Common Elements in AI Chatbot Usage Guidelines for Academic Research

Preface: Responsibility and Evolving Policies in AI Chatbot Use

Before applying the general usage guidelines outlined below, researchers must consult the specific requirements of their field, academic journals, and funding agencies. Different disciplines and institutions may have varied expectations regarding the use of generative AI tools in research design, data analysis, authorship, and acknowledgment. What is considered acceptable in one context may not meet the ethical or professional standards in another.

Given the rapid development of AI technologies, institutions and publishers are committed to regularly reviewing and updating their policies to address new challenges and ensure ongoing research integrity.

1. Authorship Attribution

- **AI Tools Cannot Be Authors:** AI chatbots, including ChatGPT, cannot be listed as authors on academic publications. Authorship requires accountability, the ability to consent, and responsibility for the work—criteria that AI tools do not meet.

2. Mandatory Disclosure of AI Use

- **Transparency in AI Utilization:** Researchers are required to disclose the use of AI tools in their work. This includes specifying the AI tool used, its version, the purpose of its use, and the extent of its contribution.

3. Human Oversight and Responsibility

- **Accountability for AI-Generated Content:** Researchers must critically evaluate and verify any content generated by AI tools or underlying models. They bear full responsibility for the accuracy, integrity, and originality of their work, regardless of AI assistance.

4. Permissible Uses of AI Tools

- **Acceptable Applications:** AI tools may be used for tasks such as language editing, grammar checking, and formatting assistance. However, their use in generating substantive content, such as data analysis or interpretation, should be approached with caution and must be transparently disclosed. Uploading proposals to generative AI tools is prohibited (see point 7).

5. Privacy and Confidentiality Concerns

- **Data Protection:** Researchers should avoid inputting sensitive, confidential, or proprietary information into AI tools, as these platforms may store and use the data for training purposes, potentially leading to unintended disclosures.

6. Verification of AI-Generated Citations

- **Verification of References:** AI tools may generate fictitious or inaccurate citations. Researchers must verify all references and ensure that only legitimate sources are cited in their work.

7. Compliance with Specific Funding Agency Policies

- **Adherence to Grant Guidelines:** Funding agencies emphasize that applicants are accountable for the content of their submissions. The use of AI tools in grant applications must be disclosed, and applicants must ensure that AI-generated content complies with ethical standards and confidentiality requirements.
- NSF:
  - https://www.nsf.gov/news/notice-to-the-research-community-on-ai
  - NSF reviewers are prohibited from uploading any content from proposals, review information and related records to non-approved generative AI tools.
  - Proposers are encouraged to indicate in the project description the extent to which, if any, generative AI technology was used and how it was used to develop their proposal.
  - NSF will update the 2025 PAPPG to align with the requirements stipulated in this memorandum or with additional guidance and requirements as necessary.
- NIH:
  - https://grants.nih.gov/grants/guide/notice-files/NOT-OD-23-149.html
  - Notice about the prohibition of generative AI technologies in the peer review process.
  - Reviewers will be required to sign and submit an agreement certifying that they understand and will abide by these requirements.
- DOE:
  - As of June 2025, the U.S. Department of Energy (DOE) has not issued formal, binding policies specifically governing the use of generative AI tools—such as chatbots and large language models (LLMs)—in the preparation or review of research grant proposals. However, the DOE has developed comprehensive guidance documents that outline best practices and considerations for the responsible use of generative AI within the department.

8. Guidelines from Scientific Publishers

- **Adherence to Publication and Review Policies:** Most major scientific publishers allow the use of generative AI tools for language editing and formatting but require clear

disclosure of their use, and prohibit AI from being credited as an author. Authors and reviewers remain fully responsible for all content, with strict guidelines to ensure transparency, confidentiality, and research integrity. To protect the confidentiality of peer-reviewed materials, referees should not upload submitted manuscripts into AI tools.

- Elsevier
- IEEE
- Science
- Nature
- Wiley
- APS Physical Review Journals
- COPE (Committee on Publication Ethics)