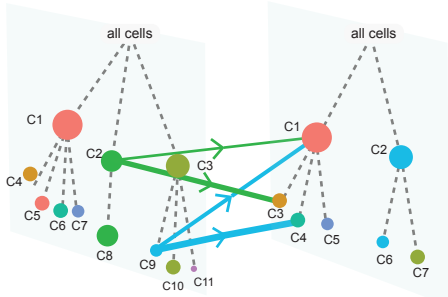


Main visualizations of CrossChat

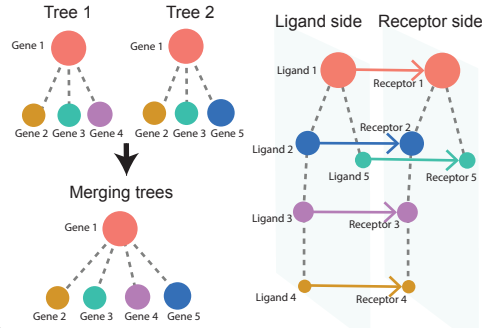
Global hierarchy

Ligand hierarchical clusters Receptor hierarchical clusters



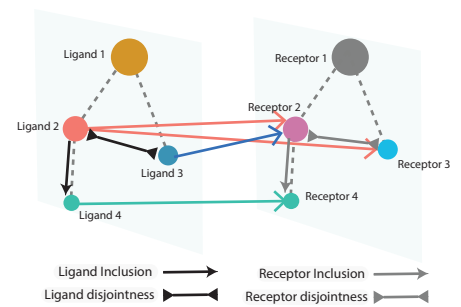
Local hierarchy

i. Hierarchy of cells containing ligands ii. Hierarchy of cells containing ligands or receptors



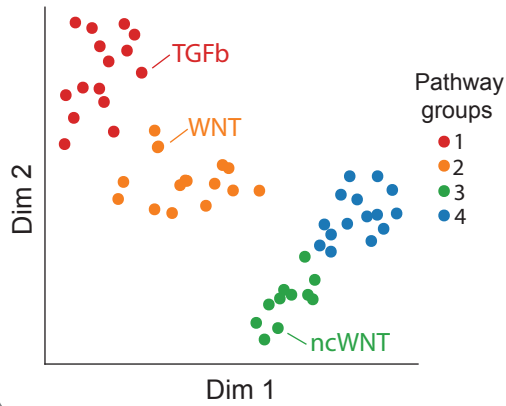
Ligand-receptor interactions in local hierarchy

Ligand hierarchical tree Receptor hierarchical tree

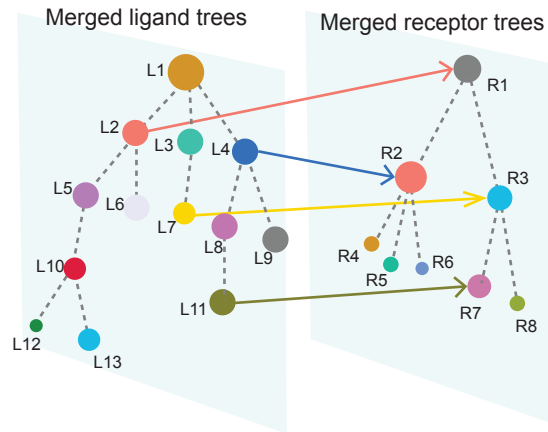


Downstream analysis

Pathway hierarchical similarity



Interaction between merged trees



Frequency of ligands in ligand trees

