Assignment 9.10.2025

Explore Files from DepMap

In the data folder of week 4 you find 3 files:

- Achilles_gene_effect.csv
- Achilles_raw_readcounts.csv
- CCLE_gene_cn.csv

If you want to learn more about these files you can explore https://depmap.org/portal/. In the fourth week we will work with these 3 files only and use them for target identification. As a preparation for the following lecture this assignment asks you to explore the files.

Achilles_raw_readcounts.csv

- How many rows and how many columns?
- What are the rows? What are the columns?
- How many experiments have been done on cell line CCK-81?
- What is the minimal, maximal, average read count in replicate A of the experiment on CCK-81?
- Which sequence(probe) has the highest read count?
- Which sequence(probe) has the highest average read count over the 3 replicates?
- In which other experiment with its replicates do we find the highest average read count for the same sequence(probe)?

Achilles_gene_effect.csv

- https://depmap.org/portal/cell_line/ACH-000963?tab=overview says that cell line CCK81 has DepMap ID: ACH-00963
- How many rows? How many colums?
- What are the rows? What are the columns?
- Which gene has the highest value for this cell line? Which gene has the lowest value?

CCLE_gene_cn.csv

- How many rows? How many colums?
- What are the rows? What are the columns?
- Which cell line is most similar to CCK81?