

Official statement by the Doctoral Degree Committee of the Faculty of Biosciences concerning plagiarism

In the following we would like to state Heidelberg University's Faculty of Biosciences' official position concerning the prevention of plagiarism in PhD theses. This should also answer some frequently asked questions regarding this topic.

Please note that these guidelines are not an exhaustive set of rules and that it is always necessary to follow the general guidelines concerning good scientific practice throughout the process of writing a thesis. These can be found at: <https://www.uni-heidelberg.de/en/university/about-the-university/good-academic-practice> and <https://backend.uni-heidelberg.de/de/dokumente/satzung-zur-sicherung-guter-wissenschaftlicher-praxis-und-zum-umgang-mit-fehlerverhalten-in-der/download>

If in doubt, please consult your supervisors!

1) Avoiding Plagiarism

- It is plagiarism to copy text (of whatever length) and/or figures from others, and depicting those in a thesis without clearly giving reference and/or quoting (if copied text is used) the used material.

Example:

The following sentence is a direct copy from *Lang et al., Responding to Possible Plagiarism, Science* **232**, 1293-1294 (2009):

The increasing availability of scientific literature on the World Wide Web has proven to be a double-edged sword, allowing plagiarism to be more easily committed, while simultaneously enabling its simple detection through the use of automated software.

ref1: Lang et al., *Science* **232**, 1293-1294 (2009)

It is NOT sufficient to give reference at the end of a sentence:

The increasing availability of scientific literature on the World Wide Web has proven to be a double-edged sword, allowing plagiarism to be more easily committed, while simultaneously enabling its simple detection through the use of automated software.

ref1: Lang et al., *Science* **232**, 1293-1294 (2009) (ref1).

A literal quotation HAS to be cited as follows:

"The increasing availability of scientific literature on the World Wide Web has proven to be a double-edged sword, allowing plagiarism to be more easily committed, while simultaneously enabling its simple detection through the use of automated software."

ref1: Lang et al., *Science* **232**, 1293-1294 (2009) (ref1)

2) Is paraphrasing plagiarism?

- Copying a text, e.g. one or several paragraphs and then slightly changing it (order of words, individual words, etc.), i.e. paraphrasing, does NOT prevent plagiarism!

Overall, the only way to clearly prevent plagiarism in the text, is to actually write the thesis yourself: Close all books/articles while writing and use them later as references.

Example:

The increasing availability of scientific literature on the internet has proven to be a double-edged sword, allowing plagiarism to be easily committed, while simultaneously enabling its easy detection through the use of automated software.

This would still not be considered to constitute own text. Do not start to wonder, how much paraphrasing you would have to do to create your own text! If you write it yourself without first copying and then starting to change, it will automatically be sufficiently dissimilar to anything else.

3) How should I represent joint scientific work in my PhD thesis?

- Experimental or computational results depicted in a PhD thesis that were not produced by the respective PhD student have to be clearly marked as such.

Thus, every figure or table legend that belongs to a figure or table containing such results has to state that the data was produced by person x. This also holds true for results produced by other students in the lab, even when supervised by the PhD student. If the results were commonly achieved, the legend should contain a formulation like "data produced jointly with X".

- Text that has been part of a publication of such joint work CANNOT be copied and pasted into the PhD thesis without clear quotation/citation.

Literal copying is only possible, if the original text was completely written by the PhD student him/herself **and** all results therein are his or hers, or if the text is marked with quotation marks and cited. In any case, text copied from a manuscript should be kept to a bare minimum, even if you have initially written the original text. (See also §5 below).

- The same rules apply when using text from unpublished joint work that is part of a manuscript draft or submitted paper. Such text should be quoted and referred to as "author 1, author 2, author 3, manuscript in preparation", or similar.

Examples:

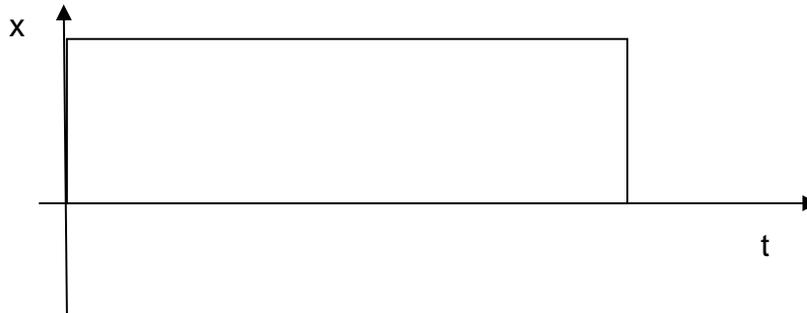


Figure 1 depicts the development of the concentration of x over time. Experiments performed by Mark Mustermann.

Text copied from a joint manuscript:

"We studied a time-course of the concentration of x after perturbation (ref 2)." -> with ref 2 pointing to the respective manuscript.

4) How can I avoid self-plagiarism?

- Reusing your own text from a manuscript (published or in preparation), grant application or any other form of publicly available writing, is considered self-plagiarism. Self-plagiarism is to be avoided. If for scientific reasons text is reused, it needs to be kept to a bare minimum and needs to be cited properly in the thesis. It might also be necessary to sort out any copyright issues with the original publisher.

Example:

The text of the following (paragraph, section, chapter) has been taken from (ref 3) and was originally written by myself:

When analysing the increase of the concentration of x after perturbing the cells with cytokine y , I noticed that

5) Why are cumulative dissertations not allowed at the Faculty of Biosciences?

- A dissertation is a 'single-author publication' intended to demonstrate the author's ability to do specific independent scientific research.

The problem with a cumulative dissertation is that your previous publications in scientific journals certainly include several authors - and thus you cannot simply declare these publications as your own works. After all, it remains completely unclear what the individual contributions of each author were, and you run the risk of making the contributions of others appear to be your own work - which would then be plagiarism.

Even if you wrote the journal articles yourself, it does not mean that all scientific contributions are yours. This means that you must clearly distinguish and identify your own work from all other contributions (ideas, experiments, texts...) of third persons. In every single sentence on every page of your thesis it must be clear who did what.

- It is mandatory to write the thesis in first person ("I have", "I did") and then appropriately name all others who have additionally contributed to the thesis.

For scientific reasons, you may take over a minimum from earlier own publications (e.g. illustrations, technical descriptions), **however**, you must cite yourself and it is mandatory that the differentiation of your own performance from that of other authors must be made clear here as well.