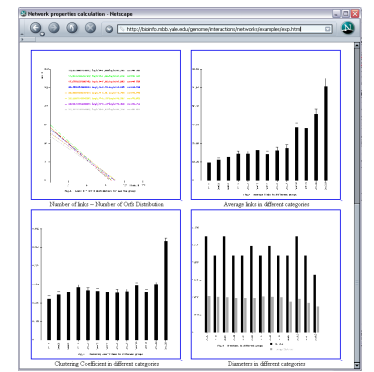


Upload



Calculation

What is TopNet?
TopNet is an automated web tool designed to calculate topological parameters and compare different sub-networks for any given network. TopNet takes as an input an arbitrary undirected network and a group of node classes to create sub-networks. Then, it computes all topological parameters mentioned above and draws the power-law degree distribution for each sub-network. TopNet also enables the user to explore the complex networks part by part. First, all first neighbors of a certain node could be shown in a simple graph. Second, after the user defines two nodes of interest and a maximum path length, the sub-network between these two nodes with all the nodes on the paths within the maximum path length will be drawn in an independent graph.

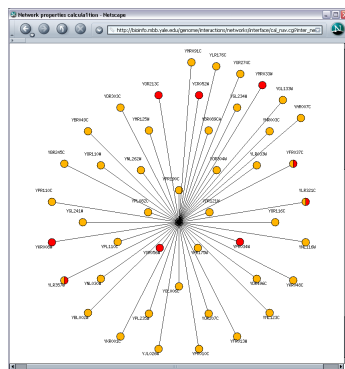
Start to use TopNet

- Upload your own dataset here. Both category datasets and interaction dataset can be accepted
- Calculate the topology parameters: diameter, average links and clustering coefficient. The data to be calculated can be freely selected from given datasets or datasets uploaded by the user. [example](#)
- Navigate within the interaction networks. Report all the neighbors of one node. Links from different interaction datasets are separated by different colors. [example](#)
- Visualize all the possible paths of every two nodes. The maximum length of the paths is defined by the user. [example](#)

• Click [here](#) to enter the download page
• Click [here](#) to enter the reference page

Last updated: 07/26/2003

Navigation



Visualization

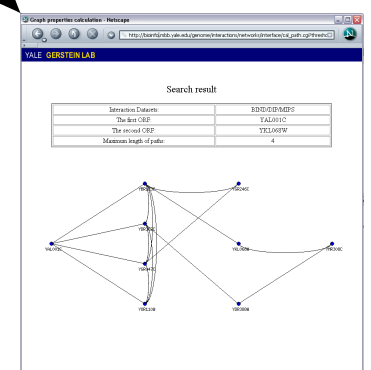
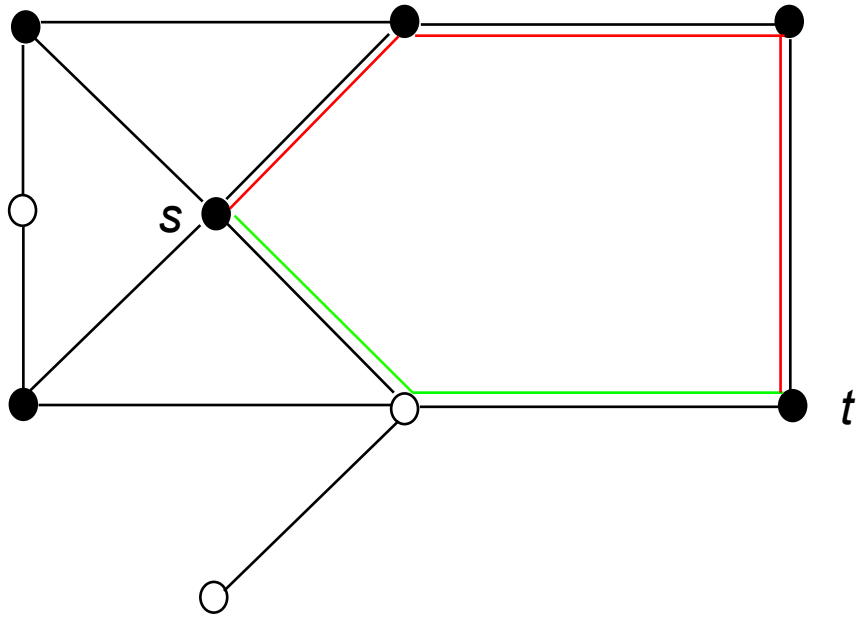


Figure 1



- Nodes in sub-network *A*
- Nodes in sub-network *B*
- Shortest path in the whole network
- Shortest path in sub-network *A*

Degree of *s* is 4, not 3

Distance between *s* and *t* is 2, not 3

Figure 2

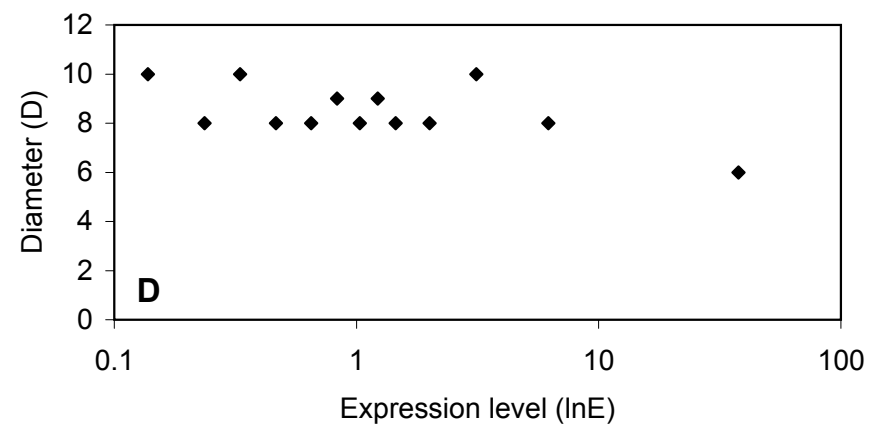
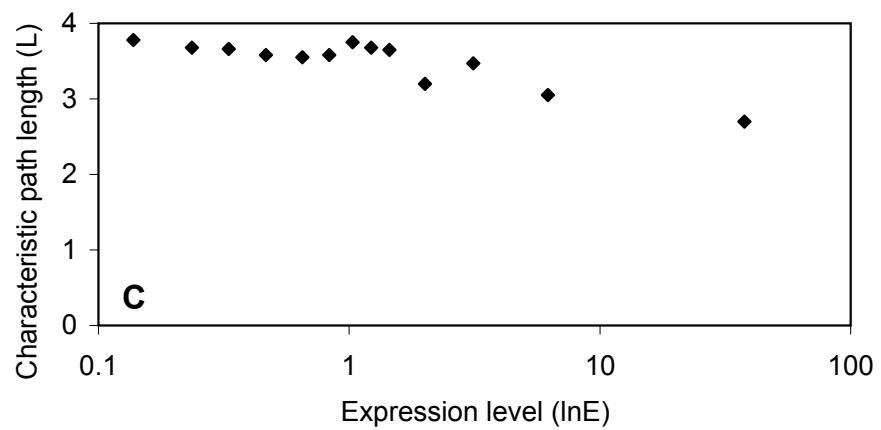
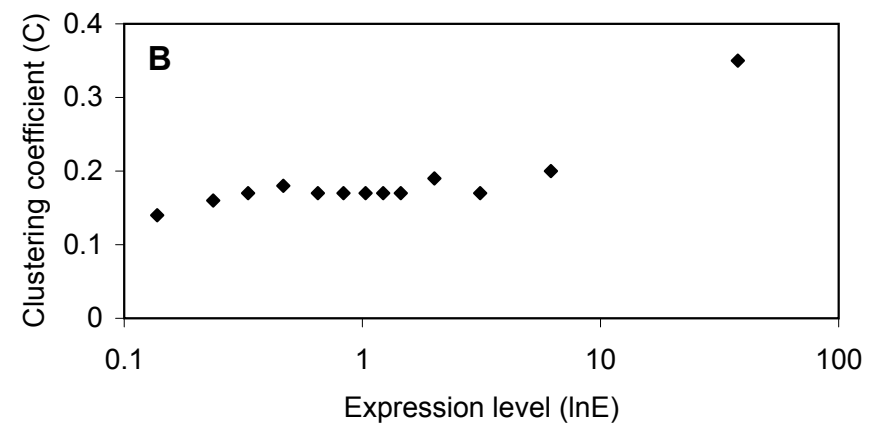
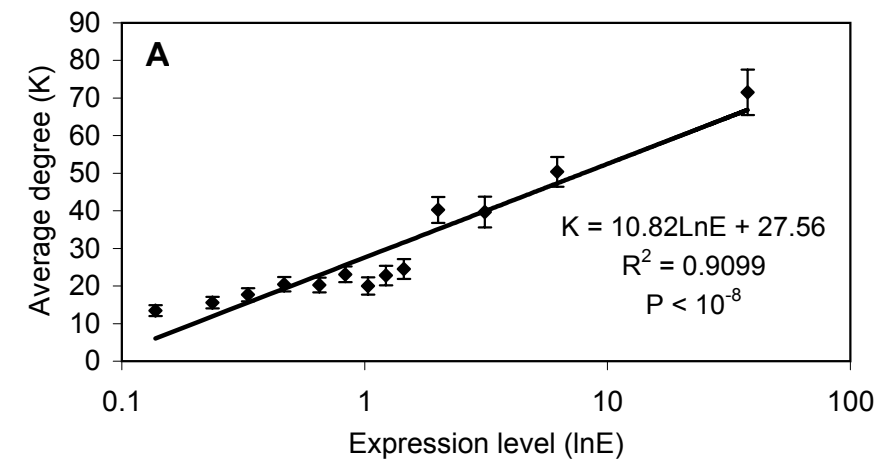


Figure 3

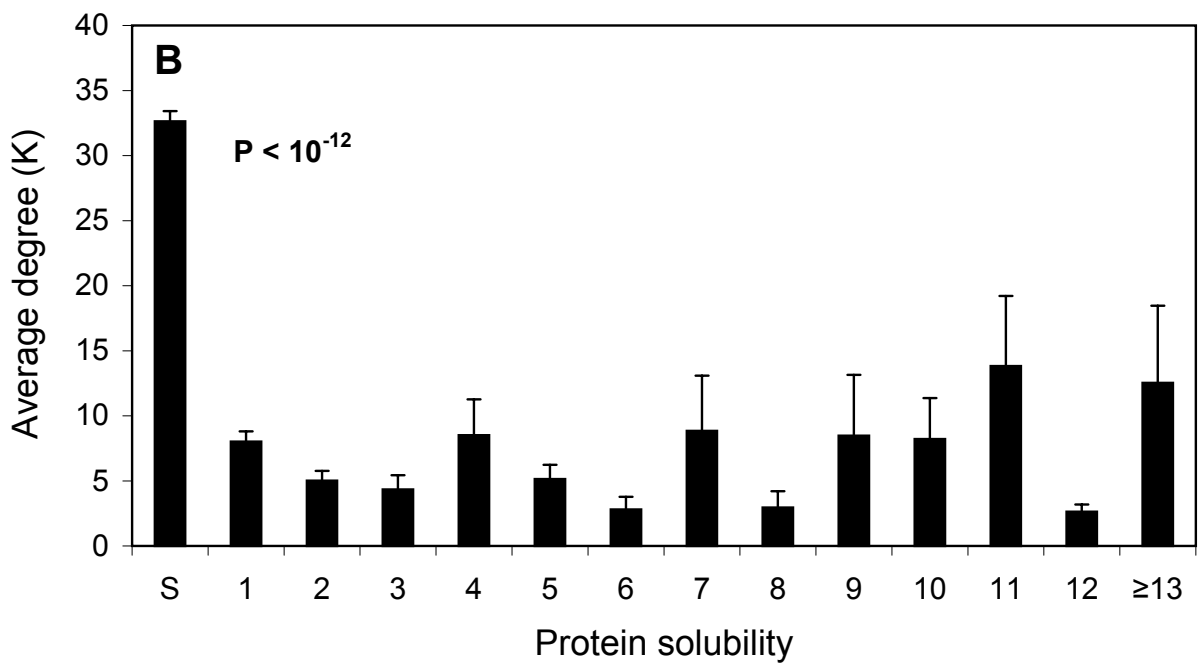
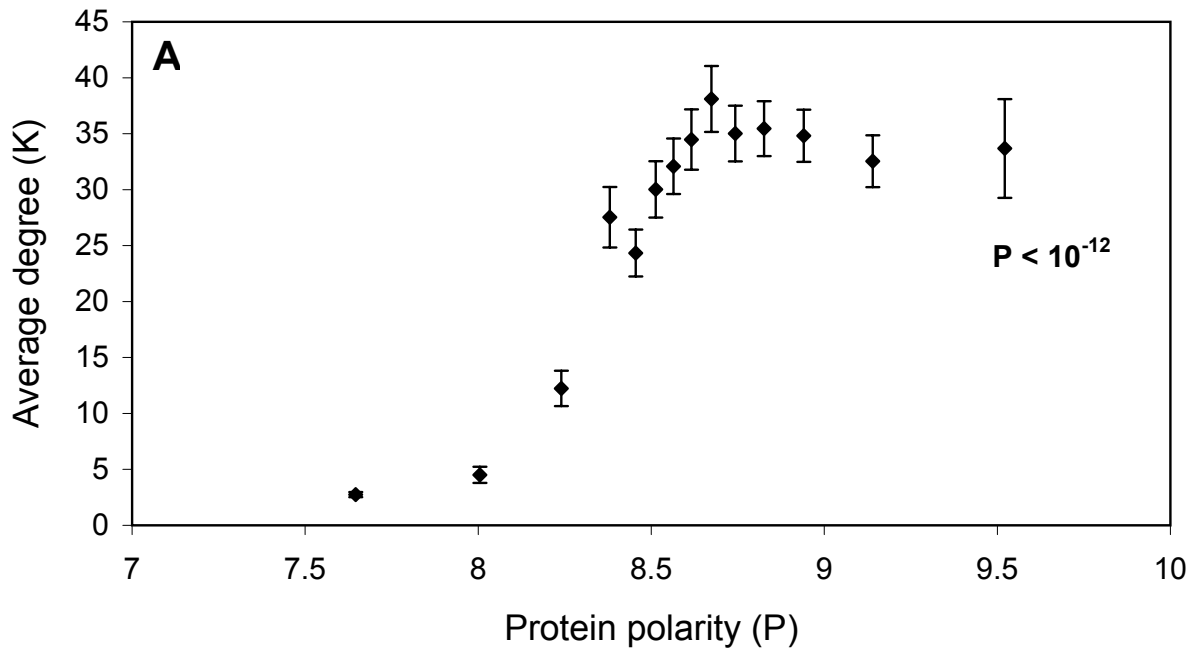


Figure 4

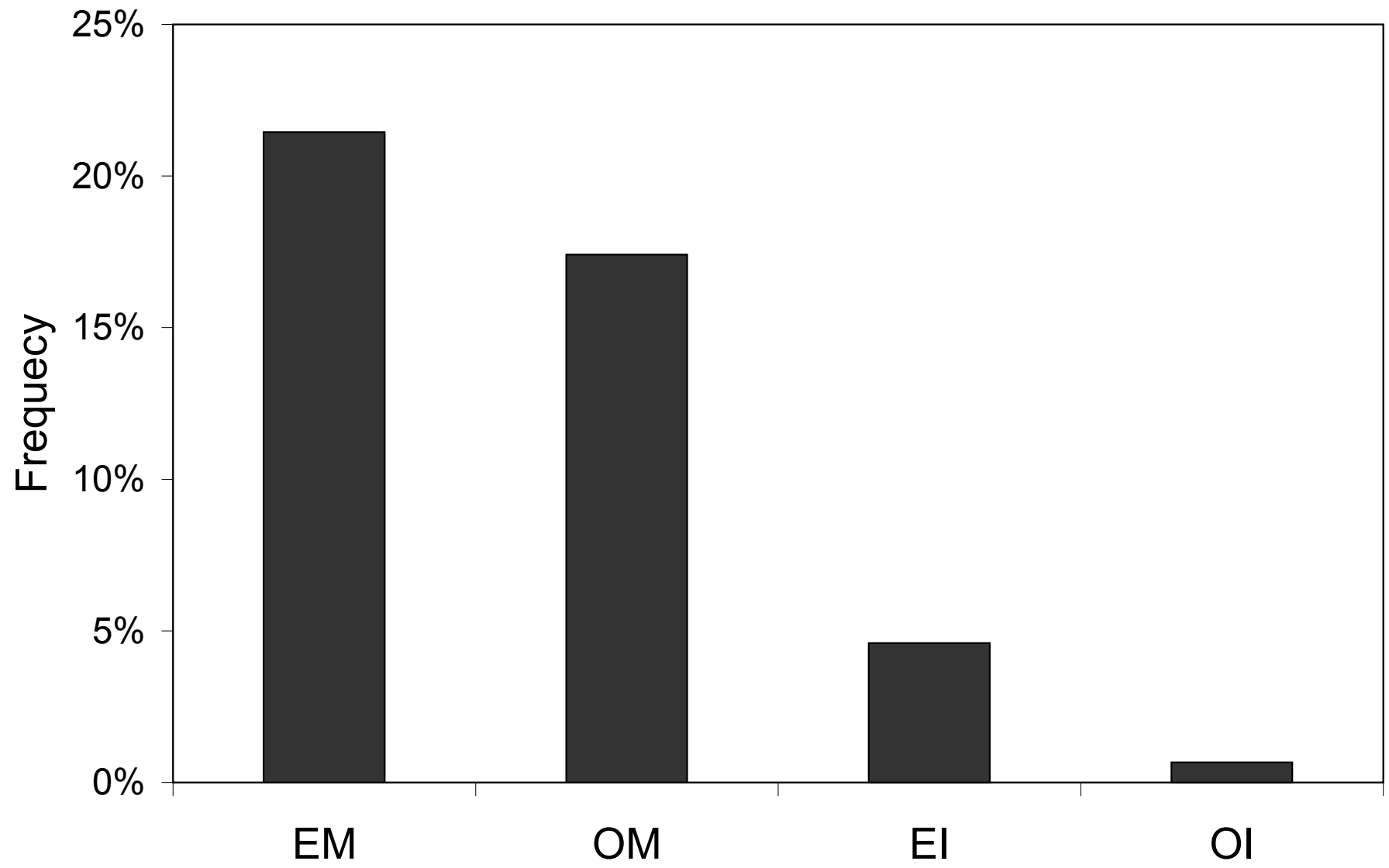


Figure 5

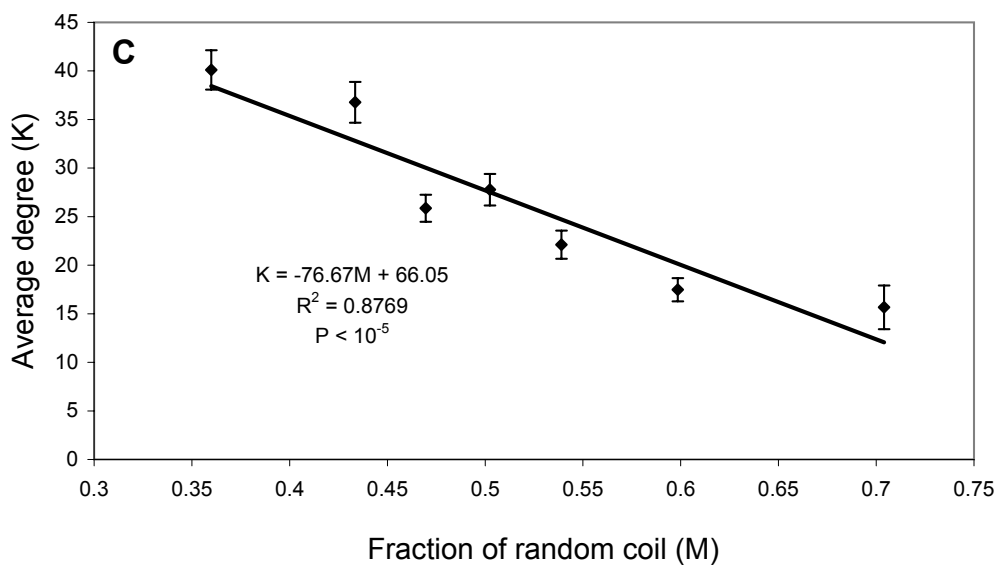
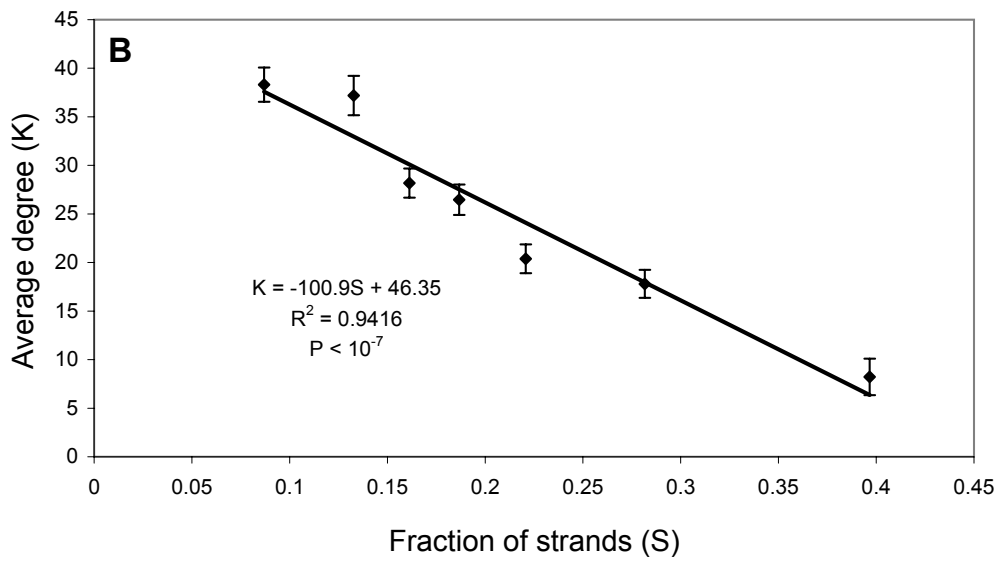
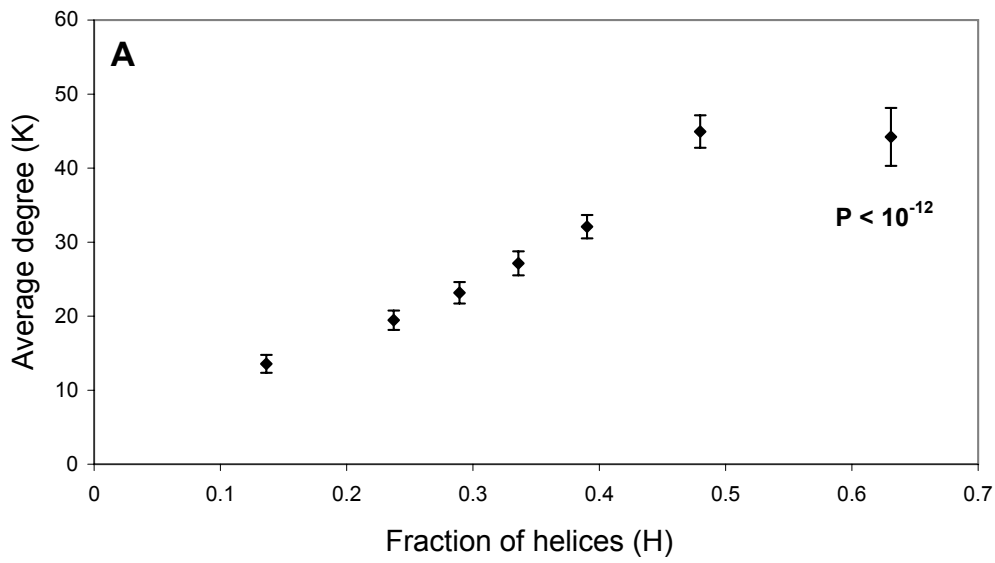


Figure 6

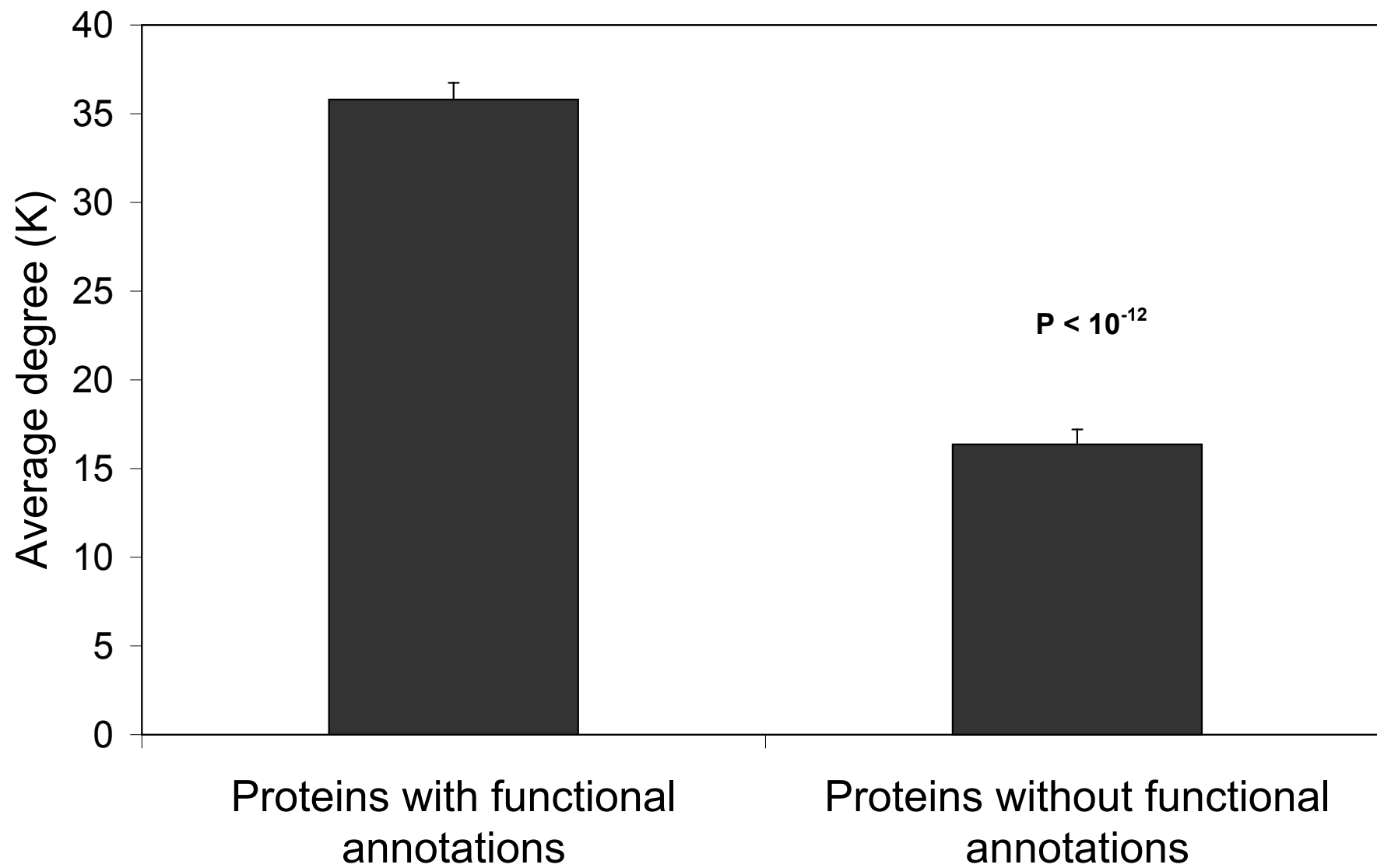


Figure 7

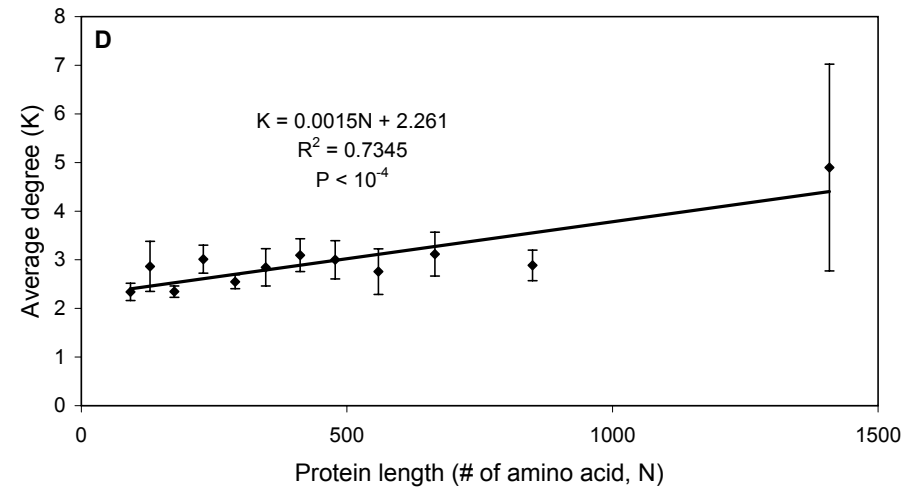
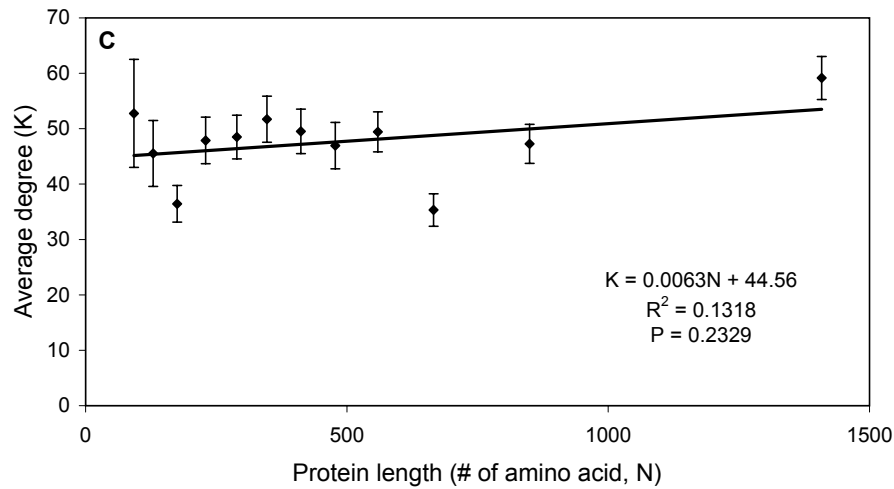
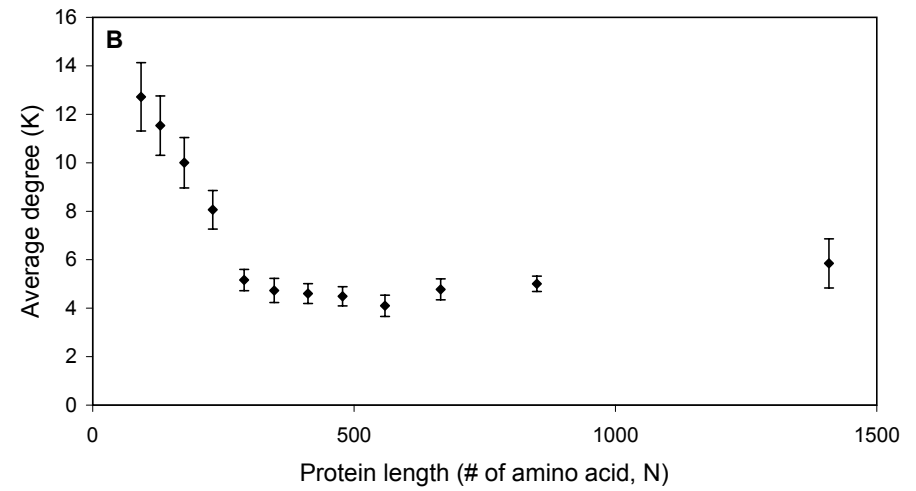
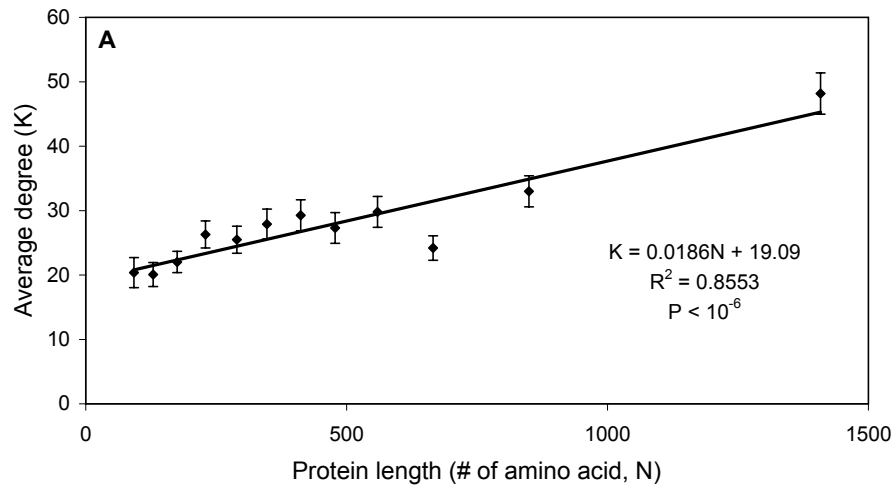


Figure 8