

Literature Research, Management

Christof Geldmacher, PhD
Institute for Tropical Medicine and Infectious Diseases
University of Munich

Learning objectives

- Overview how I conduct Literature Research during preparation of Manuscripts
- Use of Endnote programme to manage references when writing scientific texts
- Using the Internet to find information & data.
- Knowledge about different online tools.

Structure of lecture

1. Basic advice on literature research and management (hand out)
2. Endnote training to retrieve references from pubmed and add them in a publication
3. Let`s surf together and look for data...eg about a particular pathogen.

Useful tips for Literature management

- **Review: Interaction between HIV and TB : HIV induced Immune defects and the development of active Tuberculosis**
2500 words
- 1. If you start from scratch: Recent review articles can be a good source of other relevant literature in your field. Otherwise: Ask your supervisor, colleagues....
- 2. Use online publication databases:
 - **Pubmed** <http://www.ncbi.nlm.nih.gov/sites/entrez/>
 - **Google scholar** (<http://scholar.google.de/>)
 - Google scholar includes number of citations of a scientific article and the articles that cite a given article: Can be informative to look at these as well...
- 3. If possible, be online when doing literature research.
If not: Copy & paste/write down Articles of Interest (eg Title, Author, Year, Journal)

Useful tips for Literature management

4. Interesting articles or at least the abstracts can be accessed quickly usually by a direct link from pubmed. Several Journals are now offering free online access after the article is 6months or 1 year old.
5. For scientists from none-industrialized countries: Free access to almost all scientific publication through:
 - <http://hinari-gw.who.int/>
 - Make an account and you should get access
6. If you cannot find access to an article online, sometimes it is worth trying to write an Email to the corresponding author and kindly request the .pdf file

Online Data Mining

Learning objectives

- Knowledge about which data can be easily found on the internet.
- Where to find what data.
- Knowledge about different online tools.
- Use of Endnote programme to manage references when writing scientific texts

Useful tips for Literature management

7. Sometimes it can be good to just copy & paste abstracts into a word document when online and save it. At a later time point, when you are offline, you can read them and decide which articles you want to get.

8. If you are looking for a specific publication in pubmed:

- copy paste the title or parts of the title
- or author, year, and a key word (eg: HIV)

9. Referring to online sources and databases

Be vigilant when using data from web pages. “Think critical”

- Never forget to mention the data source.
- When referring to data found on a web page in a publication always include URL address and the date the webpage was accessed.

Online Data mining

- **The internet is an almost infinite source of data and useful material for Biomedical research, but there are many other valuable sources, too**
- **Many public „databases“,**
 - Google and Wikipedia
 - Pubmed – many important data have been published in scientific publications !!!
 - Information about any diseases, including global epidemiological data
 - Genomic & protein data,
 - tools for statistical and sequence analysis,
- **BUT: Be vigilant when using data from the internet**

Online Data mining

- **Colleagues, friends and other scientists can be a great source of data. ASK and COMMUNICATE ! Conversations with people in the field are often very revealing and help seeing things from different perspectives**
 - MDs, lab based scientists and epidemiologists all can have a different view on a particular subject. Communication is the key.
- **Never forget to mention a data source.**
- **When referring to data found on a web page in a publication always include URL address and the date the webpage was accessed.**

online Data bases-general

- Online lexica - www.wikipedia.org
- **Google anything** www.google.com
- **disease outbreaks**
- <http://www.who.int/csr/don/archive/country/en/index>
- <http://www.who.int/csr/don/archive/year/2010/en/index.html>
- www.cdc.gov

- scientific articles, proteins, genes
<http://www.ncbi.nlm.nih.gov/pubmed/>
- geneblast
<http://blast.ncbi.nlm.nih.gov/Blast.cgi>
- HIV databases
<http://www.hiv.lanl.gov/content/index>
- HIV genetic sequences, immunological epitopes, drug resistance-associated mutations, and vaccine trials.

- <http://www.denguedb.org/>
- www.tbdb.org
- www.healthmap.org (current outbreaks, interactive)
- www.immuneepitope.org antibody and T cell epitopes

- material safety data sheets just google “MSDS” plus “compound”
- <https://www.cia.gov/library/publications/the-world-factbook/>

how to cite online databases:

- organization, website, date of access

Let`s design a Dengue virus vaccine TOGETHER in 1 hour

- **Group1:** Clarify: What diseases are associated with Dengue Virus infection
- **Group 2:** Describe Global epidemiology of Dengue Virus infection
- **Group 3:** Identify protein sequences to include in OUR Dengue vaccine

Groups need to interact with each other in order to succeed

1 hour time to find data and
prepare presentation

5-8 Minutes Powerpoint
presentation from every group
(starting with Group 1)