

## Guidelines for Generative Artificial Intelligence use in Research at Sheridan

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Generative AI (GenAI) is a type of artificial intelligence that is capable of generating new content such as text, images, or other media. As with other new technologies, it can be harnessed as a powerful tool which, when used appropriately, can contribute to efficient and impactful research. There are several considerations related to using GenAI in applied research including, but not limited to, intellectual property, privacy, research integrity, research and academic writing, and bias. While these guidelines apply to the use of any GenAI software, it is recommended that employees and students at [Sheridan College use MS Copilot](#) instead of other free tools available on the internet. GenAI is a rapidly evolving field, and this guidance is subject to change.

If you have any questions, feedback, or concerns, please do not hesitate to reach out to the Generator Support Office team at [generator@sheridancollege.ca](mailto:generator@sheridancollege.ca).

### Usage Philosophy

Generator at Sheridan has developed the following guidelines for the use of GenAI in research at Sheridan College. This guidance applies to all members of the research community, including faculty, staff, students, and anybody completing research under the auspices of their role at Sheridan College, either funded or unfunded. Mentors and supervisors are responsible for ensuring students on research projects are aware of and are following these guidelines through regular conversations about the intended use of GenAI in research.

### Guidelines for the responsible use of GenAI in research:

- **Role of GenAI Tools:** GenAI tools may be used as a supplemental tool to assist applied research activities. As one example, in the drafting and refining of grant applications, GenAI tools may be employed to enhance the articulation of research objectives, to generate initial drafts of the literature review, and provide notes on clarity or missing rationale. There are, however, specific cautions around the use of GenAI for applied research. Please see the following for guidance on the use of GenAI tools.
- **External Guidance:** While these guidelines apply to all who are considering using GenAI in their research at Sheridan College, there is also external guidance which must be considered:
  - If you are considering using GenAI in grant application writing, first review Science.gc.ca's [Advice from the ad hoc generative AI panel of external experts](#) and any guidelines specific to the funding body to which you are applying.
  - While guidelines may differ from field to field, it is largely accepted that GenAI cannot be provided authorship on scholarly work (e.g., [Committee on Publication Ethics](#), [Nature](#), [International Committee of Medical Journal Editors](#)). Please review regulations for anywhere you will be submitting to or disseminating your work.
- **Human Oversight:** GenAI may be used to assist but not replace intellectual contributions to applied research. Those who are involved in proposing, reviewing, performing, or disseminating research bear the responsibility for familiarizing themselves with these guidelines governing the

use of GenAI in their research. This could include properly attributing ideas and credit through appropriate citation and verifying all information created by GenAI by relying on authentic sources and verifying accuracy of content (see below). Researchers using GenAI are ultimately responsible for the work that they produce and disseminate.

- **Permissions for Proprietary Information:** Uploading proprietary information to GenAI (including as part of the drafting process of a grant application) is a form of release of that information to a third party and is akin to publicly releasing this information. Disclosure of this proprietary information or other faculty/staff [intellectual property](#) exposes both individuals and Sheridan College to potential breaches of privacy and security. Similarly, uploading research data, grant proposals, or analytical results into GenAI is effectively to disclose that content publicly. Specifically:
  - Any intellectual property that belongs to partners cannot be submitted to GenAI unless otherwise explicitly specified in the Collaborative Research Agreement. Further, any usage of GenAI tools must be explicitly outlined in the Collaborative Research Agreement with any research partners.
  - Where applicable, researchers should also consider implications for their own intellectual property prior to entering it into GenAI.
  - Only de-identified human participant data may be submitted to GenAI for purposes such as data analysis or visualization. If human participant data is going to be used with GenAI, this must be outlined in the REB Application and Informed Consent document. Please contact the SREB Coordinator at [sreb@sheridancollege.ca](mailto:sreb@sheridancollege.ca) should you have any questions about using GenAI with human participant data.
  - Where applicable, researchers should also consider implications for their own intellectual property prior to entering it into GenAI.
- **Documentation and Disclosure of GenAI Usage:** The use of GenAI should be clearly and transparently disclosed and documented at all stages of the research project (e.g., idea curation, grant writing, data collection, data analysis, dissemination, etc.). A detailed log of interaction with GenAI tools shall be maintained and made available upon request. This log will include specifics of the queries made to the GenAI tool and examples of its contributions to the text, underscoring the transparent use of this technology. Disclosures are required to all partners in the Collaborative Research Agreement, to all human participants in the informed consent document, in research dissemination (e.g., reports, manuscripts, presentations, etc.), to the Sheridan Research Ethics Board (if including human participants), and the Generator Support Office (for funded research projects).
  - As with the secondary usage of any information, the use of GenAI must be properly cited in any research outputs. There are proper citation guides for many writing styles (e.g., APA, MLA, Chicago, IEEE, etc.). See the Sheridan Library and Learning Services [webpage](#) for how to reference and disclose GenAI in your work.
- **Potential Risks in the Usage of GenAI:** GenAI produces output based on previously existing data and thus reflects biases and other limitations of those data which must be considered and acknowledged by researchers. It is the responsibility of the researcher to verify all information and references produced by GenAI and to properly cite all relevant information.
  - The output may be inaccurate or entirely fabricated.

- GenAI may create content that infringes on others' intellectual property (IP) or copyright-protected works or may create content that leads to allegations of plagiarism or other forms of misconduct against the researcher/scholar.
- The prompts used with GenAI may introduce bias ("garbage in, garbage out"). Please see [prompting suggestions](#) by Sheridan Library and Learning Services.
- **Can I Use GenAI in my work?** Please see the following examples about how GenAI can be incorporated into your work by adhering to the above guidance.
  - If you are writing a grant application that does not include proprietary information - likely. GenAI may be used as a supplemental tool if adhering to the above guidance. It is the responsibility of the researcher to ensure using GenAI to write a grant application is compliant with the funding agency's and partner's requirements.
  - If you are preparing a research report for use by an external partner – no. You cannot use GenAI because you would not release this content publicly.
  - If you are preparing a manuscript that will be submitted to a journal for publication and made widely available – maybe. You may be able to use GenAI because this document will be released publicly. Check specific journal guidelines about the use of GenAI in writing.
  - If you are considering using GenAI to visualize or analyze de-identified human participant data – yes, so long as the participants have consented to this use of their data in the informed consent form and it has been approved in your SREB application. Researchers must always keep a clean version of their data archived outside of its use in GenAI.
  - Please contact the Generator Support Office should you have any questions about whether or not you can use GenAI in your research and dissemination activities.

## References

Note: Sheridan wishes to acknowledge The University of North Carolina at Chapel Hill as a source for this document.

The University of North Carolina at Chapel Hill (2023). Generative AI Usage Guidance: Research Community. Retrieved from: <https://provost.unc.edu/generative-ai-usage-guidance-for-the-research-community/>

## Other sources

Committee on Publication Ethics (2023). Authorship and AI tools. Retrieved from: <https://publicationethics.org/cope-position-statements/ai-author>

International Committee of Medical Journal Editors (2023). Defining the Role of Authors and Contributors. Retrieved from: <https://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html#four>

Nature (2023). Artificial Intelligence (AI). Retrieved from: <https://www.nature.com/nature-portfolio/editorial-policies/ai>