



**POSITION STATEMENT ON THE INCORPORATION OF ARTIFICIAL INTELLIGENCE IN  
GRADUATE STUDENT ACADEMIC PRODUCTION**

The Lamar University College of Graduate Studies places a strong emphasis on upholding the utmost standards of integrity and ethical conduct in graduate research. All individuals engaged in research activities associated with the university are obligated to adhere to best practices throughout the entire research process, encompassing proposal development, execution, and review, as well as the reporting of research outcomes. Authors bear the ultimate responsibility and accountability for the content and methodology of their published and disseminated work.

The College of Graduate Studies entrusts the authority for permissions, authorization, and verification related to the use of generative AI to the respective thesis or dissertation committee for comprehensive exam takers and thesis or dissertation writers. Additionally, these responsibilities extend to the Principal Investigator (PI) in the context of graduate-level grant-based research.

Artificial Intelligence (AI) is an important arrival technology, significantly influencing higher education, especially in teaching and research. In the research domain, policies and guidelines governing the application of AI, particularly in the creation and evaluation of manuscripts, papers, and grant proposals, are continually evolving across federal agencies, academic journals, and educational institutions. The responsibility for staying informed about relevant policies and guidelines related to the use of AI programs and tools rests with investigators, project staff, and students. It is crucial to critically assess the reliability of these tools within the research environment (NIH, 2023).

Researchers, project staff, and students actively involved in AI-driven research activities must navigate through these evolving policies and guidelines. The following guidelines are designed to address key aspects of AI application in research:

- 1. No AI Authorship:** Authors, Committees, and PIs should note that the College of Graduate Studies adheres to the principle stated by the Committee on Publications (COPE, 2023). Consensus exists among journals and research communities that AI models cannot be listed as authors. AI models are ineligible for authorship recognition due to their inability to fulfill the necessary requirements. As non-legal entities, they cannot assume responsibility for submitted work, assert the presence or absence of conflicts of interest, or effectively manage copyright and license agreements (Committee on Publication Ethics [COPE], 2023; Zielinski et al., 2023; Flanagin et al., 2023). The notion of 'responsibility' extends beyond ownership, encompassing accountability as well. Generative AI cannot be acknowledged as an author since any attribution of authorship inherently entails accountability for the work, a responsibility that AI tools are incapable of assuming (Nature, 2023; Hosseini, Rasmussen & Resnik, 2023). Accountability, serving as a fundamental aspect of authorship, signifies liability and answerability for the produced work. Human authors must assume responsibility for the content, accuracy, factualness, or veracity of the data and analysis in their research. A thorough data privacy review is mandatory before incorporating any protected data set into a generative AI tool, regardless of its public availability, to ensure compliance with applicable laws and university guidelines on data privacy and security. This review is expected to be completed by the graduate student and verified by the student's faculty committee. Publicly accessible generative AI tools pose heightened privacy risks when handling research data, especially protected health information (PHI), personal identifying information, or other data protected by laws such as FERPA, as well as proprietary information.

2. **AI in Manuscript Writing:** Distinct journals and research fields impose varied requirements on the incorporation of AI in the writing process. Broadly, it is emphasized that "authors utilizing AI tools in manuscript composition, production of images or graphical elements, or in data collection and analysis must exhibit transparency by disclosing, in the Materials and Methods (or equivalent section) of the paper, the manner and specifics of AI tool utilization" (COPE, 2023; Zielinski et al., 2023; Flanagin et al., 2023). Authors bear the responsibility of ensuring the appropriateness and accuracy of AI-generated outputs. It is stressed that "authors should meticulously review and edit the outcomes as AI has the potential to generate authoritative-sounding output that may be inaccurate, incomplete, or biased" (International Committee of Medical Journal Editors [ICMJE], 2023; Hosseini, Rasmussen & Resnik, 2023).
  - a. **Transparency Requirements:** Authors using AI tools in writing, data analysis, or producing graphical elements must transparently disclose the AI tool's usage in the Materials and Methods section.
  - b. **Responsibility for Outputs:** Authors are accountable for ensuring AI-generated outputs are appropriate, accurate, and allowable by the publishing entity. Review and editing are crucial, as AI may produce authoritative sounding but potentially incorrect, incomplete, or biased content, also sometimes called "hallucinations."
3. **Citation of AI in Manuscripts:** Adhering to ICMJE standards, authors are urged to take precautions against plagiarism in AI-generated text and images (2023). Proper citation and attribution of any quoted material from AI-generated content are emphasized (ICMJE, 2023). In general, the AI model itself should not be acknowledged as the author of the quoted text. For instance, in the case of using the AI model ChatGPT, the credited author should be specified as the model's creator, OpenAI.
  - a. **Avoiding Plagiarism:** Authors must take steps to avoid plagiarism in AI-generated text and images. Proper citation and attribution of quoted material are essential.
  - b. **Citing AI Models:** When using AI models like ChatGPT, authors should cite the model's developer (e.g., OpenAI) rather than the AI itself.
  - c. **Graduate Student Output:** Generative AI tool utilization must be documented in every thesis or dissertation that incorporates such tools. Specifics regarding input from AI should be thoroughly outlined in the Materials and Methods section, Acknowledgment section, or a comparable part to ensure transparency. When presenting published results, it is imperative to disclose the incorporation of a generative AI tool, specifying the particular tool used, the sections of the publication it contributed to, and the manner of its application. Additionally, adhering to best practices involves indicating not only the generative AI tool but also the specific language model, along with the date(s) of its utilization (e.g., "ChatGPT Plus, GPT-4, p. 19-20, February 2024.")
4. **Copyright and Patent Considerations:** It is important to note that 'the United States Patent and Trademark Office (USPTO, 2024) has determined that only natural persons can be named as inventors,' thereby excluding generative AI from being designated as an inventor. Relying solely or significantly on generative AI for the creation or contribution to an invention might potentially hinder the ability to secure patent protection or be recognized as an inventor, as the latter requires substantial intellectual contribution from a human inventor.
5. **Use of AI in Grant Applications:**
  - a. **Similar Concerns:** Concerns applicable to manuscript writing also extend to grant applications. Funding agencies hold applicants accountable for any AI-produced content that may introduce plagiarism, falsification, or fabrication.

- b. All researchers involved in a grant must comply with the specific guidelines set forth by the granting agency regarding the utilization of generative AI when drafting proposals for their programs. Grant-based research integrated into a thesis, dissertation, poster, paper, or presentation must adhere to the regulations outlined in this policy.
- c. Several of the issues associated with utilizing AI in the creation and development of manuscripts, as outlined earlier, are similarly pertinent to the realm of crafting grant applications. Grant applications are presumed to encapsulate the authentic and precise concepts of the applicant institution and researchers. Nevertheless, given the propensity of AI tools to potentially introduce plagiarized, falsified, and fabricated content, caution is advised for grant applicants regarding any content produced by AI. It is explicitly cautioned that funding agencies will hold applicants responsible for any instances of plagiarized, falsified, or fabricated material, constituting research misconduct (Lauer, Constant, & Wernimont, 2023).

#### 6. AI in the Peer Review Process:

- a. **NIH Prohibition:** The National Institutes of Health (NIH, 2023) prohibits the use of AI in scientific peer reviews for grant applications and R&D contract proposals. Utilizing AI in the peer review process is considered a breach of confidentiality because these tools “have no guarantee of where data are being sent, saved, viewed, or used in the future” (NIH, 2023). Using AI tools to help draft a critique or to assist with improving grammar and syntax of a critique draft is still considered a breach of confidentiality. For this reason, the College of Graduate Studies does not advise of AI use in the peer review process without explicit permission from the applicable organizations.

#### 7. Reporting AI Use in Research:

- a. **Reproducibility Standards:** Rigorous and reproducible research is emphasized. Transparent and complete reporting of AI methodology and materials used is crucial for promoting reproducibility and replicability. Refer to the Association of the Advancement of Artificial Intelligence's reproducibility checklist found here: <https://aaai.org/conference/aaai/aaai-23/reproducibility-checklist/>.

**Conclusion:** Researchers using AI in higher education must adhere to evolving policies, ensuring responsible use and accountability for the outputs. The guidelines provided aim to foster transparency, integrity, and ethical conduct in AI-driven research activities.

**IMPORTANT NOTE:** This position statement does not override any applicable guidelines, policies, or procedures from the university, state, federal, or other relevant authorities.

## References

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