

Modularised procedure for network analysis: overview

Laudanna's lab

Network analysis is modularised. Each module performs a discrete step of analysis dedicated to a specific goal. Modules can be executed alone or in combination, to perform a complex, more informative, analysis.

For instance, if the goal is simply network reconstruction, then Module 1 and/or Module 2 are applied. If a proteomic data-set has to be analysed, with the purpose, for example, of identifying the most important phosphorylated proteins in a specific context, for instance leukaemia cells isolated from many CLL patients, then a combination of Module 2 + Module 3 + Module 4 + Module 8 can be applied.

And ... so on!

The procedure is designed for the *Cytoscape* network analysis environment.

Module 1

Global pathway/network
download

Module 2

Network reconstruction
from experimental data
sets

Module 3

Network topological
analysis

Module 4

Network merging analysis

Module 5

Network ontological
analysis

Module 6

Network global
enrichment analysis

Module 7

Network disease
enrichment analysis

Module 8

Network kino-
phosphatome enrichment
analysis

Module 9

Network protein domain
enrichment analysis

Module 10

Network metabolic
enrichment analysis



= Analysis starting point



Red

= actions



Blue

= web service



Blue

= apps



= web-links (mouse hover and click over the objects to go to web sites)



[Cytoscape user manual](#)