# SSPPS Student Guide: Ethical and Responsible Use of Artificial Intelligence in Your Education and Research

As a student at the CU Skaggs School of Pharmacy and Pharmaceutical Sciences, you are part of a professional and graduate community that values honesty, curiosity, and responsibility. Artificial intelligence (AI) presents exciting opportunities in science and medicine. Generative AI (GenAI) tools like Copilot and others are becoming more common in learning, research, and patient care. These tools can be helpful, but they must be used the right way.

This guide gives you practical advice on how to use GenAI ethically and responsibly. It is based on CU Anschutz guidance, with a focus on what matters most for research and pharmacy students like you.

## What You Should Know First: Key Terms

- **Academic Integrity**: Being honest and responsible in your work, including when using AI tools.
- **AI (Artificial Intelligence)**: Technology that can mimic human thinking, like answering questions or summarizing information.
- **Bias in AI**: When an AI tool gives inaccurate or unfair results because the data it learned from were incomplete or one-sided. This can lead to problems like discrimination or incorrect conclusions.
- **Generative AI (GenAI):** Computer systems that can create new content (e.g., text) based on patterns learned from existing information.
- **Hallucinations**: When an AI tool makes up information that sounds real but is not true.
- **Large Language Model (LLM):** Advanced AI systems trained on vast amounts of text data to understand and generate human-like language.
- **Plagiarism**: Using someone else's words, ideas, or AI-generated content without saying where it came from. This includes not telling your instructor if you used AI to help with your work.
- **Prompt Engineering**: Writing clear and specific instructions (called "prompts") to get the best results from an AI tool. The better your prompt, the more helpful the AI's response will be.
- **PHI (Protected Health Information)**: Any personal health details that can identify someone—like their medical history, treatments, or insurance information. You must never share PHI with AI tools unless the tools are approved for that use.
- **Training Data**: The information used to teach an AI tool how to work. If the training data are high-quality and diverse, the AI output will be more generalizable and fairer.

## Using GenAI Ethically and Responsibly Means:

- **Be Transparent.** Always be open, clear, and honest about how and when you use GenAI tools in academic or research work.

- **Own Your Work**: Even if GenAI helped you, you are still responsible for the accuracy, integrity, and originality of the final product.
- **Protect Private Information**: Never enter patient details, unpublished research, or anything confidential into GenAI tools.
- **Keep It Fair**: Do not use GenAI to gain an unfair edge, and make sure GenAI does not lead to biased outcomes.
- **Stay Respectful**: Use GenAI in ways that reflect the values of respect, empathy, and professionalism in healthcare and research settings.
- **Be Informed**: GenAI is not always right. Know how it works, what it cannot do, and fact-check its answers.

## Guidelines for Using GenAI the Right Way:

1. **Use Approved Tools Only**
   For all classroom work, only use GenAI tools that are approved by the University of Colorado Anschutz Medical Campus. The current list is available here and will be updated as new tools are approved. Additional tools may be approved by the School of Pharmacy, and your instructors will inform you as these become available.

   For all experiential work, discuss with your preceptor first and have them go through their GenAI protocols with you. Your preceptor may allow you to use GenAI tools beyond what is approved by the school.

   Please note that expectations and permissions for the use of GenAI may differ across courses and experiential sites. It is the student's responsibility to review the specific guidelines regarding GenAI use. If any aspects of the guidelines and protocol are unclear, consult your professor or preceptor for clarification.

2. **Protect Confidential Information**
   Never put patient data, unpublished research, or personal information into a GenAI tool.

3. **Use GenAI to Build Community, Not Advantage**
   Use GenAI in ways that help everyone learn, not just to get ahead. Do not rely on it for shortcuts, and do not let it reinforce bias or misinformation.

4. **Make Your Learning the Priority**
   GenAI should support, not replace, your effort. Your work should reflect your understanding. Do not use GenAI to write something for you and submit it as your own. Use it to understand complex topics, not to do all the thinking for you. Real learning builds the skills you need to succeed.

5. **Fact-Check What GenAI Gives You**
   You are responsible for what you turn in. If you use GenAI to help, always fact-check the content with trusted sources like your class materials or peer-reviewed articles.

6. **Be Transparent – Clearly Say When You Use GenAI**
   Let your professor or preceptor know if you used GenAI tools and be specific. Examples:
   - "Microsoft Copilot version X was used to generate talking points and slide titles. I reviewed and edited all content myself."
   - "Microsoft Copilot version X helped summarize one article for the background section, and I rewrote the summary in my own words."

   If you do not disclose GenAI use, or if you use GenAI in a way that is not allowed, it will be treated as plagiarism or a professionalism issue.

7. **Stay Curious and Informed**
   AI is changing fast. Keep up with new tools and think critically about their role in pharmacy education, research, and practice. Understand what GenAI is good at, where it struggles, and how bias can show up. The more you know, the better you'll use it.

**Final Note:**
This guide was developed using Microsoft Copilot and adapted from CU Anschutz's campus-wide AI guidelines (AMC and Graduate School). It's here to help you make smart, ethical choices while using GenAI throughout your education.

Let's embrace innovation with integrity.