

Responsible Use of Generative AI in Publishing Scientific Research

Tara Murphy, 16 March 2026

These principles have been co-designed with a group of senior researchers, postdoctoral staff, PhD students and honours students to capture current and intended practice.

1. Introduction

Scientists occupy a unique position in society. We are responsible for generating new knowledge and communicating it clearly and accurately to our scientific peers and the general public. This comes with a significant responsibility to ensure the integrity of the scientific record and in our accountability to each other as collaborators.

Generative AI tools can help make our work more efficient and improve the clarity of our communication, particularly in writing. We acknowledge many people are using these tools in a range of ways, and at different stages of the scientific process. These include: translating text to English; polishing text to improve grammar and clarity; doing advanced literature searching; finding and summarising resources; writing and debugging code and many more. Hence we would like to agree on how to use these tools thoughtfully and responsibly.

The principles and practices below are intended to help our group benefit from generative AI while maintaining high standards of scientific integrity and avoiding both deliberate and accidental breaches of research ethics or journal guidelines.

Everyone conducting research in our group agrees to follow these principles.

2. Five principles for GenAI use in our scientific research and publishing

Principle 1. Treat GenAI output as unverified

"Trust nothing, question everything"

- All GenAI output should be treated as suggestions, not the final product.
- **You are responsible** for checking facts, references, interpretations and wording before including anything in a scientific manuscript.

Principle 2. GenAI is a learning tool, not a substitute for understanding

"GenAI is about accelerating my learning, not giving me the answer"

- GenAI output should be used to guide your learning.
- **You are responsible** for fully understanding and being able to explain every sentence and fact you include in a scientific manuscript.

Principle 3. Scientific integrity is your responsibility

“If you would not take responsibility for a sentence, it cannot be in the paper.”

- Gen AI is not a scientist, or a co-author of the paper.
- **You are responsible** for the content of a manuscript, regardless of whether AI tools were used in drafting or editing.

Principle 4. Use GenAI only where you would seek human assistance

“If you wouldn’t ask a colleague to do it, don’t ask GenAI.”

- Think about what it is reasonable to ask a colleague to help you with. For example, improving grammar, restructuring a paragraph, summarising information. Think about what it isn’t OK to get some else to do (without credit). For example, coming up with new ideas, writing up your work for you.
- **You are responsible** for ensuring your GenAI use is reasonable.

(Note this will vary depending on your scientific and team context)

Principle 5. All GenAI use must be transparent and traceable

“No hidden GenAI use or edits after internal review.”

- All GenAI use must comply with journal and external collaboration policies
- **You are responsible** for ensuring that all GenAI use is transparent within our research team and with our collaborators.

3. Five GenAI practices to support our principles

Practice 1. Start papers with a draft of human-written bullet points

Before drafting the full paper text, circulate a bullet point outline of the key ideas and results to your supervisor or key collaborator/s.

This allows us to:

- Focus on the scientific reasoning first, separate from the writing;
- Ensure that the argument is not shaped by GenAI;
- Allows key co-authors (e.g. supervisor) to agree on interpretation early in the process.

Practice 2. Follow a “responsible editing” workflow

When using GenAI to improve your writing, set up a workflow such as:

- Write the initial draft yourself;
- Use GenAI for editing or clarity improvements;
- Review each sentence before incorporating changes into your manuscript.

Ensure that no GenAI-generated text is used without a line-by-line review.

Practice 3. Highlight all GenAI-assisted changes after circulation

If you use GenAI to revise a draft after it has been circulated. You should ensure:

- You minimise unnecessary changes to the manuscript;
- You highlight or track any significant changes;
- You explain to the co-authors how GenAI was used in any subsequent version.

This ensures that all co-authors know what has changed, and can recheck it if they want.

Practice 4. Follow University policies and protect confidential information

All use of GenAI tools must comply with our University policies.

You should not upload confidential information, or other people’s unpublished work, to a public GenAI system. This includes:

- Unpublished manuscripts from other people, without their permission;
- Confidential data or results;
- Text from manuscripts you are refereeing;
- Grant proposals or internal documents;
- Any document containing private information about a person.

You can use internal GenAI systems (with care) for these tasks.

Practice 5. Final accountability check

Before you submit your manuscript you should check:

- Do I understand every sentence in this paper?
- Does each sentence say what I intend it to mean?
- Can I defend the meaning in peer review?
- Does the text accurately reflect the science that was conducted?

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