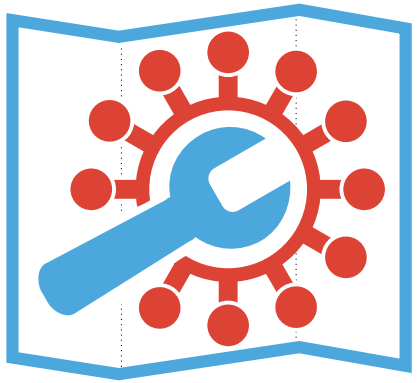
Wrap-up and Outlook

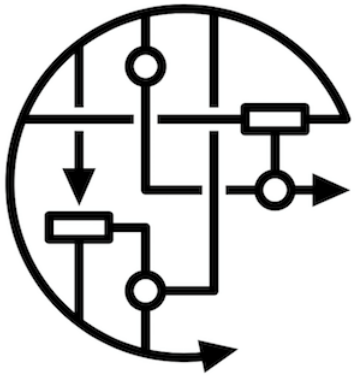
Lauren J. Dupuis

ISMB/ECCB 2021 Tutorial: Reproducible omics data analysis workflows
July 22-23 2021

What did we get into today?



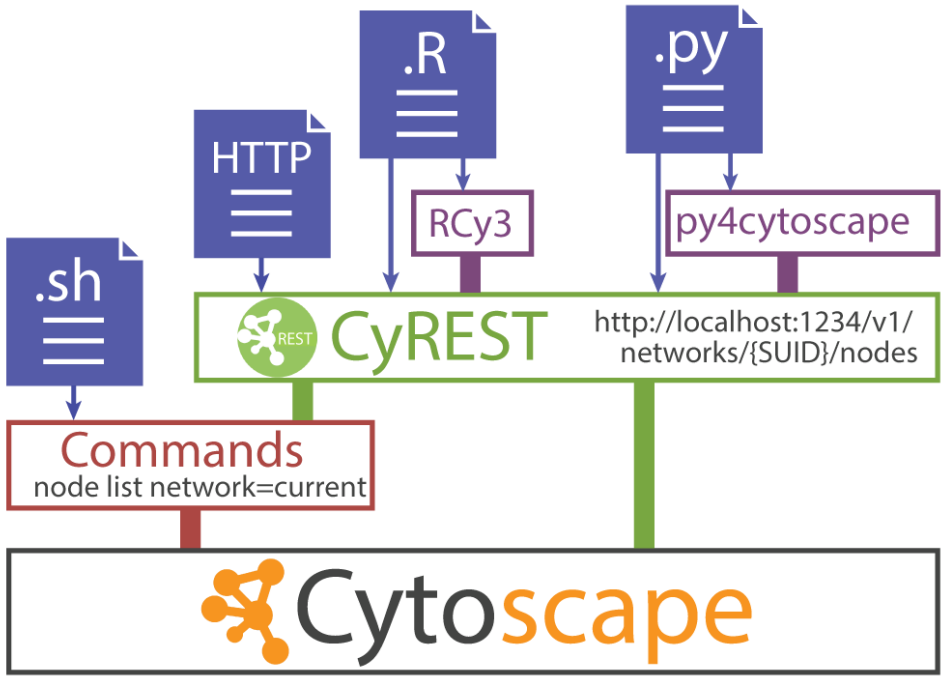
COVID-19
Disease Maps



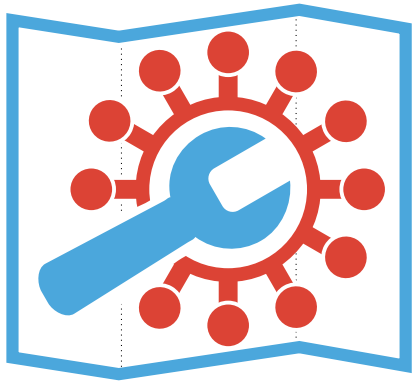
WikiPathways

COVID-19
Disease Maps

WikiPathways



Automation in Cytoscape



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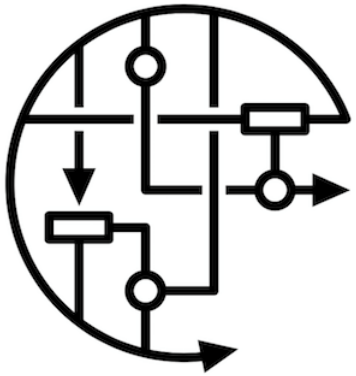

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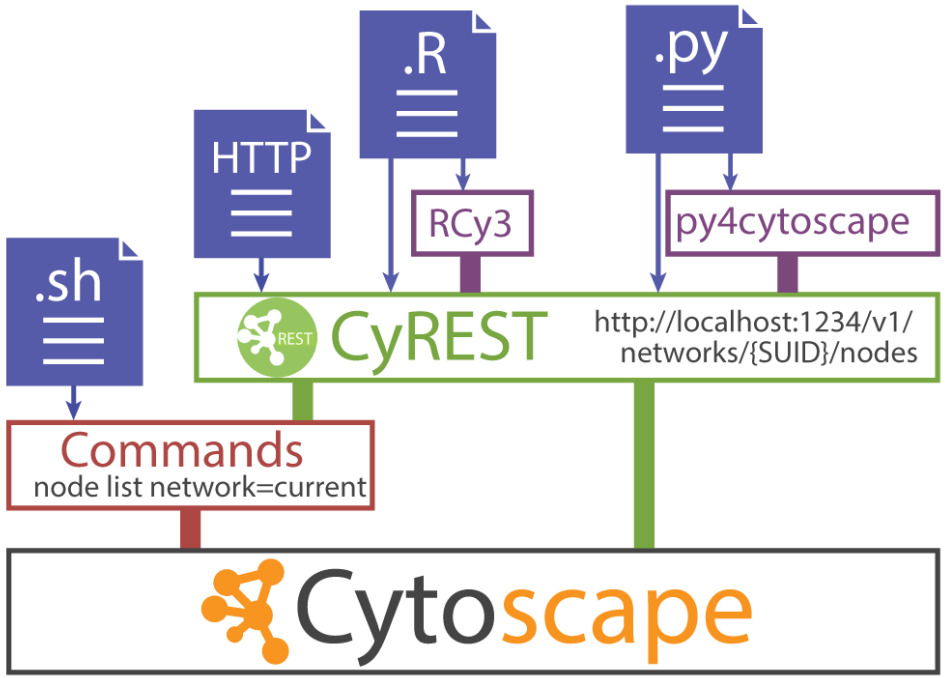

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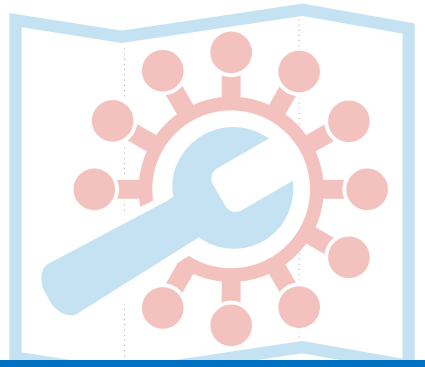

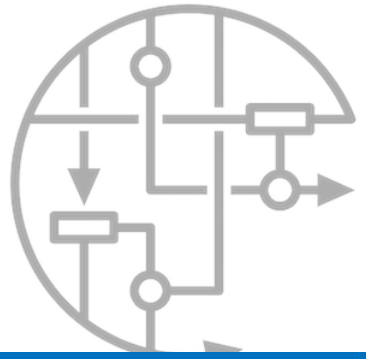

Quiz Time!

Go to the link below:

- Link to quiz will be added

Still to come: Applying Day 1!

Time	Activity	Speaker/instructor
15:00 - 15:30	Introduction workflows	Martina Kutmon
15:30 - 16:15	Workflow 1 Pathway enrichment / network visualization / drug-target extension	Martina Kutmon Lauren Dupuis
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17:00 - 17:15	**Coffee break**	
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18:00 - 18:30	Wrap up and quiz	Lauren Dupuis
18:30 - 19:00	Q&A / Get input on your own project	All instructors

Dataset

GSE147507

Dataset

Gene Expression Omnibus

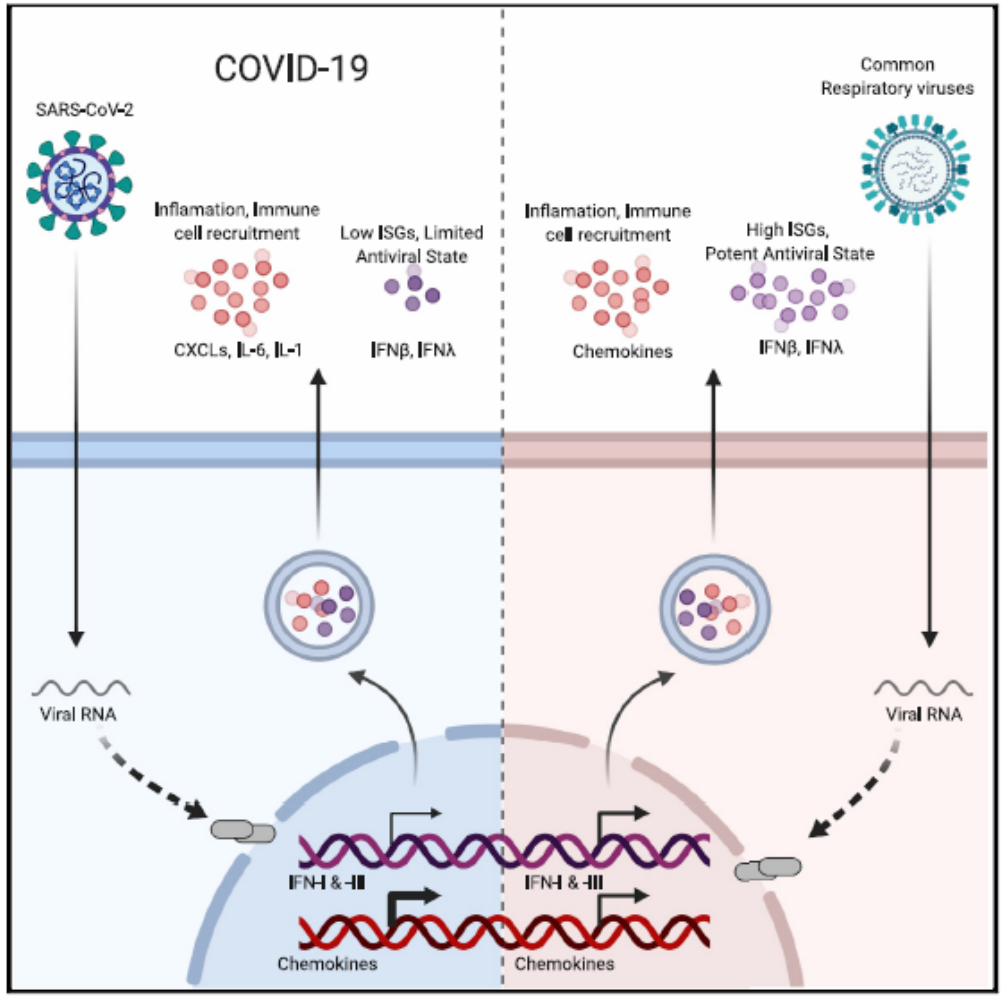
GSE147507

Cell

Article

Imbalanced Host Response to SARS-CoV-2 Drives Development of COVID-19

Graphical Abstract



Authors

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Correspondence

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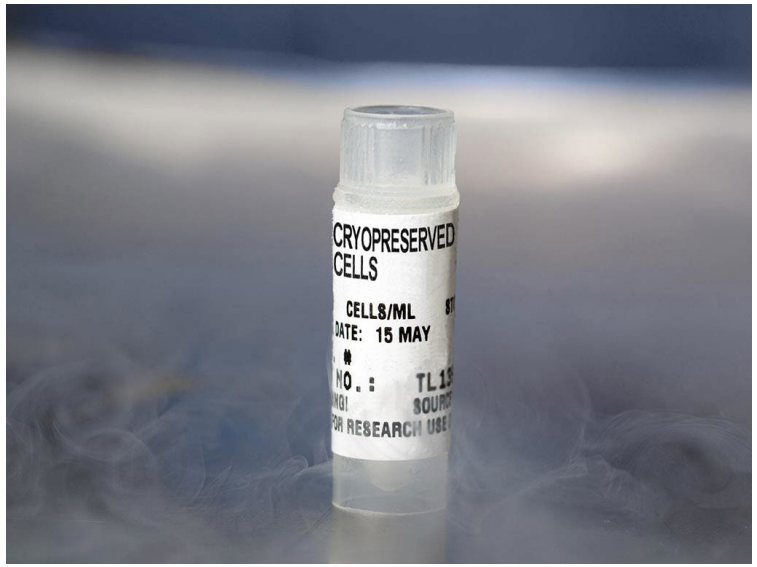
In Brief

In comparison to other respiratory viruses, SARS-CoV-2 infection drives a lower antiviral transcriptional response that is marked by low IFN-I and IFN-III levels and elevated chemokine expression, which could explain the pro-inflammatory disease state associated with COVID-19.

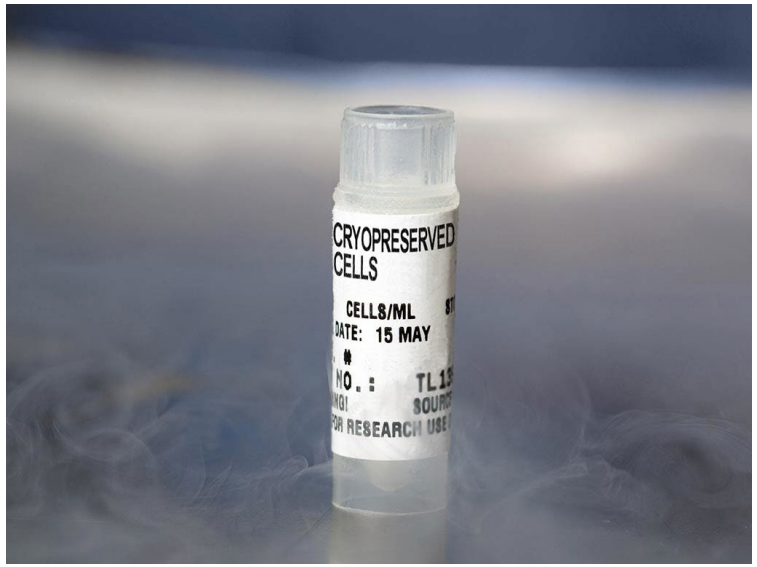
Dataset



https://bioscience.lonza.com/lonza_bs/CH/en/Primary-and-Stem-Cells/p/000000000000185007/NHBE-%E2%80%93-Human-Bronchial-Tracheal-Epithelial-Cells-without-Retinoic-Acid

Normal Human Bronchial Epithelial (NHBE) Cells

Dataset



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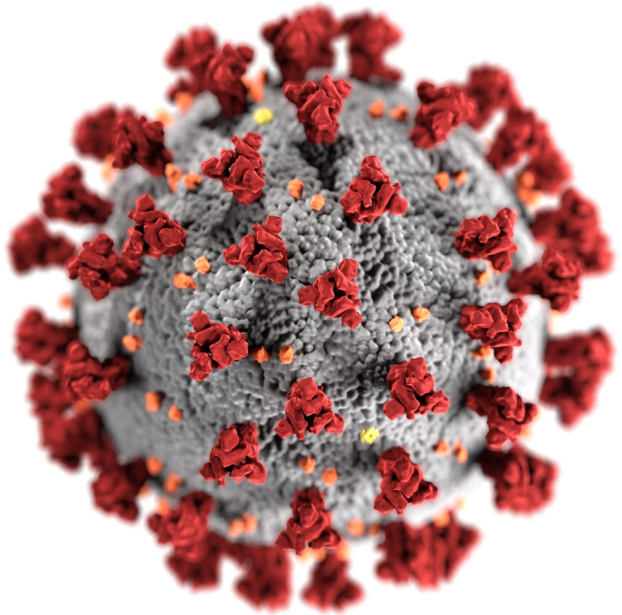
Infected



https://covid-19.sciensano.be/nl

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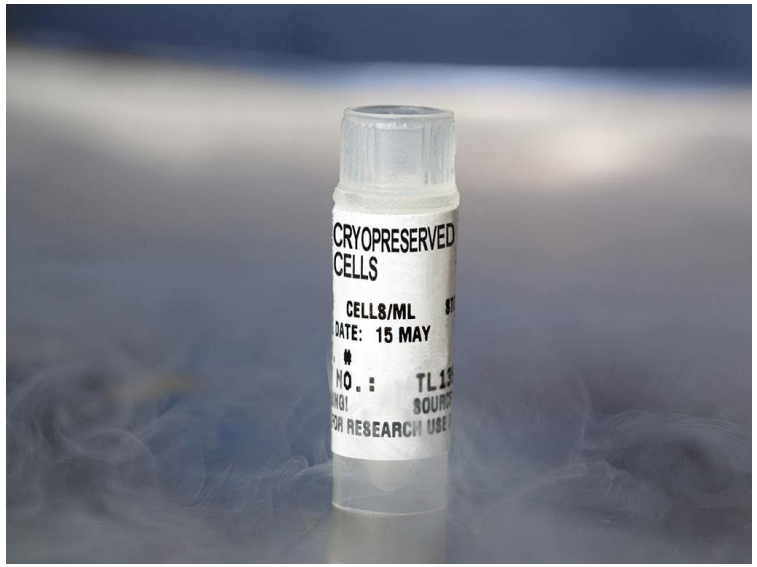

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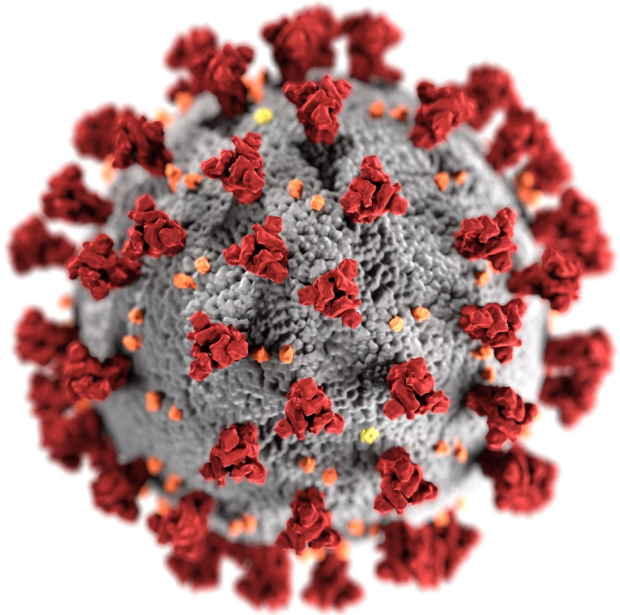
Normal Human Bronchial Epithelial (NHBE) Cells

Infected

Mock Treated



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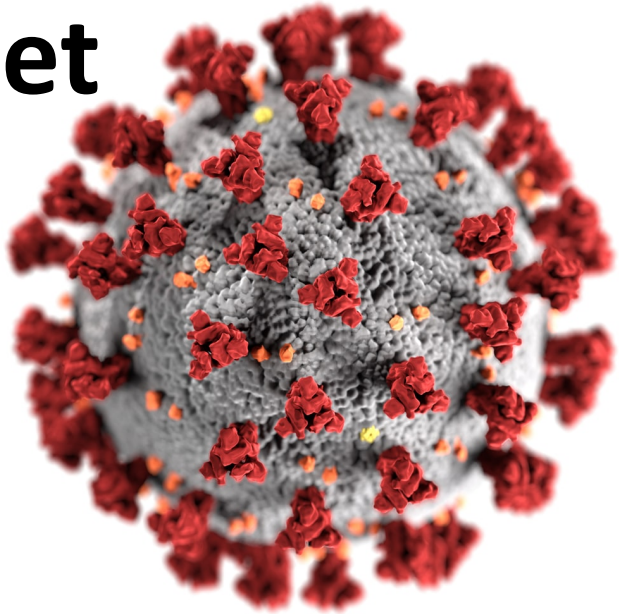

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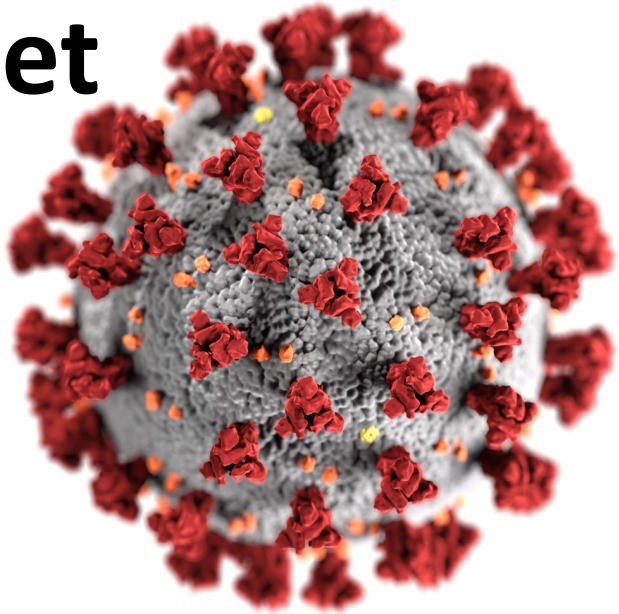

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Infected

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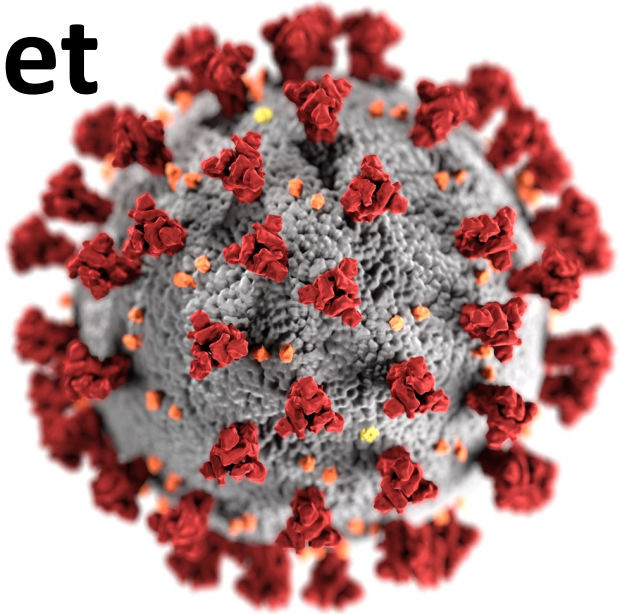
RNA-Seq

Comparison

RNA-Seq

Dataset



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Infected

Mock Treated

RNA-Seq

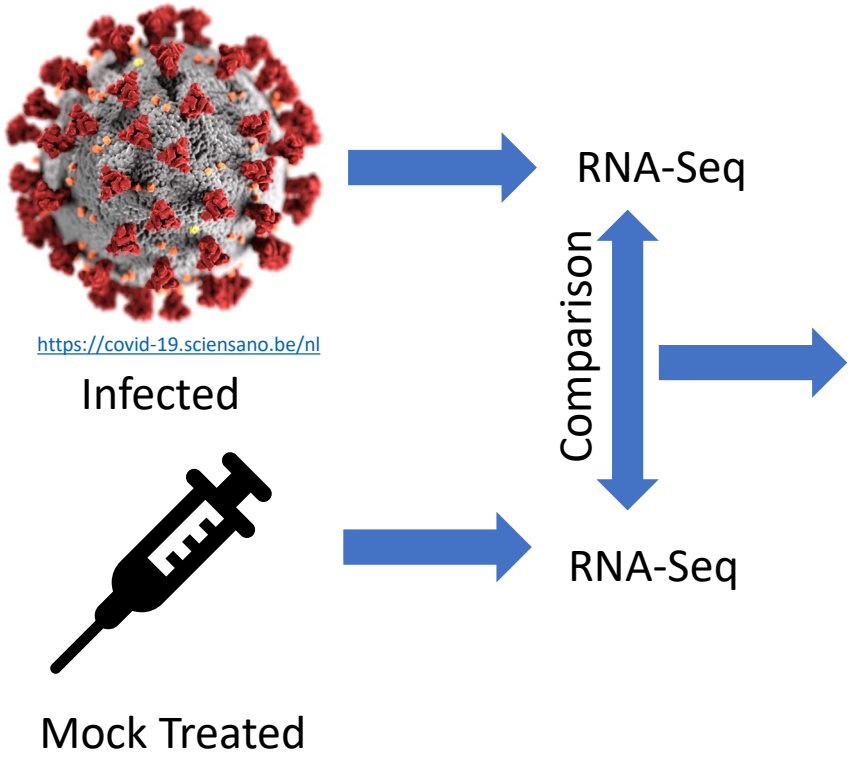
Comparison

RNA-Seq

Cytoscape

R

Questions?



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