OWLS Writing Guides: LABORATORY REPORT

General Guidelines

Title:

- Your name (please underline) and your lab partner(s) name(s).
- Title is informative and concise.

General:

- Writing is clear and concise. Lab report reflects careful proofreading.
- Correct grammar and spellings are used throughout.
- Subheadings are used for the different sections.

Introduction:

- Background information necessary to understand paper is given, any unusual terms are defined.
- What is known and what is unknown are described.
- Flow of thought leading to your objectives is clear.
- Research question(s) (objectives of the study) is/are clearly described.
- Previous work is cited and there is a clear description of the current state of the field and the questions remaining.
- Awakes the readers' interest.

Materials and Methods:

- All procedures used are described in narrative format as actually performed (don't just copy the lab manual) and written in the past tense.
- Appropriate level of detail is given so that experiments could be repeated, without unnecessary detail.
- Company, city and country are given for any specialized equipment or biological reagents.
- How data was collected is detailed.
- How data was analyzed is described including statistical methods and computer software.

Results:

- Figures and tables are clear and appropriately labeled. (All figures and tables appear at end of paper).
- Tables have a title and figures have legends (title is included in legend).
- Figure legends and captions clearly describe what is in each figure.
- A clear description of results of all stages of the investigation is provided in narrative format.
- Figures and tables are cited in the text.
- Text does not repeat the data in the tables rather summarizes key points.
- No interpretation is given.

Discussion:

- Results found are related back to objectives.
- Results are interpreted and discussed in light of predictions and published studies.
- Results are compared with the control.
- Results generated by different methods are compared.
- Any discrepancy with expected results is discussed and possible reasons for this discrepancy explored.
- Evidence is given for each of the conclusions (always refer back to your data to support your conclusion).

References:

- All citations are in the proper format as detailed below, and not just "Copied and pasted."

Citation Format

How do I cite literature in the text of the paper?

Use the **author-year** (**not** MLA) format in which the author's last name is given followed by the year of publication. Note the placement of the comma between the names and the year when both are in parentheses. Moreover, note that the format of the reference as it appears in the text changes depending upon whether there are one, two or three or more authors on the paper.

One author- "last name, year"

Example: The role of sylvatic *T. infestans* populations in the recolonization of treated areas has to be considered (Noireau, 2009).

Alternative: As explained by Noireau (2009), the role of sylvatic *T. infestans* populations in the recolonization of treated areas has to be considered.

Two authors -"and"

Example: Sylvatic populations were found in Paraguay (Velazquez and Gonzalez, 1959).

Alternative: Velazquez and Gonzalez (1959) discovered sylvatic populations in Paraguay.

Three or more authors – "et al."

Example: *Sordaria* follows the standard ascomycete life cycle (Smith et al., 1999).

Alternative: *Sordaria* follows the standard life cycle of an ascomycete as explained in Smith et al. (1999).

How do I cite in the References section?

Citations in the References section should be listed alphabetically by the first author's last name. The format of references depends on the origin of the citation (article, book section, internet, etc.). Each journal has its specific citation format. We will use the one from PLoS Neglected Tropical Diseases as below.

Standard Journal Article

Author's last names and initials (year) Article title. Abbreviated journal name Volume: Page numbers.

Johnson DL, Lynch WE (1992) Panfish use of angler success at evergreen tree, brush, and stake-bed structures. N Am J Fish Manage 12: 222-229.

NB: Journal name must be abbreviated. A useful but non-exhaustive list of Biological Journals and Official Abbreviations can be found at http://home.ncifcrf.gov/research/bja/.

NB: Complete page numbers are used, e.g. 1770-1777, not 1770-7.

Book:

Author's last names and initials (Year) Book title. City: Publisher. Number of pages.

Voet D, Voet JG (1990). Biochemistry. New York: J Wiley. 1223 p.

Book section:

Author's last names and initials (Year). Chapter title. Page numbers *in* Editors' last names and initials (eds). Book title. Publisher, city.

Trexler JC, Loftus WF, Jordan F, Chick JH, Kandl KL, McElroy TC, Bass OL (2001). Ecological scale and its implications for freshwater fishes in the Florida Everglades. Pp 153-181 *in* Porter JW, Porter KG (eds). The Everglades, Florida Bay, and Coral Reefs of the Florida Keys: An Ecosystem Sourcebook. CRC Press, Boca Raton, FL.

Our Lab Manual:

Barrilleaux A (2012). Cells & Heredity Laboratory Manual. New Orleans: Loyola University, 72 pp.

Specific Documents from a Web Site:

Hood CS (2000, January 6). *Diversity: Introduction and Concepts*. Loyola University, New Orleans. Retrieved January 28, 2000 from the World Wide Web: http://www.loyno.edu/~chood/zooweb/diversity.html