

MCA

Α

Biological

Combinatorial Clustering

Figure 1. Multiple Clustering Analysis Method. A) MCAM begins with clustering a biological dataset through the combinatorial application of a set of clustering parameters, followed by biological enrichment testing in various categories of information. Following this, the enrichment is used to prune those parameters that contribute little biological information. B) The depiction of an MCA, which contains M sets, with each set having some number of k clusters and produced by a particular combination of clustering parameters. Biological enrichment is corrected for multiple hypothesis testing by using the False Discovery Rate procedure across a set and within a category of biological information. Mutual Information can be used to compare the resulting clustering solution between any two sets.

Biological Enrichment

Motifs

Prune MCA

**MCAfinal**