



Writing a lab report

Please refer to your course instructor for any format requirements (length, type font and size, heading, margins etc.) and the general structure of the protocol.

- If – with permission from your course instructor – you use data from other (lab) groups, it must be clearly indicated as such.
- You must specify the source for all figures that you have not made yourself.
- Figures and tables should be numbered (figures and tables should have separate numerical series) and accompanied by a legend. In general, figures legends are placed beneath the figure, table legends are placed above the table. The font in the legends is usually at least one grade smaller than the main-text grade. Place your figures and tables in your document in the order that they occur in the text.
- Wikipedia and other online-databases or internet sources are not necessarily reliable scientific sources since their published contents do not require peer review. Wikipedia should not be the only source in your literature/topic research. Using Wikipedia is, however, permitted on the condition that it is properly cited (see citation examples).
- Before you submit your protocol, check for correct spelling and grammar (spell-checkers are allowed!).

"Recycling" (even of parts) of old protocols from fellow or former students is plagiarism!

Plagiarism is defined as the adoption and usage of someone else's work or ideas without proper acknowledgement. Plagiarism is not tolerated in the faculty and will be sanctioned accordingly.

Preparing an oral presentation

- Check early-on with your instructor to clarify what is expected of you (format, length, focus, content).
- When using PowerPoint or other presentation software, the sources of figures or photo material should be cited directly on the respective slide. If no direct references are necessary, include a bibliography at the end of the presentation.
- If you are giving an oral lab report or scientific talk, you should acknowledge the people who contributed and/or supported your work, as well as funding agencies for the project. Usually acknowledgements are given at the end of a talk.
- If you use other media (e.g. video clips, audio files) please also remember to cite the sources (see citation examples).
- Wikipedia and other online-databases or internet sources are not necessarily reliable scientific sources since their published contents do not require peer review. Wikipedia should not be the only source in your literature/topic research. Using Wikipedia is, however, permitted on the condition that it is properly cited (see citation examples).
- Citation rules also apply for handouts!



Writing a thesis or scientific paper

The structure of a scientific paper should conform to the standard format: introduction, material and methods, results, discussion, references, attachments (if applicable).

In some cases abstracts or summaries may be required. Some guidelines:

- The **introduction** generally contains many citations, since you put the topic and your goals in a scientific context using other references. **Paraphrase** and quote carefully. Paraphrasing is expressing the meaning of something (written or spoken by someone else) by rewording. When paraphrasing, always cite your source! Literal quoting of texts is not accepted scientific practice, even if the source is cited.
- Make sure that the descriptions of the **materials** used and **methods** applied are accurate and complete, including suppliers.
- The **results section** should contain only very few quotes, if any. Here you present your own work and data.
- Figures and tables should be numbered (figures and tables should have separate numerical series) and accompanied by a legend. In general, figures legends are placed beneath the figure, table legends are placed above the table. The font in the legends is usually at least one grade smaller than the main-text grade. Place your figures and tables in your document in the order that they occur in the text.
- In the **discussion section** you incorporate your results in the appropriate scientific context, interpreting your own data, as well comparing it with other scientific works. Make sure to clearly cite data or interpretations from other sources.
- Quote consistently! Within the text, usually the first and the second author are given (if there are more than two authors, use "et al.") and the year (e.g. Mayer, 2000; Mayer and Bayer, 2007; Mayer et al., 2012).
- It is recommended to use citation management programs for archiving your literature and the preparation of your reference list. The University Library offers *Citavi* and *EndNote* free of charge to all LMU students and staff through a campus license.
- The **reference section** lists the publications by author in alphabetical order, followed by the year of publication, title and relevant publishing information (see citation examples). Online publications should also include the doi (digital object identifier).
- Wikipedia and other online-databases or internet sources are not necessarily reliable scientific sources since their published contents do not require peer review. Wikipedia should not be the only source in your literature/topic research. Using Wikipedia is, however, permitted on the condition that it is properly cited (see citation examples).
- If a web source has no given authors, cite it at the end of the reference list under "Internet sources".
- Double-check whether all sources cited in the text are included in the reference list and vice versa. Only references that are actually cited in the text should be listed in the reference section.
- At the end of the paper, you should acknowledge the people who contributed and/or supported your work, as well as funding agencies for the project.



Citation guidelines and examples

According to the current consensus for scientific writing, sources are cited within the text (not in footnotes). Citation formats may differ, but the critical information is always the same. This is important to guarantee universal verifiability of the reference, and to correctly acknowledge intellectual property of other authors.

Standard sources for citation guidelines:

- **APA-Standards (American Psychological Association)**
- **MLA-Guide (Modern Language Association)**

Selected examples:

Journal article:

Hammann, M (2003) Aus Fehlern lernen. *Unterricht Biologie*, 287, 31–35.

Gamelin FX, Baquet G, Berthoin S, Thevenet D, Nourry C, Nottin S, Bosquet L (2009) Effect of high intensity intermittent training on heart rate variability in prepubescent children. *Eur J Appl Physiol* 105:731-738. doi: 10.1007/s00421-008-0955-8

Article with doi: Slifka MK, Whitton JL (2000) Clinical implications of dysregulated cytokine production. *J Mol Med*. doi: 10.1007/s001090000086

e-journal article: Münz, S (2001) Selfhtml. HTML-Dateien selbst erstellen. Version 8.0. <http://selfhtml.teamone.de/index.htm> (viewed: 03.02.04).

Online document:

Cartwright J (2007) Big stars have weather too. IOP Publishing Physics Web. <http://physicsweb.org/articles/news/11/6/16/1>. Accessed 26 June 2007

Wikipedia: the quotable (permanent) URL for a Wikipedia entry can be found in the left-hand navigation column under Tools/Permanent Link

In: Wikipedia, Die freie Enzyklopädie. Version: 23. Mai 2009, 14:38 UTC. URL: <http://de.wikipedia.org/w/index.php?title=Zitierf%C3%A4higkeit&oldid=60350199> (Abgerufen: 17. September 2009, 17:10 UTC)

Textbook:

Alberts, B, Bray, D, Lewis, J, Raff, M, Roberts, K, Watson, JD (eds.) (1989) *Molecular Biology of the Cell*, 2nd Edition (pp. 209-213). New York & London: Garland Publishing.

Monograph (book):

South J, Blass B (2001) *The future of modern genomics*. Blackwell, London

Book chapter:

Brown B, Aaron M (2001) The politics of nature. In: Smith J (ed) *The rise of modern genomics*, 3rd edn. Wiley, New York, pp 230-257

Volume collection:

Seidel, T (2011) *Lehrerhandeln im Unterricht*. In E. Terhart, H. Bennewitz & M. Rothland (Hrsg.), *Handbuch der Forschung zum Lehrerberuf* (S. 605-629). Münster: Waxmann.

Dissertation:

Trent JW (1975) *Experimental acute renal failure*. Dissertation, University of California

Audio document/video clip:

NAME, first name. Year of production. *Title: Title extension*. Genre. Channel/broadcasting company. Location, date of broadcast:

- SCHLÖNDORFF, Volker / TROTТА, Margarethe von (Director). 1975. *Die verlorene Ehre der Katharina Blum*. Spielfilm nach der Erzählung von Heinrich Böll. WDR 07.08.2006, 20:15.
- WILSON, Ryall (Director). 1981. *Creation vs. Evolution: "Battle of the Classroom"*. Video cassette. PBS Video, 58 min.

Username, title of the video clip, date of video publication, the URL, and the date of viewing:

- ItsJustSomeRandomGuy: Hi, I'm a Marvel...and I'm a DC: Wolverine (Deadpool) and Watchmen. 01.05.09. <http://www.youtube.com/watch?v=G1R5PhReY5k> (viewed: 31.07.09).