

Biomedical Sciences Documentation Protocols

Introduction

The purpose for documenting the sources of information you use in the reports and presentations you make is three-fold. First, it gives credibility to the information you are presenting. If your source is a scientific journal, for example *Scientific American* or *Nature*, the information will have more credibility than if the source is the *National Inquirer* magazine found at supermarket check-out stands. Second, it allows someone to look up the source in order to obtain more information. Third, the citation gives credit to the original author(s). Just as you want credit for writing your report or for your presentation, the person or persons who wrote the information you used in your report want credit.

Where in the report or presentation is the information documented?

The source of information is listed in two places within your report. The first place is immediately following the information you used from the source. This is called the *intext citation*. It is called that because it is on the same line or in the same paragraph as the information. The second place the source is listed is at the end of the document in the bibliography or references cited section of the report.

How is an in-text citation written?

The format of an in-text citation is always the same, and is referred to as the *name-year system*. The name of the author and the date of publication are listed in parentheses, for example (Hernandez, 2007). If the name of the author is not known, then the name of the organization or the title of the website home page is used instead of an author's name, for example (National Institute of Health, 2007).

How is an end-of-document citation written?

The format of the end-of-document citation is more complicated. The general format remains the same for all the different types of sources including books, journals, newspapers, and website documents. All the authors' names are listed first, then the date of publication and the title of the document. The information that follows the title depends on the type of source and is the specific information needed by someone else to locate the document you used. Later in this document you will see several examples of end-of-document citations for the most commonly used types of sources.

Who determines how the citations are written?

For scientific writing, the authoritative reference for documentation protocols is written by the Council of Science Editors. The book is titled *Scientific Style and Format: The CSE Manual for Authors, Editors, and Publishers*. This is the guide for documentation used by science writers, researchers and health professionals

throughout the world. The examples and protocols in this document are taken from this manual.

Example of an in-text reference and the corresponding end-of-document citation:

The name-year system of in-text reference is widely used and is also known as the "Harvard System" because it was developed by a Harvard Professor of Zoology (Council of Science Editors, 2006). The advantage of this system is that the citations at the end of the document are arranged alphabetically and not in the order of appearance within the report. This makes it easier to find specific authors and does not require the rearrangement of the citations if revisions are made to the report and the order of citation changes.

The citation at the end of the report would look like this:

Council of Science Editors. 2006. Scientific style and format: the CSE manual for authors, editors, and publishers. 7th ed. Reston (VA): The Council.

Take care to examine the punctuation and capitalization in the citation above. Notice that only the first word in the title is capitalized. Periods and colons are used in specific places to separate the information. Also, unlike some bibliographies you may have seen, in science literature the citations are not indented.

End-of-document citations

The following are specific formats and examples of the end-of-document citations for different types of source material. The citation format is different depending on whether the resource was accessed through the Internet or if it was a printed publication. Therefore, the examples are divided into two sections: Internet sources and printed sources of information. Then within each section are multiple examples of types of resources that you may need to cite in your reports and presentations. These examples do not include all the different types of resources you could potentially use, but they are the ones you are most likely to use. If you use a resource that does not match these examples, see if the school has the Council of Science Editors manual cited above or ask your teacher or a librarian for help.

Be sure to examine each of the examples carefully because the punctuation and capitalization are very specific and different from what you normally use. Remember to list the citations alphabetically by the first author's last name, and to not indent any of the lines of the citation. If you use more than one resource by the same author, then the citations for that author are listed chronologically.

Internet Sources: Web Site

Internet Site Homepage

Title of Homepage [Internet]. Date of publication. Edition. Place of publication: [date updated; date accessed]. Available from: (URL address)

Example:

British Heart Foundation [Internet]. 1994-2006. London (UK): [updated 2006 July; accessed 2006 Aug 25]. Available from: http://www.bhf.org.uk/

Internet Site Web Page

Author(s). Date of publication. Title of Page [Internet]. Place of publication: publisher; [date updated; date accessed]. Available from: (URL address).

Example:

Lefebvre P. 2002. Molecular and genetic maps of the nuclear genome [Internet]. Durham (NC): Duke University, Department of Biology; [updated 2002 Dec 11; accessed 2003 Sep 5]. Available from:

http://www.biology.duke.edu/chlamy_genome/nuclear_maps.html.

If the name of the author is not known then begin the citation using the name of the organization or entity that published the website; do not use the term *anonymous* in place of an author's name.

Example:

World Health Organization. 2004. Public health response to biological and chemical weapons: WHO guidance [Internet]. 2nd ed. Geneva (Switzerland): World Health Organization; [accessed 2005 May 21]. Available from http://www.who.int/csr/delibepidemics/biochemguide/en/.

If the web page does not have a distinct title, use the title of the page shown in the tab of the web browser or construct a reasonable title using the first series of words on the screen page.

Internet Sources: Books

Book with Author or Editor

Author(s). Date of publication. Title of book [Internet]. Edition. Place of publication: publisher; [date updated; date accessed]. Pages used. Available from: (URL address)

Example:

Griffiths AJF, Miller JH, Suzuki, DT, Lewontin RC, Gelbart WM. 2000. Introduction to genetic analysis [Internet]. 7th ed. New York (NY): W.H. Freeman & Co.; [accessed 2005 May 30]. p. 15-25. Available from:

http://www.ncbi.nlm.nih.gov/books/bv.fcgi?call=bv.View..ShowTOC&rid=iga.TOC

Book Written by an Organization with No Author or Editor

Name of organization. Date of publication. Title of book [Internet]. Edition. Place of publication: publisher; [date updated; date accessed]. Pages used. Available from: (URL address)

Example:

The American Association for the Advancement of Science. 2006. Obesity: the science inside [Internet]. New York, NY: The American Association for the Advancement of Science; [accessed: 2007 Dec 10]. p. 23-41. Available from: http://www.healthlit.org/scienceInside/documents/Obesitybook.pdf

Internet Sources: Journals, Periodicals, and Papers

Journals or Periodicals Accessed by Internet

Author(s). Date of publication. Title of article. Title of journal or periodical [Internet]. [date updated; date accessed]; Volume (issue): pages. Available from (URL address)

Example:

Savage E, Ramsay M, White J, Beard S, Lawson H, Hunjan R, Brown D. 2005. Mumps outbreaks across England and Wales in 2004: observational study. British Medical Journal [Internet]. [accessed 2005 May 31]; 330(7500):1119-1120. Available from:

http://bmj.bmjjournals.com/cgi/reprint/330/7500/1119doi:10.1136/bmj.330.7500.1119

Newspapers Accessed by Internet

Author(s). Date. Title of article. Title of newspaper [Internet]. [date updated; date accessed]. Available from: (URL address)

Example:

Weiss R. 2003 Apr 11. Study shows problems in cloning people: researchers find replicating primates will be harder than other mammals. Washington Post [Internet]. [accessed 2006 September]. Available from:

http://pqasb.pqarchiver.com/washingtonpost/access/323429341.html?dids=323429341:323429341&FMT=ABS&FMTS=ABS:FT&fmac=&date=Apr+11%2C+2003&autho r=Rick+Weiss&desc=Study+Shows+Problems+in+Cloning+People

Print Sources: Books

Book (author(s) given)

Author(s). Date published. Title. Edition. Place of publication: Publisher; pages used.

Example:

Sissons HA, Murry RO, Kemp HBS. 1984. Orthopaedic diagnosis: clinical, radiological, and pathological coordinates. Berlin (Germany): Springer-Verlag; p. 236-245.

Comments: If there are several authors, write their names in the order they appear on the book. If the entire book was used, do not include page numbers. Also, do not change the spelling or words in the title of the book. Notice that this book uses the European spelling for orthopaedic; the North American spelling is orthopaedic.

Book (editor(s); no author given)

Editor(s) names, editors. Date published. Title. Edition. Place of publication: Publisher; pages used.

Example:

Mark BS, Incorvaia J, editors. 1997. The handbook of infant, child, and adolescent psychotherapy. Northvale (NJ): Jason Aronson, Inc.; p. 25-40.

Book (written by an organization, no author)

Name of organization. Date published. Title. Edition. Place of publication: Publisher; pages used.

Example:

National Research Council (US). 2000. Subcommittee to review the Hanford thyroid study, final results and report. Washington DC: National Academy Press (US).

Print Sources: Journals, Periodicals, and Papers

Journals or Periodicals

Author(s). Date. Article title. Journal title. Volume (issue): pages

Example:

Smart N, Fang ZY, Marwick TH. 2003. A practical guide to exercise training for heart patients. J Card Fail. 9 (1): 49-58.

Comments: Only abbreviate the journal name if the accepted abbreviation is known. The journal in the example is the Journal of Cardiac Failure and the abbreviation is used by the manual. Notice no abbreviation is used for page(s).

Newspapers

Author(s). Date. Title of article. Title of newspaper. (edition). Section: beginning page (column).

Example:

Weiss R. 2003 Apr 11. Study shows problems in cloning people. Washington Post (Home edition). Section A: 12(col.1).

Comments: If there is no author, begin with the title of the article.