

Homework 5

BCB570

Organism	Experimentally annotated proteins	Experimentally unannotated proteins	Total proteins	% experimentally annotated proteins
Chicken	696	14343	15309	4.63%
Human	13847	5534	19381	71.44%
Mouse	11088	10597	21685	51.13%
Rat	5534	13936	19470	28.42%
Zebrafish	4026	17810	21836	18.43%

The total number of experimentally annotated and unannotated proteins are shown in the table above. As seen from the results, human leads in being experimentally annotated proteome if we just see the total number of annotated proteins. As all the species have a different number of proteins so in order to compare them we normalize the data dividing it by a total number of proteins. After normalization, human proteome again leads with 71.44% experimentally annotated proteins.

I have used python to carry out this analysis. The code and the downloaded 'gaf' files are attached with this document.