

Computational Molecular Biology and Bioinformatics Tools

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November, 2024

1 Cytoscape

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Cytoscape

Cytoscape is a free and open source software platform for visualizing complex networks and integrating these with different types of attribute data. Different plugins (termed as Apps) are available for various kinds of problem domains.

The latest version of Cytoscape (3.9.0) is available for download from: <https://cytoscape.org/download.html>

Inkscape

Inkscape is a free and open source vector graphics editor used to create vector images, primarily in SVG (denoting Scalable Vector Graphics) format. Other image formats can also be imported and exported.

The latest version of Inkscape (1.1.1) is available for download from: <https://inkscape.org/fr/release/inkscape-1.1.1>

Hands-on

- 1 Collect the state-of-the-art drug-drug interaction information from the following paper.

Xiong, G., Yang, Z., Yi, J., Wang, N., Wang, L., Zhu, H., Wu, C., Lu, A., Chen, X., Liu, S. and Hou, T., DDInter: an online drug–drug interaction database towards improving clinical decision-making and patient safety. *Nucleic Acids Research*, 50(D1), pp.D1200-D1207, 2022.

Link: <https://academic.oup.com/nar/article/50/D1/D1200/6389535>

- 1) Visualize the drug-drug interactions as a network using Cytoscape tool.
- 2) Provide new insights by analyzing the said network with different Apps of Cytoscape.