Types of Cellular Networks

Gene Regulatory Networks
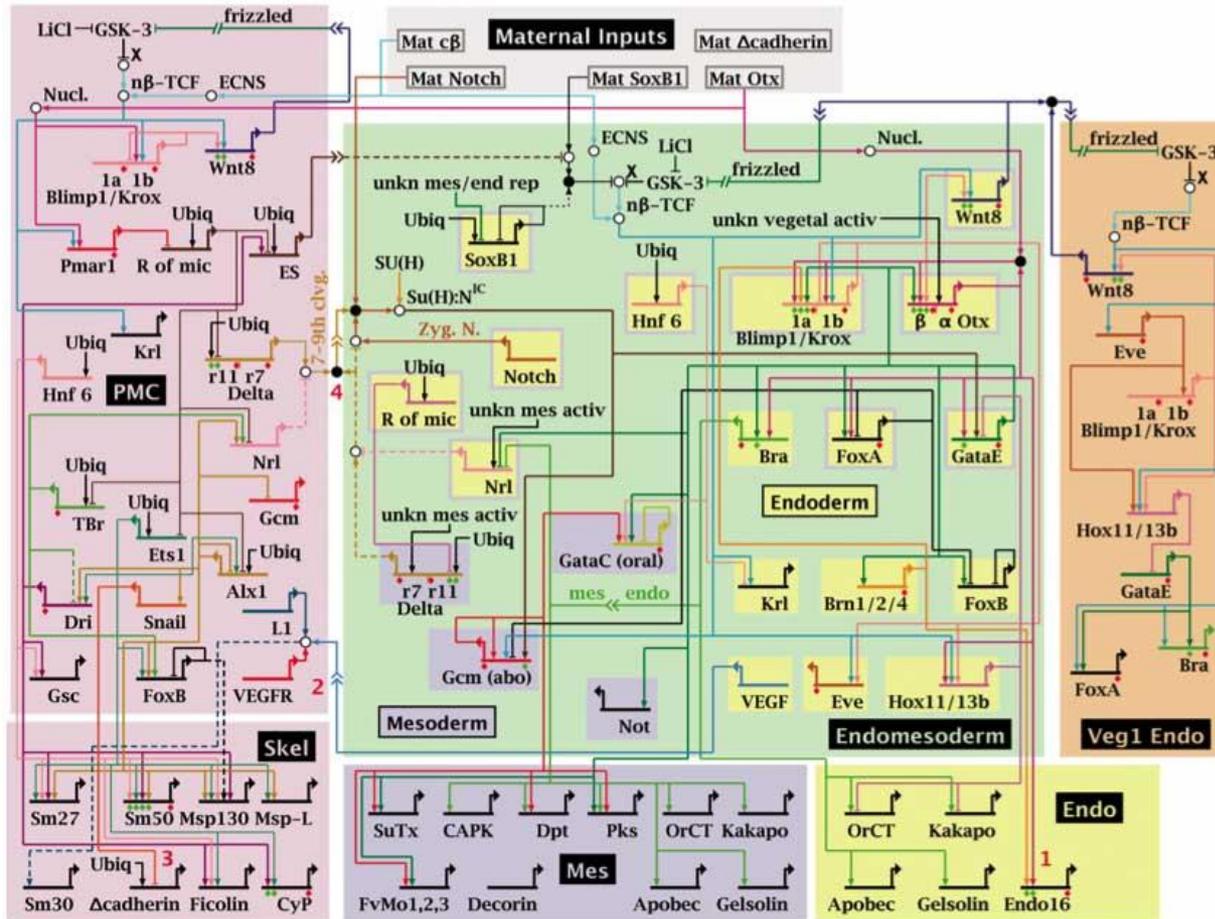
Gene Regulatory Network Basic Operations
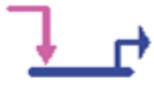
Protein Signaling Networks
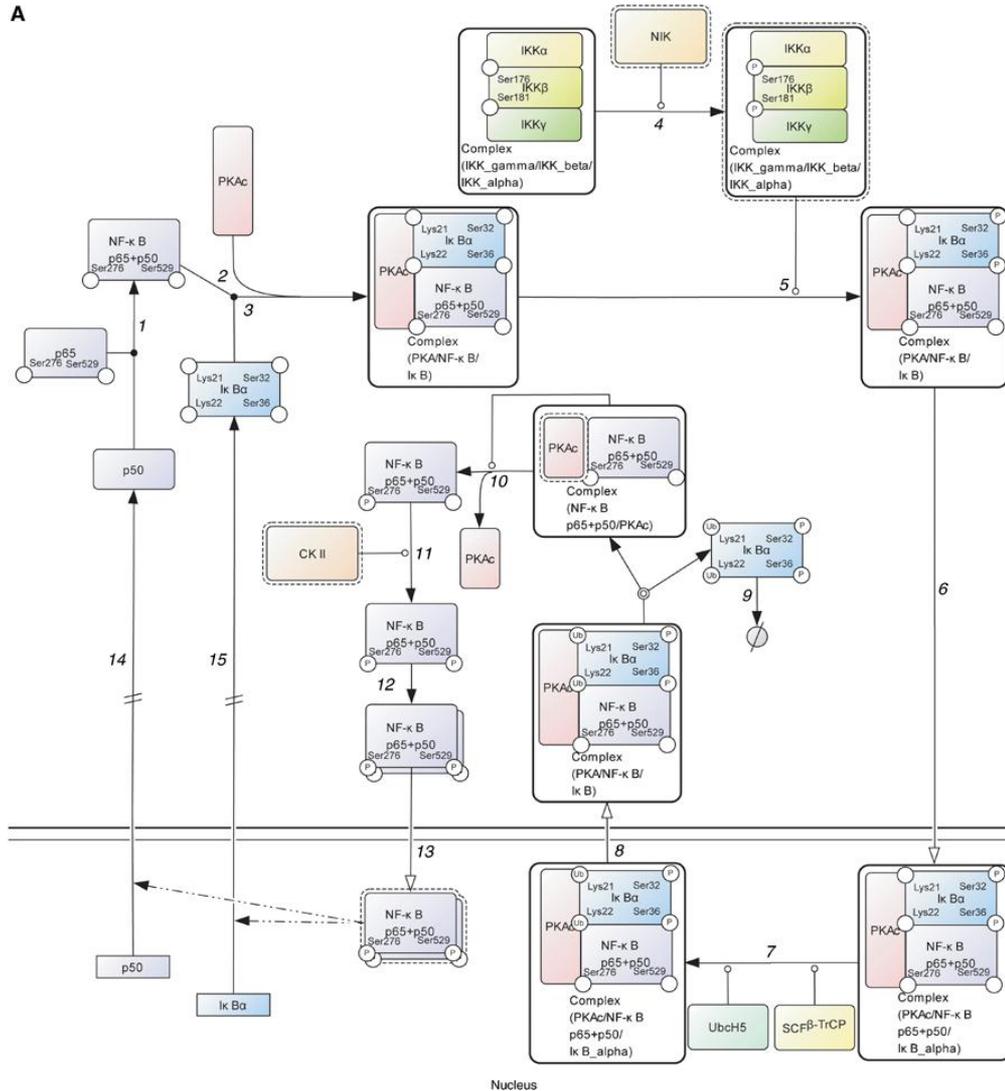
Protein Signaling Networks Basic Operations
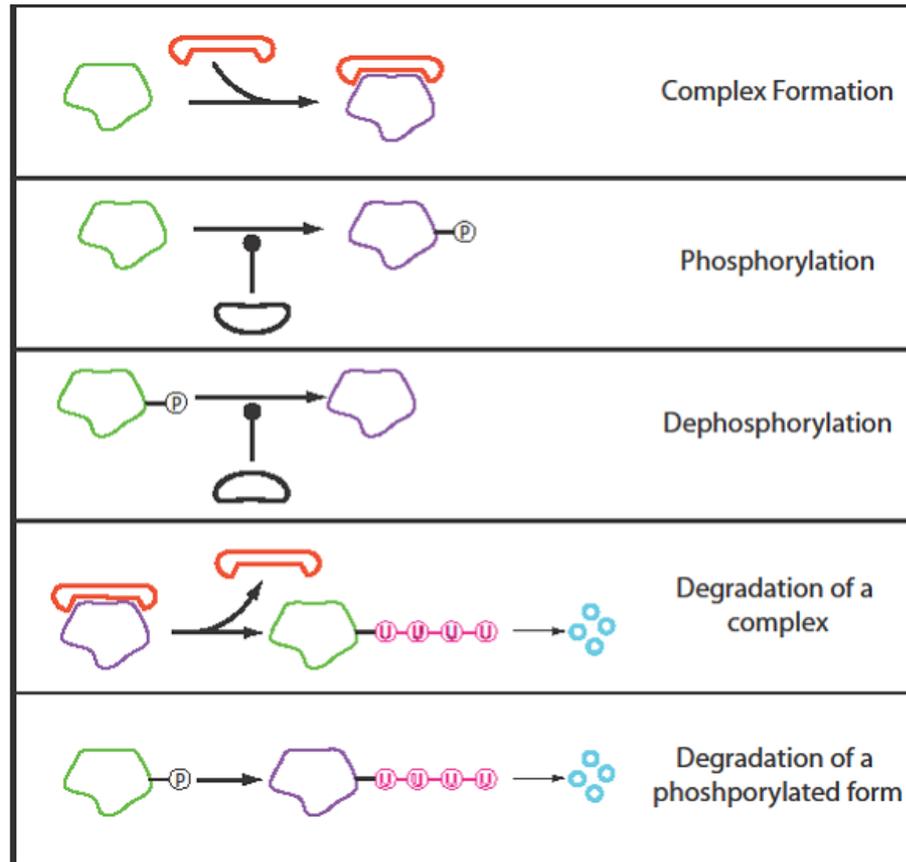
Metabolic Networks
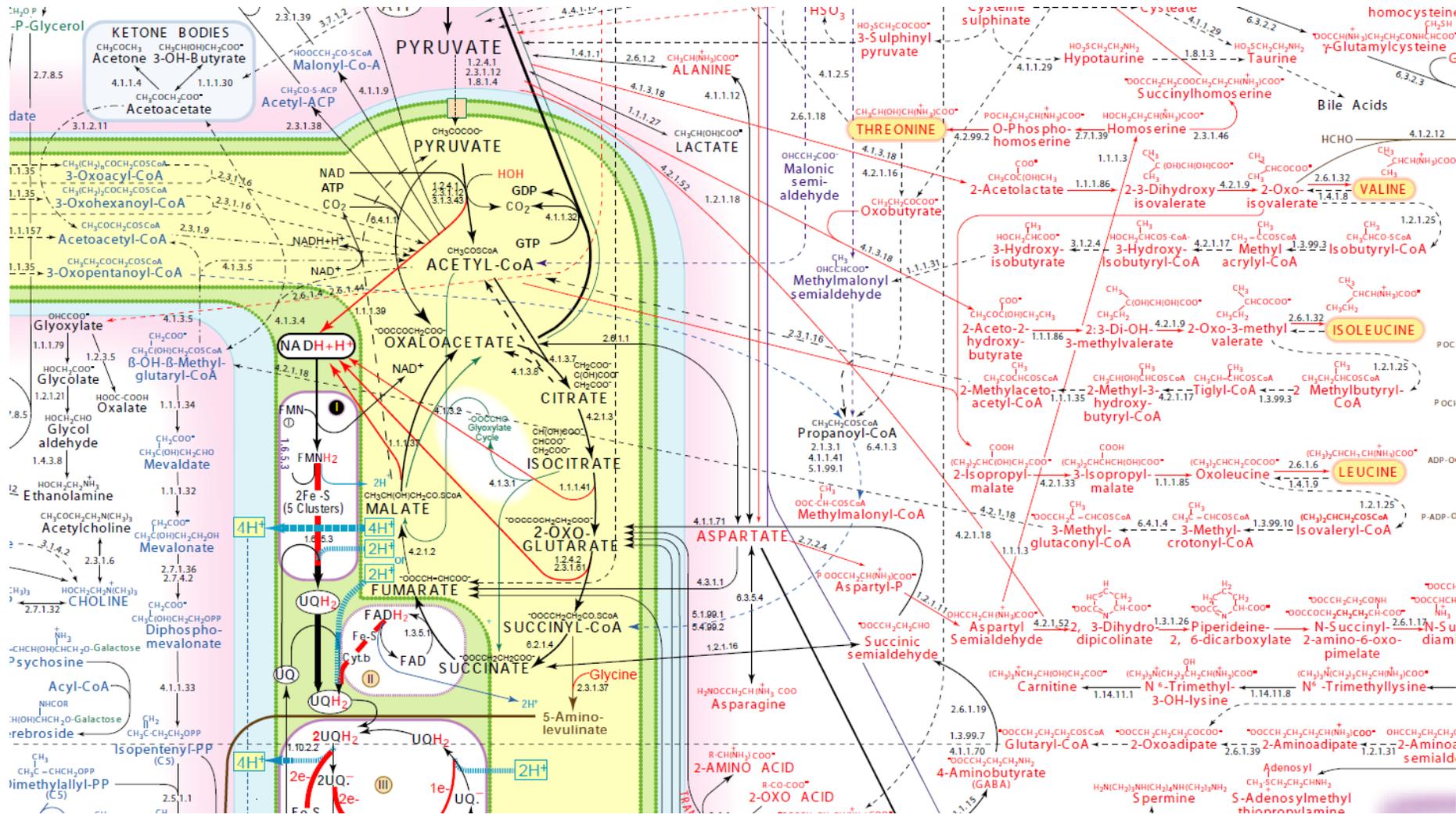
Some Characteristics

| Network	Speed	Purpose	'Technology'
Gene	Slow to medium	Remodeling signaling and metabolic networks	DNA binding to control expression
Protein	Medium to fast	Signal processing	Protein covalent modification and sequestration
Metabolic	Fast	Manufacturing, energy systems	Enzymes, allosteric control

Software for Network Visualization
Does not include ball-stick networks, eg cytoscape

Gene Regulatory Networks

BioTapestry
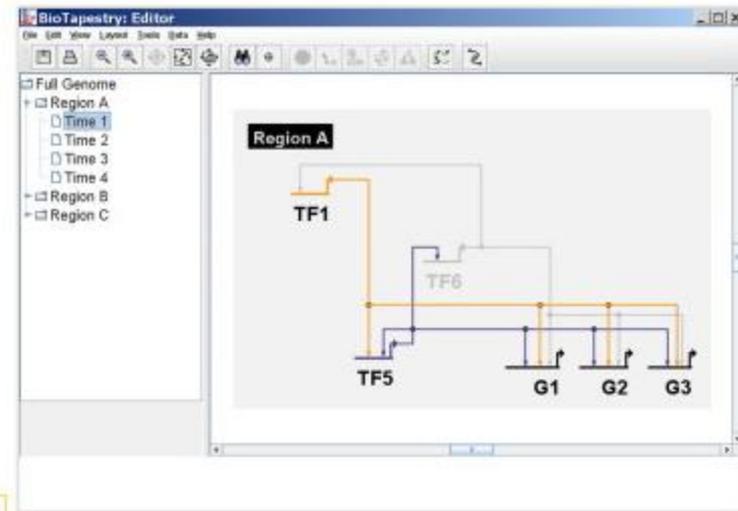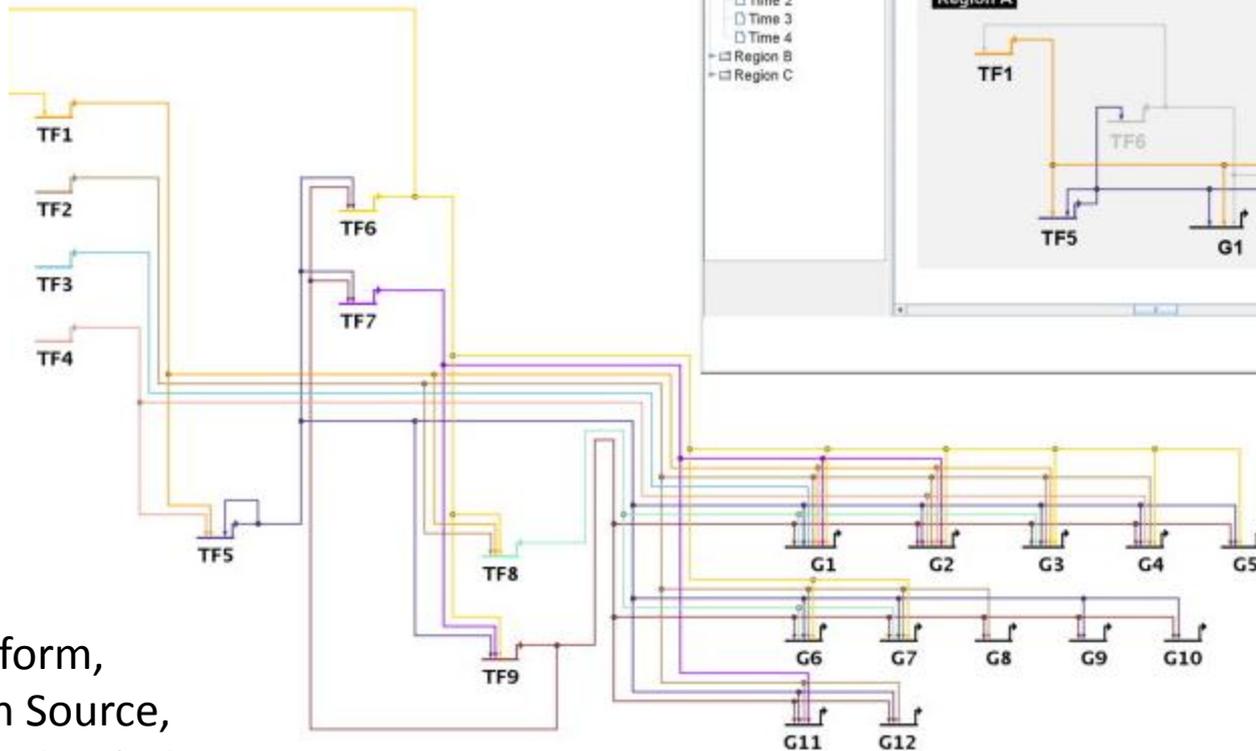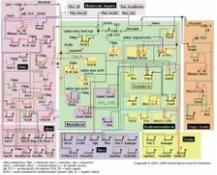
Cross-platform,
Java, Open Source,
SBML?, no simulation

Biotapestry.org

Metabolic and Protein Networks
JDesigner
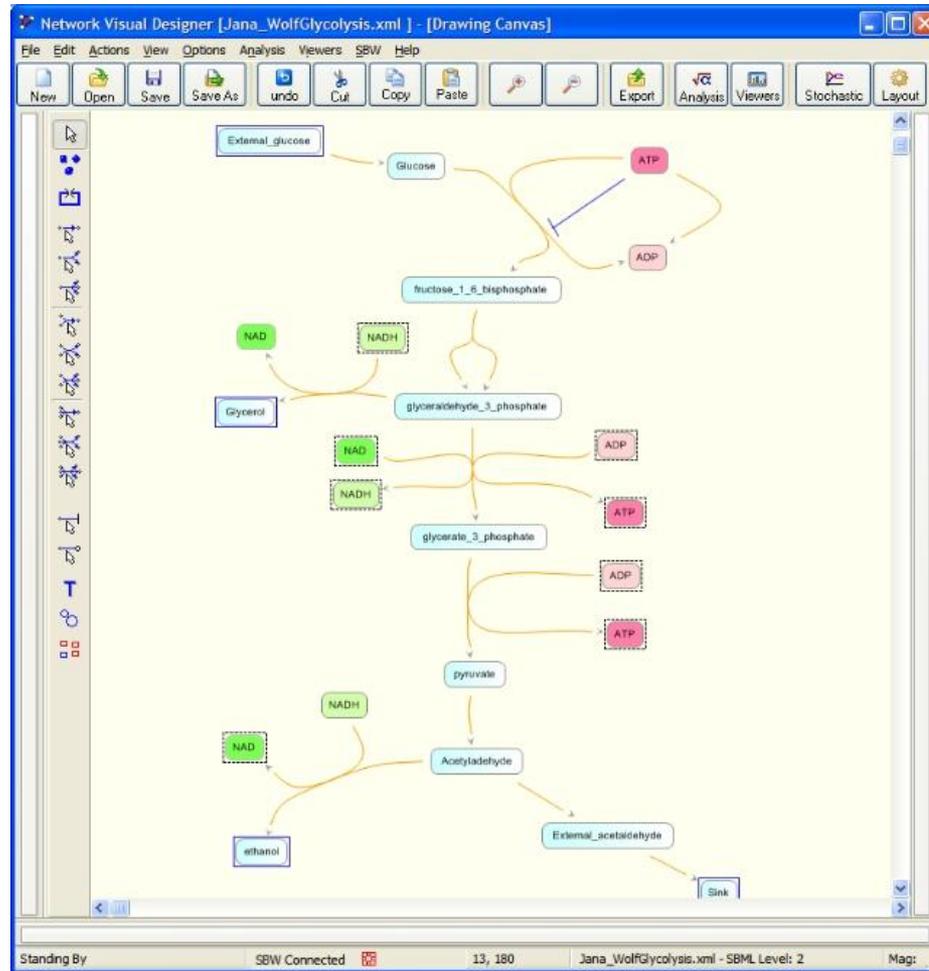
Windows,
Delphi, open source
SBML, Part of SBW

Gene Protein and Metabolic Networks

TinkerCell
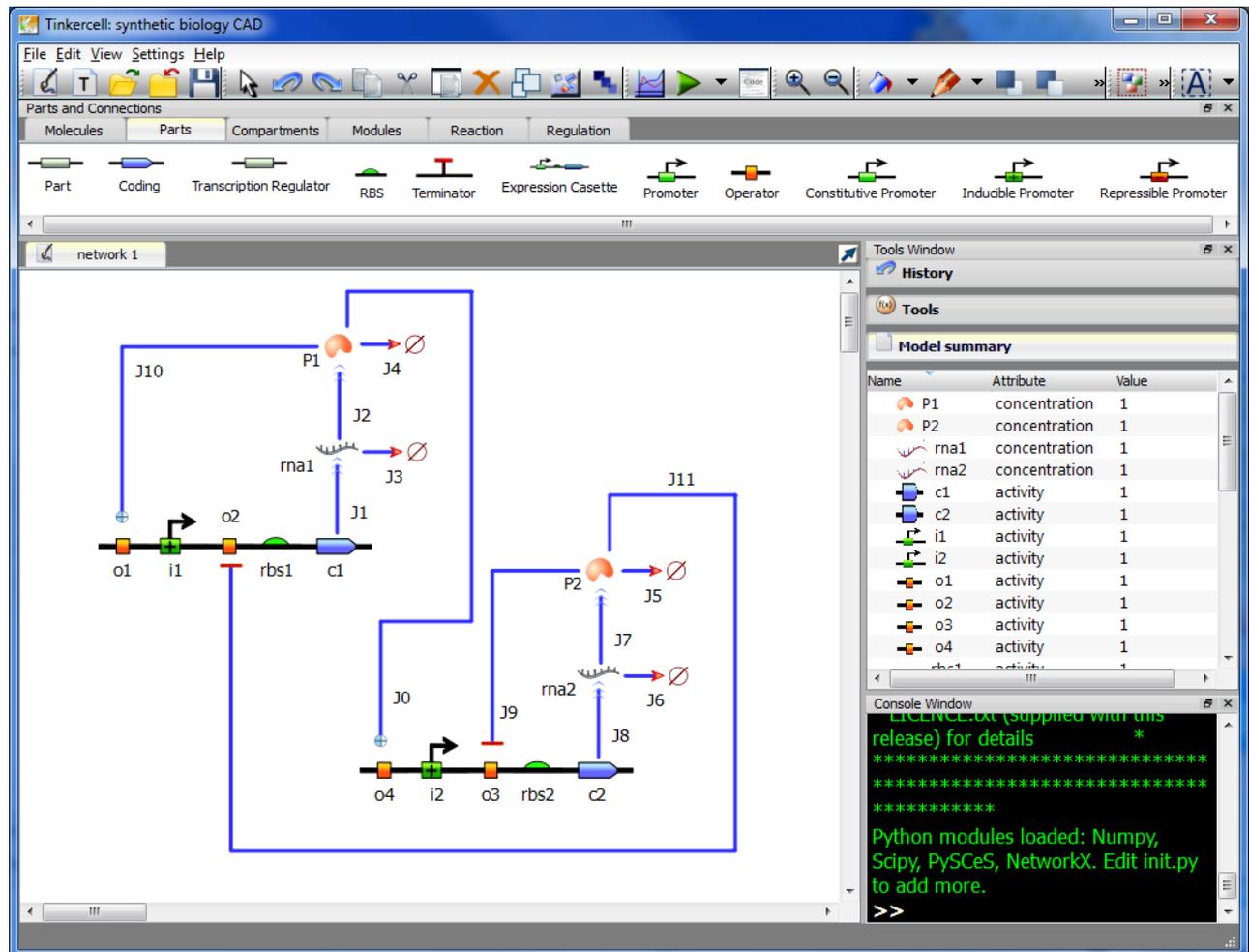
Cross-platform,
Open source,
C/C++, Qt, Python,
SBML?

tinkercell.com

Metabolic and Protein Networks
CellDesigner
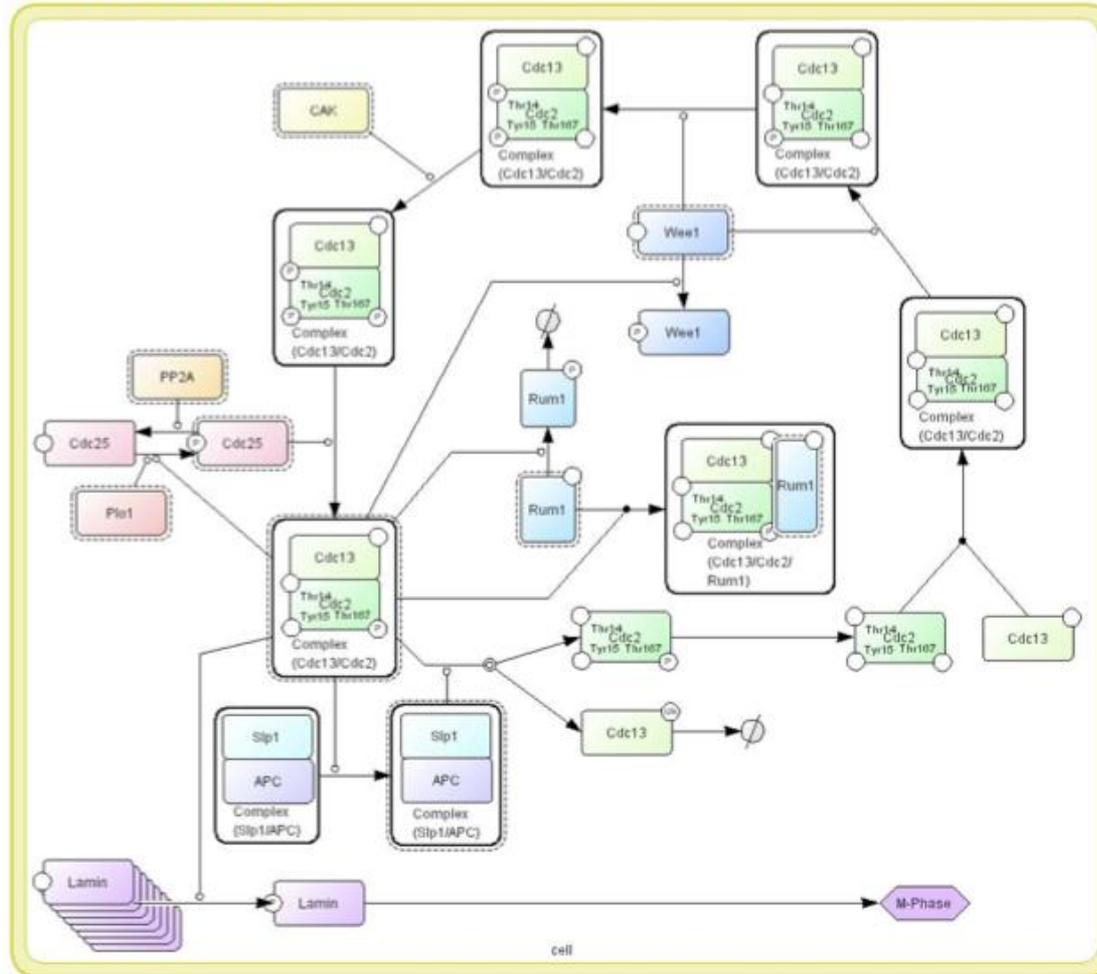
Cross-platform
Works with SBW,
Java, SBML