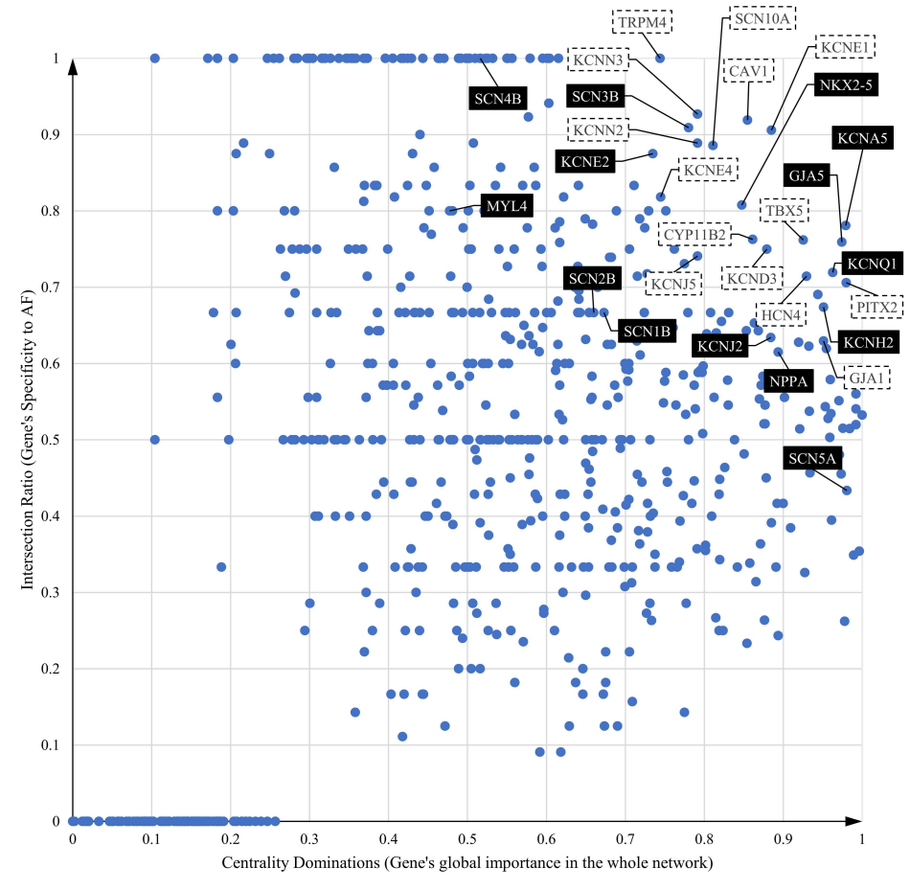
ARC LP - Transfer Learning for Genome Analysis and Personalised Recommendation

Dist Prof Jie Lu, A/Prof Guangquan Zhang, Dr Yi Zhang, Dr Qian Zhang

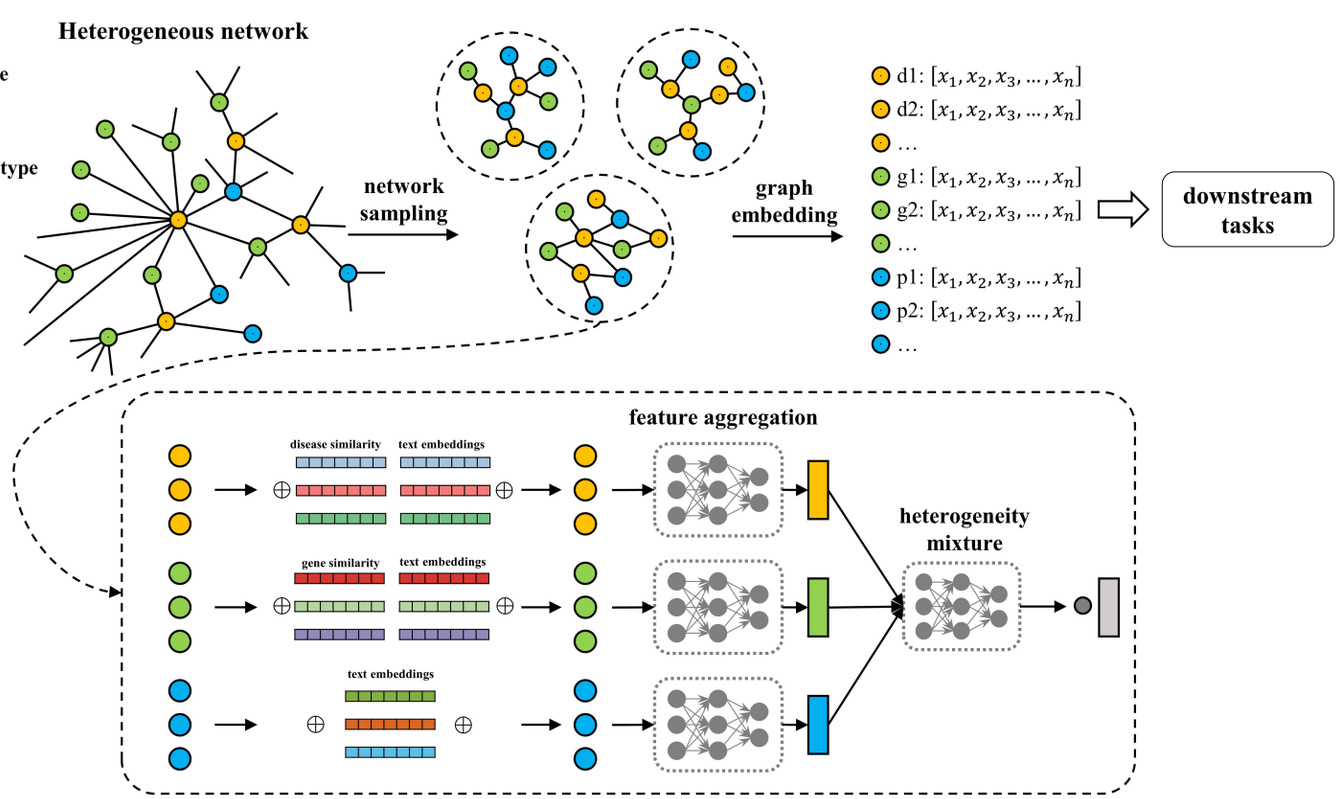
Dr Hua Lin, Mr Mark Grosser, Mr Steven Tipper, Prof Deon Venter

Objective 1: Analysing genome and gene expression (GGE) data associations through uncertainty learning

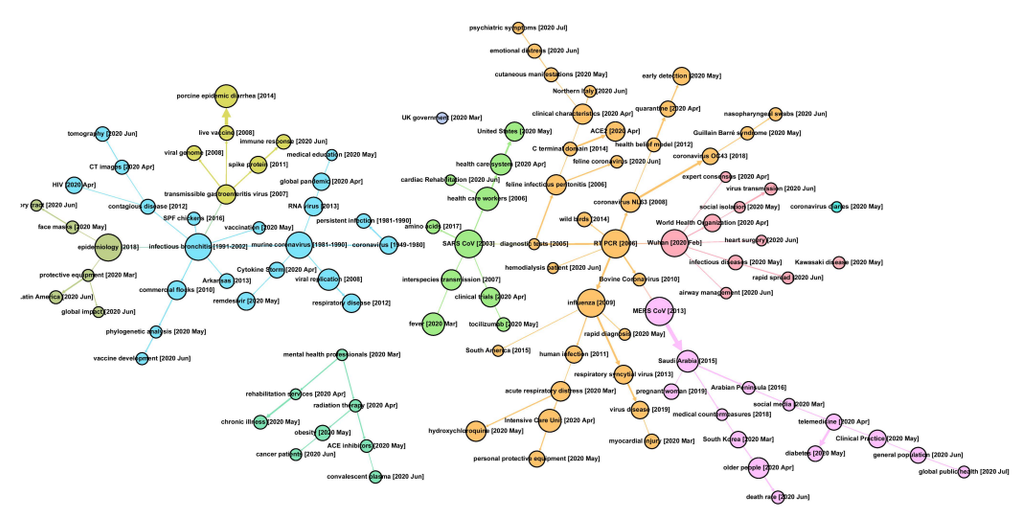
Our team has achieved significant progresses on identifying the associations between genes and health characteristics through intelligent bibliometrics (for Task 1.1) and identifying crucial GGE and gene biomarker selection from scientific literature using a series of bibliometrics-enhanced models with graph neural networks (partially for Tasks 1.2 and 1.3).



Gene-Disease Association



Heterogeneous Bibliometric Graph Embedding for Feature Selection



Topical Evolution (CoVID-19)