Consensus Clustering Paradigm – Genes & Brains

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Abstract: Clustering algorithms can extract information from large datasets in model-free or data-driven ways. However, in applications with real data with little a priori knowledge, it is often difficult to select an appropriate clustering algorithm and evaluate the quality of clustering results due to the unknown ground truth. It is also the case that conclusions based on only one specific algorithm might be biased. In addition, in cases of multiple heterogeneous datasets from similar experiments, which may have been generated in either the same laboratory or different laboratories, the challenge is how to reach consensus conclusions. This presentation will address these issues and report on very recent results from applying Bi-CoPaM and UNCLES to analyse gene and fMRI data.

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