Editorial

The Nuances and Obvious of Writing for Scientific Publication

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Conducting research and writing for publication requires hard work and dedication. It may seem obvious, but it is essential to avoid the following:

1. Plagiarism: Using someone else's words, ideas, or data without proper credit.
2. Fabrication: Making up data, results, or sources.
3. Falsification: Manipulating research, data, or processes to misrepresent the results.

These nuanced ethical issues are considered research misconduct and are generally the byproduct of stress and a pressure to succeed – most have heard the aphorism, "publish or perish." While publication quantity is a metric used for promotion, tenure, and grant competitiveness, it does not outweigh the importance of quality. Further, even a single instance of the plagiarism, fabrication, or falsification constitutes a major breach of research integrity and can lead to serious professional and legal consequences, including loss of funding, retraction of published work, termination of employment, and in extreme cases, criminal charges. Avoid these outcomes by taking your time with data collection, writing, and reviewing. Certainly, take advantage of your mentors' expertise and the ethical guidelines from organizations such as ICMJE (International Committee of Medical Journal Editors), COPE (Committee on

Publication Ethics), or ORI (U.S. Department of Healthy & Human Services Office of Research Integrity). For further guidance see Table 1.

Table 1

Tips for Avoiding Plagiarism, Fabrication, or Falsification

Tip	Guidance
Keep Detailed and Honest Records	• Maintain a clear lab notebook or digital log. • Record everything, including failed experiments and unexpected results—don't "clean things up" to make them look better.
Cite EVERYTHING That is Not Yours	• If you are referencing someone else's idea, result, or even method—cite it. • When in doubt, give credit. Over-citation is less of a problem than under-citation. • Use reference managers like Refworks, Zotero, Mendeley, or EndNote to stay organized.
Paraphrase Properly	• Don't just change a few words—rewrite in your *own voice* and cite the source. • Tools like Grammarly or Turnitin can help check similarity, but don't rely on them blindly.
Report Data Transparency	• If a research study or QI project didn't go as expected or the data is noisy, explain it. • Transparency in methods and limitations strengthens your work.
Do Not Over-Promise or "Beautify"	• Avoid cherry-picking data or tweaking graphs to make them look more impressive. • It's better to be accurate and modest than impressive and misleading.
Review Before Submission	• Run a final check for proper attribution and clear language. Consider software such as iThenticate (we use this for all submissions at the BHAC Journal). • Ask a colleague or mentor to review your work with a focus on integrity.
Use Artificial Intelligence (AI) and Large Language Models (LLMs) with Caution	• ChatGPT (OpenAI), Co-Pilot (Microsoft 365), and Scite (Research Solutions) are commonly used AI and LLMs and you should familiarize yourself about their ethical use and pitfalls (Chetwydn, 2024; Mishra et al., 2024; Watkins, 2024). • Before using AI or LLMs, check the journal you want to publish with as some ban AI, while others require appropriate disclosure.
If You are Unsure, ASK	• It is OKAY not to know everything. • Reach out to your supervisor, ethics office, or a trusted colleague.

National Examples of Research Misconduct

When research misconduct occurs, it is not simply swept under the rug and forgotten. There are serious consequences. ORI publishes ethical breaches in research on their Case Summaries page (https://ori.hhs.gov/content/case_summary). These case studies are freely accessible to the public and list the names of the accused and the outcomes of their investigations. Of the six case studies reported in 2024, five involved fabrication and falsification and one involved fabrication and falsification and plagiarism. All offenders had to enter into a Voluntary Settlement Agreement with the ORI. Agreements include requirements such as correcting or retracting journal articles, establishing a faculty committee to supervise research activities for 5 years, and enforcing exclusion periods (up to 8 years) where the offender cannot receive funding from the United States Government or be listed on any funding applications.

Researchers must also be aware that outside groups can use deceptive practices which may also negatively impact their reputation. For example, in this issue of the *BHAC Journal*, Tornwall et al. describe the ins and outs of predatory journals and conferences and how to ensure the selection of reputable scholarship venues via their article titled, "Predatory Journals and Conferences: Impacts and Strategies to Protect Scholarly Integrity."

BHAC Journal Procedures for Upholding Ethical Publication Practices

The *BHAC Journal* adheres to COPE guidelines, specifically COPE's "Principles of Transparency and Best Practice in Scholarly Publishing" (COPE, 2022). In addition to following COPE guidelines, the *BHAC Journal* uses iThenticate to check for plagiarism. Our editorial assistant uploads the document into iThenticate, which then produces a Similarity Reporting Rating (i.e., Similarity Index). The Similarity Index is an overall percent created by summing the matching percentages of individuals sources. If the Similarity Index is ≥ 40%, the editorial assistant reviews all the matches (determines if the matches are from a single source or multiple combined) and notifies the Editor-in-Chief. Just because an article is flagged for similarity does not mean that plagiarism has actually occurred. iThenticate will pick up on similarities in methods and other common industry terminology and short terms; similarities in those instances are reviewed and noted when the Editor-in-Chief is alerted. Large matches in the discussion section and from single sources are more concerning than those in the methods or spread across multiple appropriately cited sources. iThenticate will also report if the text match did not cite the original source, so again be sure to cite everything even if you are not sure! The Editor-in-Chief makes the final decision on any high Similarity Index Scores. Actions taken are dependent on the severity of the plagiarism and can include rejecting the article, banning the author from publishing with BHAC, or notifying the author's institution of funding agency. More details about BHAC Journal's publishing policies can be access here: https://bhacjournal.org/index.php/BHAC/policies.

If the submission has a normal Similarity Index and matches the aims and scope of the journal, it is then sent out for peer review. The BHAC Journal requires a blinded review with a minimum of two reviewers. Our expert reviewers will determine if there are any concerns with fabrication and falsification in addition to assessing the article for relevance and journal fit, suitable methodology, accurate data interpretation, and effective science writing (i.e., the manuscript is coherent and easy to follow).

Upholding research integrity through ethical publication practices is a professional responsibility that demonstrates our commitment to advancing scientific knowledge with transparency and care. To avoid plagiarism, fabrication, and falsification it is recommended to use transparency when reporting your findings, follow the appropriate guidelines (i.e., COPE, ICMJE, or ORI), use available plagiarism checking resources (like iThenticate or Turnitin), and ask your mentors and peers when in doubt.

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