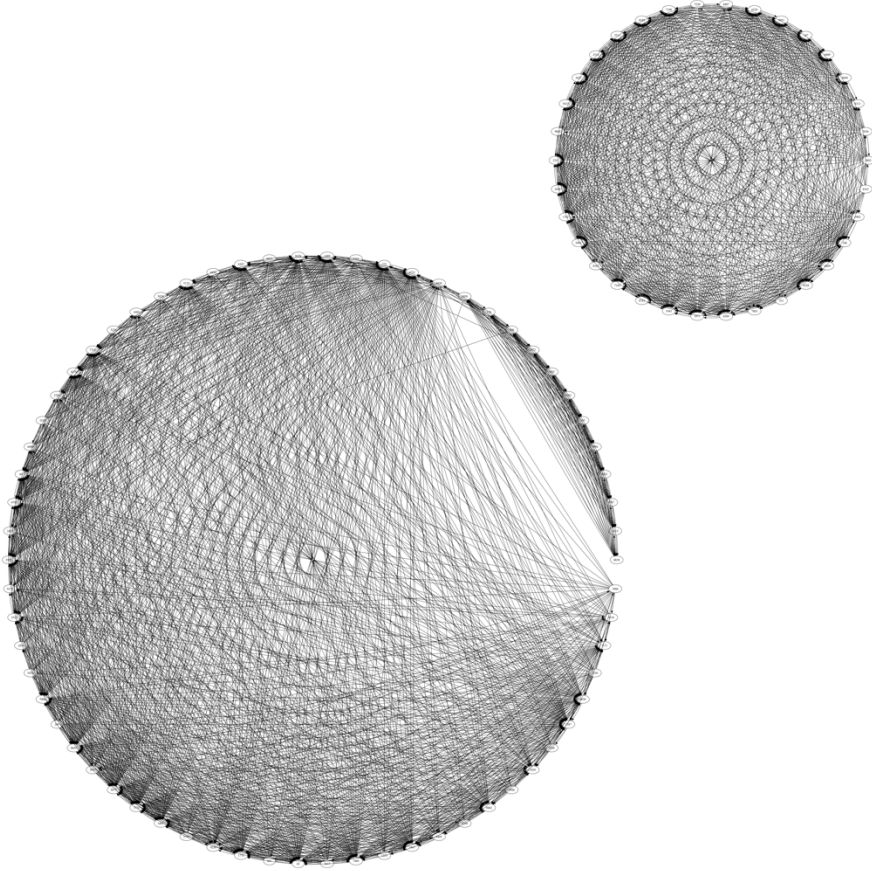


Figure 24: Partition B, P100 Data, Top 100 Nodes By Degree