

## **Document of Expectations for use of Generative Artificial Intelligence (AI) for Graduate Students in the Plant Biology Graduate Program at MSU**

Artificial Intelligence (AI) may be an important – even central – tool during your career as a plant biologist. The purpose of this document is to prompt important conversations and establish expectations between students and their faculty advisor(s) for use of generative AI during graduate training and assessments in the Department of Plant Biology.

Definition: generative AI is artificial intelligence (AI) that can create content such as text, images, video, audio or software code in response to a user's prompt or request (IBM: <https://www.ibm.com/think/topics/generative-ai>).

Additional information and resources are available at:  
<https://research.msu.edu/generative-ai>

Expectations for the advisor:

- Consult with each graduate student when they join their group regarding AI use and describe the outcomes of this meeting below.
- Revisit this conversation as needed (e.g., if new, potentially useful technologies emerge), revising responses to the prompts below.

Expectations for the graduate student:

- Only MSU-approved platforms may be used: <https://ai.msu.edu/>
- User must be logged into MSU-approved platform with MSU account.
- Consult with their Advisor(s) regarding AI use and describe the outcomes of this meeting below.
- Revisit this conversation as needed (e.g., if new, potentially useful technologies emerge), revising responses to the prompts below.
- Disclose all uses of generative AI during preparation of the qualifying exam and dissertation/thesis.

### **Prompts for meetings between Graduate Student and Advisor(s)**

During this meeting, consider various ways that generative AI might be used, including for the generation of text, images, video, audio and software code, as well as statistical code. Throughout this conversation, keep in mind that students are ultimately responsible for their work and that violations of the agreement below may constitute academic misconduct (<https://ombud.msu.edu/resources-self-help/academic-integrity>).

Consider also the positive and negative impacts of generative AI use. Potential positives may include:

- Proofreading – AI could provide sophisticated feedback on language use, which could be particularly helpful for those using English as a second language.
- Visuals – AI could provide schematics or cartoons more easily than drawing and more customizable than image databases.
- Formatting – AI could enhance document appearance and overall style aesthetics.
- Coding – AI could assist with revising code, such as that used in the R programming language for statistical analysis

Negative impacts could include:

- Environmental impacts – The use of AI typically requires greater energy than non-AI computation. This can lead to increased water usage and increased carbon emissions.
- Intellectual property impacts – The use of AI typically involves sharing documents, figures, and/or data, which could be confidential or proprietary.
- Ethical impacts – The use of AI poses risks of plagiarism, error, bias, and inappropriate sharing of confidential material.
- Training impacts – The use of AI impinges on student training in critical thinking, analytical reasoning, persuasive writing, arguing from evidence.
- Economic impacts – increased energy costs and decreased human costs could have unpredicted economic effects.

Describe acceptable uses of Generative AI (if any) during preparation of the qualifying exam proposal:

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Describe acceptable uses of Generative AI (if any) during preparation of the dissertation or thesis:

Describe unacceptable uses of Generative AI (if any) during preparation of the dissertation or thesis:

Describe any other acceptable uses of Generative AI (if any) during the course of this graduate program:

Describe any other unacceptable uses of Generative AI (if any) during the course of this graduate program:

**We agree to abide by this compact**

**Advisor(s):**

**Graduate Student:**

\_\_\_\_\_  
Printed name          Date

\_\_\_\_\_  
Printed name          Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

**Please complete and submit this form to the PLB Academic Program Coordinator, when you select your advisor(s) and share a copy with the guidance committee, once formed. Submit a revision (new version of this form) if/when it is updated.**