

WRITING IN BIOLOGY:

EXTERNAL LINKS YOU MAY FIND USEFUL

General References about Writing: Print

“Two Books I Can Recommend”

Links are provided to publishers' descriptions of two excellent books about writing in biology. Many other publications exist but these are two books with which I am familiar and which I have used.

Knisely, K. (2009). *A student handbook for writing in biology, 3rd ed.* Massachusetts: Sinaeur Associates, Inc. and Virginia: W. H. Freeman & Company.
<http://www.whfreeman.com/newcatalog.aspx?search=knisely&isbn=1429234911>

McMillan, V. E. (2006). *Writing papers in the biological sciences, 4th ed.* Boston: Bedford/St. Martin's.
<http://bedfordstmartins.com/newcatalog.aspx?search=McMillan&isbn=0312440839>

General References about Writing: Internet

“A Guide to Writing in the Biological Sciences”

George Mason University includes samples of student writing and tips on how to best write the most commonly encountered sections of scientific research papers.

<http://classweb.gmu.edu/biologyresources/writingguide/ScientificPaper.htm>

“A Guide to Writing Scientific Papers”

Colby College has provided this fine overview of how the typical scientific research paper should be organized and written.

http://www.colby.edu/biology/BI17x/writing_papers.html

“Alverno Guide to Writing in Biology”

The Biology Department of Alverno College offers a few tips on appropriate references (both print and internet) for scientific writing. Also, some guidelines for the use of measurements, citations and avoid plagiarism are included.

<http://depts.alverno.edu/nsmt/writing.htm>

“Citations and References in APA Style and MLA Style”

Here are some links to helpful websites for APA style. The first one is directly from the American Psychological Association. The second, sponsored by Bedford/St. Martin’s Press, is an interactive site based around Diana Hacker’s *A Pocket Style Manual*.

<http://www.apastyle.org/>

<http://bcs.bedfordstmartins.com/pocket5e/player/pages/Login.aspx?sViewAs=S&userid>

“Scientific Writing”

This site from Georgian Court University in New Jersey does an exemplary job of comparing a research paper with a review paper. The various components are discussed in each case.

http://gcuonline.georgian.edu/wootton_1/scientificwriting.htm

“Writing a Biology Review Paper”

In science, a review paper is very different from a research paper. These tips for preparing an effective review paper are authored by Dr. Troy Nash of Presbyterian College.

<http://web.presby.edu/writingcenter/guides/bio1.html#anchor659232>

“Writing in Science”

This extensive and helpful web page is from Monash University’s Learning Support materials. It includes a number of very helpful tips for a variety of types of scientific writing.

<http://www.monash.edu.au/lis/lionline/writing/science/index.xml>

“Writing in Science” (another web site)

Colorado State University offers this extensive site. It focuses primarily on writing formal scientific research papers and includes information about the use of tables and figures. Examples are provided to illustrate the major sections of a scientific research paper.

<http://writing.colostate.edu/guides/processes/science/pop2a3.cfm>

Internet Accessible Databases and Search Engines

“BioOne Journals”

This database provides citations and abstracts for numerous scientific journals, both well-known and obscure. Numerous full text articles are available by subscription but many of the journals may be accessed elsewhere online or in libraries.

<http://www.bioone.org/>

“Google Scholar”

This search engine eliminates many questionable hits and focuses on links to journals, web sites and other material of a more academic nature. Often, one is provided with the title of a journal article or an abstract of an article but not the full article. In other cases, some journals allow access to complete journal articles through this and other search engines. As is the case with so many other search engines, irrelevant or unnecessary hits may be reduced by enclosing the search

phrase in quotation marks. For example typing the following words, South American Rainforest, as opposed to enclosing the phrase in quotation marks, i.e. "South American Rainforest" is a less desirable practice. In one practice session the former search yielded 84,000 hits; the latter 332. You may narrow the search even more by typing something like "South American Rainforests" + Animals (226 hits) or "South American Rainforests" + mammal (97 hits) or "South American Rainforests" + "endangered animal" (one hit).

<http://scholar.google.com/>

"PubMed"

This is a search engine which focuses primarily on professional publications related to the science of medicine.

<http://www.ncbi.nlm.nih.gov/pubmed/>

"Scirus: For Scientific Information Only"

This search engine is similar to Google Scholar but somewhat wider in scope. See the hints about narrowing web searches above.

<http://www.scirus.com/>

"United States Department of Agriculture: National Agriculture Library"

This is a database which indexes numerous professional journal articles and government printings having to do with agriculture. Some hits provide a link to the complete document, others only a citation which may be found in many libraries.

<http://agricola.nal.usda.gov/>

Help With Figures, Tables & Graphs

"Almost Everything You Wanted to Know About Making Tables and Figures"

Tables, figures and graphs are the most commonly used types of inscriptions in scientific papers and other types of science communication. This site, from the

Department of Biology at Bates College, provides a discussion and examples of all three.

<http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWtablefigs.html#tables>

“Create a Chart: Microsoft Office Online”

If you are using Microsoft Word as your word processing program, this tutorial could be a big help to you.

<http://office.microsoft.com/en-us/word/HP051900461033.aspx>

“Create a Graph”

This site was developed with children in mind. Yet, it includes very useful tips on how to make good graphs. The graphs you make during the tutorial will be saved for about a month. Users are provided with an electronic mail link to their graph.

<http://nces.ed.gov/nceskids/createagraph/default.aspx>

“Graphing Resources”

North Carolina State University provides this valuable set of tips on how to construct graphs. Graphs are one of the most commonly encountered forms of inscriptions in scientific writing.

<http://www.ncsu.edu/labwrite/res/gh/gh-bargraph.html>

“Tables and Figures: National Center for Education Statistics”

This site is being included to allow you to see a wide variety of examples of tables and figures. This is a searchable database of published tables and figures from a variety of professional books and journals. You may also find this site valuable for research purposes.

<http://nces.ed.gov/quicktables/result.asp?SrchKeyword=cancer&topic=All>

“Table Basics on Microsoft Word”

If you are using Microsoft Word as your word processing program, this tutorial could be a big help to you.

<http://word.mvps.org/FAQs/TblsFldsFms/TableBasics.htm>

Measurement: International System

“Conversions among Measurement Units”

This site, Online Conversion.com, contains converters for many types of measurement (such as length, volume, mass, etc.) and includes many systems of measurement.

<http://onlineconversion.com/>

“International System of Measurement & Writing on Wikipedia”

Focus on the sections entitled *SI Writing Style* and *Spelling Variations* for some useful tips on how to deal with units of measurement while writing.

http://en.wikipedia.org/wiki/International_System_of_Units#SI_writing_style

“The Metric System, Abbreviations, and Conversions for Common Units of Measure”

Abbreviations, decimal values, scientific notation and even conversion factors are included. The site is from Bates College.

<http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWabbr.html>

Abbreviations and Special Characters

“Commonly Used Abbreviations in Life Science Research”

A list of some commonly encountered abbreviations from thelabrat.com

<http://www.thelabrat.com/protocols/CommonAbbreviations.shtml>

“List of Medical Abbreviations on Wikipedia”

The title is self explanatory. Many common abbreviations are listed in an alphabetically arranged database.

http://en.wikipedia.org/wiki/List_of_medical_abbreviations:_Overview

“Typing Special Characters”

Using these shortcuts can save Microsoft Word users incredible amounts of time when special characters are required in a word document. Washington State University put this list together.

<http://www.forlang.wsu.edu/help/keyboards.asp>

Basic Statistics

“The Median, the Mean and the Mode”

About.com provides a mini lesson on these three frequently encountered statistical values.

<http://math.about.com/library/weekly/aa020502a.htm>