

Best Practices

- Use of AI Tools in Reserch
 - Basic Rules for Using AI in Research
- Referencing the Use of AI Tools in Publications

Use of AI Tools in Research

Basic Rules for Using AI in Research

When using AI tools in your research conducted as part of the MCL Lab, you are required to store all prompts that you use to communicate with tools like ChatGPT, similar to a "lab book" that biologists use when using the laboratory. In this log book that you should update regularly, you should list all prompts and answers and conversations in order to make sure that the use of artificial intelligence in your research is transparently documented.

If you use the tools to write papers -- be it in collaboration or alone -- you are also required to list all of the prompts in the supplementary material accompanying your study.

We require this transparency from all of our researchers in order to make sure that we prevent errors resulting from problematic AI responses as well as a transparent usage of tools in science.

The general recommendation is to avoid using any extended tools that produce texts that you have not produced on your own. While it is fine to use tools for translation in order to learn how to organize your thoughts in languages that are not your mother tongue, using tools to summarize texts for you or writing entire parts of your paper and code is something that we recommend to avoid in general, as it won't help you in producing better work, but will rather on the long run deprive you of the ability to develop thoughts on your own and put them into writing.

Referencing the Use of AI Tools in Publications

You are required to not only mention but also document all usages of artificial intelligence tools that helped you to produce

- texts,
- thoughts,
- images,
- visualizations,
- data, and
- code

in your research. Thus, we recommend that you follow the recommended practice of writing a [lab book](#) when conducting your research at the MCL lab and later sharing all those parts of the prompts that you used to create your paper when submitting it along with the supplementary material accompanying your paper.