

Homework

Aim of the work To be able to report information research methodology in order to justify the choice of an experimental model (please answer the 3 assignments)

Theory A good literature search of 3R experimentation information is based on

- a well formulated need of information (=research question)
- if necessary, a research question is divided into sub-questions.
- each sub-question contains 1 to 3-4 maximum search components

Good advice Use what you learned in the online beginner course and test!

Search subject “Which mice, or non-vertebrate, or in vitro models are used to study Huntington disease?” (Huntington disease and the 3Rs)

Assignment 1

Perform a search using keywords reflecting the above question in two or three databases. Report your search strategy including search strings, selected tools, and corresponding most relevant references. (see example p. 3)

Basic search techniques:

- Free search: Combine keywords to formulate a query using **boolean operators** (AND, OR, NOT), **phrases** (“...”) and/or **wildcards** (*, ?).
- If available use the **controlled vocabulary** (e.g. MeSH terms in PubMed).
- Use **filters**
- Use **citations** (cited or citing articles) and **related articles** to find new references (Google Scholar, Web of Science, Scopus)

Information resources:

- The search can be performed with the following databases:
PubMed, PumedCentral, Embase, Web of Science, Scopus, Go3R, Sciencedirect, Springer protocols, Wiley, Protocols, CRCNetbase, library catalogues (e.g. Swissbib, NEBIS, RERO).

Assignment 2

Write down a paragraph:

- A. According to what criteria did you choose these databases?
- B. Compare the selected tools: what is similar, what is different?
- C. Do you think that your strategy is relevant to answer the question?

Assignment 3

Transformation of the query towards systematic review compliance

Transform the original question "Which mice, or non-vertebrate, or in vitro models are used to study Huntington disease?" into 3-4 sub questions, each containing following Search Components (SC):

SC1 Intervention/Exposure

SC2 Disease of interest/Health problem

SC3 Animal/Animal species/Population studied

(SC4 Outcome measures)

Example of reported equations and tools for search methodology reporting

For my strain selection, besides commercial information on transgenic inducible mouse for Huntington studies, I want to know about research papers using them

Keywords/equations	Tools / Alerts	Number of results/ / relevance	Selected useful references
Search of May 2012			
animal? AND (model? OR laborator*) AND (neurodegenerative OR dementia OR Huntington)	NEBIS Filter books Term search in title	46/ Good	[1]-[3]
(Tet-on OR tet-off OR Tet OR "inducible mouse" OR "inducible mice" OR "conditional mouse" OR "conditional mice") AND Huntington	WOS	28 Publication date display / Good	[4]-[5]
	WOS	28 <i>Times cited</i> display / Good	[6], cited 606x!
(Tet-on OR tet-off OR Tet OR "inducible mouse" OR "inducible mice" OR "conditional mouse" OR "conditional mice") AND Huntington	Scopus	30	[7],[8]
(Tet-on[tiab] OR tet-off[tiab] OR Tet[tiab] OR "inducible mouse"[tiab] OR "inducible mice"[tiab] OR "conditional mouse"[tiab] OR "conditional mice"[tiab]) AND (huntington[tiab] OR Huntington disease[mh])	Pubmed	19	[9]
(Tet-on[tiab] OR tet-off[tiab] OR Tet[tiab] OR "inducible mouse"[tiab] OR "inducible mice"[tiab] OR "conditional mouse"[tiab] OR "conditional mice"[tiab]) AND (huntington[tiab] OR Huntington disease[mh])	Pubmed Alert	1-2 / months	
(Tet-on OR tet-off OR Tet OR "inducible mouse" OR "inducible mice" OR "conditional mouse" OR "conditional mice") AND Huntington	WOS Alert	1-2/ months	
[6]	WOS citation alert	1/week	Once per month is enough

Corresponding bibliography

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