

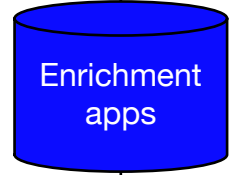
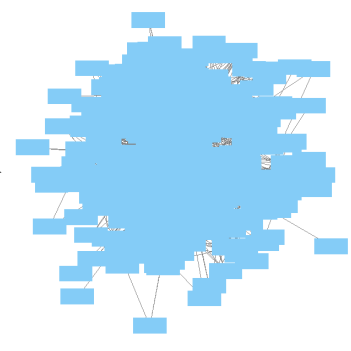
# Module 6: Network global enrichment analysis

Enrich networks with multiple layers of functional informations



GENERATE

Context-specific sub-networks (from context-specific bioinformatic probe) (eventually FN expanded)



- JEPETTO
- GeneMANIA
- ReactomeFIPlugIn
- Enrichmentmaps
- ENViz
- CyTargetLinker
- cy3SBML
- PINA4MS
- Rene

Comparison to reference database:  
(double-click to generate network)

Pathway or Process	ND-score	q-value	Overlap/Size
Pentose phosphate pathw...	0.38314	0.17890	2/28
Glycolysis / Gluconeogen...	0.26885	0.06058	3/42
Fructose and mannose m...	0.25900	0.25842	2/23
Ether lipid metabolism	0.24876	1.00000	1/16
Asthma	0.23366	1.00000	1/19
Glycerophospholipid met...	0.18456	1.00000	1/35
Malaria	0.08102	1.00000	1/42
Alzheimer's disease	0.07009	0.46614	3/338
Viral myocarditis	0.05331	1.00000	1/57
Focal adhesion	0.04825	0.03345	3/386
Arrhythmogenic right ven...	0.04795	1.00000	1/62
Bacterial invasion of epith...	0.04564	1.00000	1/64
Fc epsilon II signaling pat...	0.04467	1.00000	1/65
Systemic lupus erythemato...	0.04266	1.00000	1/67
Pancreatic cancer	0.04029	1.00000	1/78
Adhensin junction	0.04020	1.00000	1/78
ECM-receptor interaction	0.03653	1.00000	1/77
Calcium signaling pathway	0.03650	1.00000	2/152
TCF-beta signaling pathw...	0.03518	1.00000	1/79
Fc gamma R-mediated ph...	0.03497	1.00000	1/82
Grb1 signaling pathway	0.03434	1.00000	1/83
Endocytosis	0.02946	1.00000	2/178
Regulation of actin cytosk...	0.02592	1.00000	2/187
Leukocyte transendotheli...	0.02395	1.00000	1/98
Atherosclerosis	0.02395	1.00000	1/98
Neuroactive ligand-recep...	0.02104	1.00000	2/214
Axon guidance	0.01973	1.00000	1/111
Phagosome	0.01858	1.00000	1/116
Tight junction	0.01853	1.00000	1/113
Metabolic pathways	0.00853	1.00000	4/648
Pathways in cancer	-0.00371	1.00000	1/304
Drug metabolism - other ...	-0.01686	1.00000	0/16
Purine metabolism	-0.01686	1.00000	0/18
Primary immunodeficiency	-0.01686	1.00000	0/33
Cell adhesion molecules L...	-0.01686	1.00000	0/34
MAPK signaling pathway	-0.01686	1.00000	0/233
ERK signaling pathway	-0.01686	1.00000	0/84
Chemokine signaling path...	-0.01686	1.00000	0/178
mTOR signaling pathway	-0.01686	1.00000	0/49
Apoptosis	-0.01686	1.00000	0/81
WGF signaling pathway	-0.01686	1.00000	0/62

Note: statistically significant results are highlighted.



- Enrichr
- SELPHI  
Systematic Extraction of Linked Phospho-Interactions
- GSEA  
Gene Set Enrichment Analysis
- ConceptGene
- PANTHER
- LH Path  
Pathway analysis using logistic regression
- DAVID
- COREMINE
- BioGPS
- GenomeNet
- NetworkAnalyst