Academic Integrity

Learning Objectives

- Identify examples of academic misconduct
- Define a retraction and discuss the process
- Provide an example of a retraction and discuss the impact on the individual and research field

Overview of academic integrity

Science relies on academic integrity and involves a commitment to several values. What are these fundamental values in the context of academia? Hint: Many sources identify a handful of values.

Like many fields, misconduct can occur in science. There are various types of academic misconduct, and it is important to understand them. Define and provide a notable example of the following terms: fabrication, falsification, plagiarism, ghostwriting, and improper authorship. Are these issues getting worse? Why or why not?

Retractions

A **retraction** is a public statement made about an earlier statement that withdraws, cancels, refutes, or reverses the original statement or ceases and desists from **publishing** the original statement. The purpose of a retraction is to protect the integrity of the scientific literature rather than to punish authors.

- How is a retraction different from a correction (also known as an erratum or corrigendum)?
- Why and how do retractions occur? Hint: think of on purpose vs by accident. Who typically initiates a retraction? What happens to a publication once it is retracted?
- Is there a relationship between retractions and impact factor? What do you think is the most common reason for retractions?

Retraction Watch is a blog (Twitter: @RetractionWatch) that reports on retractions of scientific papers and on related topics. On this site you can find posts such as the Top 10 most highly cited retracted papers**.** Review this post, summarize what you see and comment on what you notice.

Retraction activity

Explore and compare the articles below. Pay attention to the details and comment on what you perceive to be the story here?

- Stimulus-triggered fate conversion of somatic cells into pluripotency
- Bidirectional developmental potential in reprogrammed cells with acquired pluripotency

Think About It: There are many examples of retractions in science over the years. Although they are addressed, the impact can be great. What is the impact of a retraction on researchers and the scientific community? What about public trust in science?