

Lab sheet 1
NCBI overview and PubMed database

Objectives:

- To be familiar with NCBI interface.
- Using PubMed database to construct a search.

Use NCBI database to answer the following questions:

1. Retrieve all records of **cancer**. Which database returns the highest number of hits?
2. Retrieve all records of **cancer** caused by *BRCA1* mutations.
3. How many articles published on **bone marrow**? What happen if you search only for **bone**?
4. How many articles published about **osteoporosis** related to **vitamin D**?
5. How many articles published about **osteoporosis** and not related to **vitamin D**?
6. Find citations on **cancer** caused by *BRCA1* or **P53**.
7. Search for all articles about **epigenetics of Alzheimer's disease**. Sort the articles by best match.
8. Search for a review article about **colorectal cancer molecular basis**.
9. How many free texts published on **oxytocin**?
10. How many texts published on **human oxytocin**?
11. Send one of the articles to the clipboard. Remove the article from the clipboard.
12. Copy the citation of an article in the style APA.
13. Find PMID of an article.
14. Send the article to citation manager program.
15. Send an article to your e-mail.
16. Social anxiety is a form of anxiety characterized by continuous fear of one or more social or performance situations. Although multiple treatment modalities exist for social anxiety, they are effective for only 60% to 70% of patients. Could it be possible that oxytocin can be a potential therapeutic option for individuals with social anxiety?? Search PubMed for evidence.
17. How many articles published from **King Saud University** in **2023**?
18. How many articles published by *The Lancet Oncology*?
19. Search for all published articles written by *Prof. Sooad Aldaihan*.

20. There is an article in *the New England Journal of Medicine* on Williams-Beuren syndrome written by Dr. Barbara Pober. Construct a specific search on PubMed to find this article.
21. Find your PubMed search history.
22. Search for a PMC article about **hepatitis** and download it as pdf. Save the citation as RIS file.
23. Find two similar articles to the previous article.
24. Using MeSH term, search for **immunology in cancer**.

Exercise:

In a Word document, answer the following:

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- How many free articles published on human *BACE1*?
- How many texts published on cancer caused by p53 mutations in 2021?
- Using MeSH term, search for genetics of osteoporosis.
- How many articles published by *PloS one*?
- Search for a PMC article about diabetes mellitus:
 - What is the PMCID?
 - Download as pdf.
 - Copy the citation of the article in APA format.