Table S6: Protein sequence features of young hubs and young non-hubs.

| Category | Protein Length<br>(Median) | Low Complexity (%, Median) | Long_Disorder (%, Median) | Short_Disorder (%, Median) |
|----------|----------------------------|----------------------------|---------------------------|----------------------------|
| Hubs     | 395                        | 6.26%                      | 13.67%                    | 14.62%                     |
| Non-hubs | 436.5                      | 4.12%                      | 6.99%                     | 10.47%                     |

**Note:** Genes (proteins) with minimum interaction degree 6 (medium connectivity) were defined as hubs, the remaining nodes as non-hubs.