

Exercise #4

4.1 Complete virus query

Go to <http://viruses.string-db.org>, and select **Complete Virus** from the menu on the left. In the **Virus dropdown**, enter “*Measles*”, and the **Host dropdown** can be left as auto-detect to detect the host with the most interactions, in this case, *Homo sapiens*. Click **Search** to retrieve the network.

4.2 Inspect virus evidence

Click on the **edge** connecting the measles virus **P/V protein** and the human **STAT2 protein**.

- *What types of evidence support an interaction between these proteins? List two publications that the evidence comes from.*

4.3 Single virus protein query

Click on the logo at the top of the page to go back to the main search screen. Select **Virus by Single Protein** from the left, and then enter “P” as the **Virus Protein Name** and “**bacteriophage lambda**” as the **Virus**. The **Host** can again be left to auto-detect *E. coli*. Protein P is responsible for the bi-directional replication of phage DNA.

- *Which host proteins does P interact with?*
- *What types of evidence supports these interactions?*