

References

Overview

In this chapter, you will learn why references are important, how to select the best sources to include in your article, when and how to cite a source, and where to put reference numbers.

Reference formatting will not be covered in this chapter. For this information, please refer to the author guidelines of your target journal or to the *Uniform Requirements for Manuscripts Submitted to Biomedical Journals* (www.icmje.org). Information on 2 reference management programs, EndNote and Reference Manager, is in the “Resources” section of the notebook.

Two different systems for citing references in the text are used in the scientific literature: 1 uses reference numbers, and the other gives the authors’ names and date.

In this chapter, we have used the name-and-date system to reference material from other sources and included a reference list at the end of the chapter. The reference-number system has been used within quoted and paraphrased material (for illustration only).

Why Are References Important?

Even the most brilliant scientific discoveries are rooted in existing evidence. Researchers continually study each other’s work looking for avenues to pursue and for support of their own ideas. Giving credit for using the work of others—*attribution*—is a professional and ethical responsibility that must be skillfully and consistently practiced without compromise. In the publication *On Being a Scientist: Responsible Conduct in Research* (<http://bob.nap.edu/html/obas/index.html>), the National Academy of Sciences of the United States of America says, “The principle of fairness and the role of personal recognition within the reward system of science account for the emphasis given to the proper allocation of credit.”

Attribution not only gives credit to others for their work and words but also

- Establishes the foundation on which your research is built.
- Properly acknowledges the sources you use to support your hypothesis.
- Places your work in context by introducing findings that oppose your own and that present alternative viewpoints.
- Validates your arguments by showing that they agree with those of other investigators.
- Provides an avenue for readers to follow up on aspects of your work and that of others.
- Demonstrates your integrity to your fellow researchers.

Referencing, an important aspect of scientific writing, is the practical side of attribution. It involves identifying the sources (journal articles, books, etc.) from which you obtain background information or information about the work of others.

All sources must be referenced accurately and completely—the authors' names must be spelled correctly, and all other elements (article title, date, name of the publication, page numbers, etc.) must be correct. *The accuracy of your references is your responsibility.* Always verify your references, even if you have seen them in a published References section.

To help ensure that you have cited sources correctly, always record references as you go—do not rely on your memory.

Failure to appropriately cite a source constitutes plagiarism, which is considered unprofessional and unethical. In some instances, it is also illegal.

“In the standard scientific paper, credit is explicitly acknowledged in three places: the list of authors, the acknowledgments of contributions from others, and the list of references or citations.”

—National Academy of Sciences

When Should You Cite a Source?

Any time you use a fact or an idea that you obtain from another source, you must acknowledge that source. This clearly includes direct quotations, but it also includes statements and data that you paraphrase or summarize (both in words and graphically).

If the information is extremely well known—that is, it is common knowledge—it may not need to be referenced. But if it is a fact, a statement, or a term introduced or popularized by someone else, then it is “owned” by that person, and a reference for it must be cited.

Each of the 2 statements below presents a common or well-known fact from the professional knowledge base and so does not need to be referenced.

Microtubules are important cytoskeletal components involved in many cellular events.

Maintenance of the integrity of an organism and its tissues depends upon a delicate balance between proliferation, differentiation, and programmed cell death or apoptosis.

In the next 2 examples, the information clearly originated from the work of a specific person or group and must be referenced.

This multifunctional, single-stranded DNA-binding protein complex, composed of 70-, 34-, and 11-kDa subunits,^{2,4,5} is involved in DNA unwinding and DNA synthesis during the initiation and elongation stages of DNA replication.⁴ (Janus et al., 1999)

The RPA-p53 complex is disrupted after exposure to UV radiation *in vivo*.⁹ (Janus et al., 1999)

Which Are the Best Sources to Cite?

The sources of information that you choose to include in your paper—journal articles, books, Internet sites, correspondence, and conversations—can be ranked according to their reliability, credibility, and timeliness. The best sources to cite are those that have been reviewed by an expert in the field. These sources must be cited in the text *and* in the References section at the end of an article.

Examples of such sources, beginning with the best to cite, include the following:

- Journal articles (original reports and reviews)
- “In press” articles (accepted but not yet published)
(Whenever possible, update “in press” references before submitting your article.)
- Books, book chapters, and monographs
- Conference proceedings and meeting abstracts
- Dissertations
- Internet sites of government agencies, such as the site for the National Cancer Institute

Sources that are less reliable are those that have not undergone expert review. Such sources must be mentioned in parentheses in the text but are not included in the References section. They include the following:

- “Submitted” articles (submitted but not yet accepted)
- Personal communications
(You must obtain written permission from your “personal communications” source. Some journals require you to submit this permission with your manuscript.)
- Unpublished results

Tips for Selecting Your Sources

Follow these tips when selecting your sources:

- Select first the most valid, the most important, the most available, and the most recent sources.
 - For data directly relevant to your hypothesis, cite original research articles rather than abstracts or reviews of research articles.
 - Cite review articles for background or less relevant information, broad ideas, and topics on which many papers have been published.
 - Cite dissertations, meeting abstracts, personal communications, and unpublished data only if a full-length paper on the subject has not yet been published.
 - Cite your own published papers whenever appropriate.
 - Avoid obscure references or references that would be difficult for reviewers to find.
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Where Do Reference Citations Go?

The placement of a reference citation in the text indicates exactly what is being credited and to whom. For this reason, it is very important that reference citations be inserted in the correct place.

There are 2 general guidelines:

1. When a string of sentences pertains to the same study, place the reference citation at the end of the first sentence in that string. If the string of sentences is long, consider placing the reference citation after the last sentence as well.

Another study found that the intron 3 and intron 6 M alleles exerted a functional effect.¹ As the copy number of the M allele in introns 3 and 6 increased, the apoptotic index decreased. In addition, cell lines with at least one variant allele at all three polymorphic sites had a statistically significantly lower DNA repair capacity than did cell lines with all wild-type alleles.¹ Other studies reported.... (Wu et al., 2002)

“Failure to cite the work of others can give rise to more than just hard feelings. Citations are part of the reward system of science. They are connected to funding decisions and to the future careers of researchers. More generally, the misallocation of credit undermines the incentive system of science.”

—National Academy of Sciences

2. When the author’s name is included in the text, place a citation immediately after the name instead of at the end of the sentence.

Conor et al.¹ found a statistically significant difference in the distribution of the intron 6 polymorphism between healthy control subjects and patients with ovarian cancer. (Wu et al., 2002)

When Do You Mention Other Studies by Authors' Names?

When you mention someone else's study in your paper, you have a choice of mentioning the study by the authors' names (*Jones et al. found*) or by a generic term (*Other researchers found*). As a guideline, use the authors' names in these 2 situations:

- If the author or study itself is well known in the field.
- If you plan to refer to the study more than once in the paper.

In the paragraph below, the words in bold signal a particular study.

We found that the WW–WW–WW haplotype was the most prevalent haplotype in the lung cancer patients and control subjects but was more common in the control subjects than in the patients. **A similar observation** has been documented for colorectal cancer and breast cancer.^{35,37} The haplotype distribution **in this study is similar to that found by Weston et al.**,³⁸ who suggested that rare p53 minor haplotypes are associated with increased risk of breast cancer in some racial groups. **Similarly, we found** that the rare haplotypes were statistically significantly associated with an elevated risk of lung cancer, with the highest risk found in individuals with the W–M–M alleles. **In addition, we found, as did Sjolander et al.**,⁵³ that the three loci are in strong linkage disequilibrium. (Wu et al., 2002)

Information on attribution signals as well as paraphrasing appears in the chapter “Writing the Discussion Section.”

References for This Chapter

Janus F et al. The dual role for p53 in maintaining genomic integrity. *Cell Mol Life Sci* 55:12–27, 1999.

Wu X et al. p53 genotypes and haplotypes associated with lung cancer susceptibility and ethnicity. *J Natl Cancer Inst* 94:681–669, 2002.

All quotations in boxes are from <http://www.bob.nap.edu/html/obas/index.html>.
