

Lab Notebook Guide

The following is a guide for the organization of a Laboratory Notebook. These are the items that must be on every entry to the notebook. Just remember that you are writing for someone else and not for you. Any person has to be able to do the experiment by just reading your notes...

General rules:

1. The laboratory notebook is a bound notebook (i.e. glue or sewed). It is not acceptable spiral notebook or loose-leaf binder.
2. PLEASE write readable... no abbreviations or “text-message jargon”
2. All pages must be numbered; no pages are ever to be removed.
3. The first pages must have an Index, with the title of the experiment and page. If possible, it is recommendable to write a brief description of the experiment just for reference purposes.
4. The entries to the notebook must be done in black or blue ink. Any error is crossed with a line and your initials are written closed to the mark done. **NO** “liquid paper” marks.
5. The end of the protocol is established by a line covering the remaining empty space of the page and your signature.
6. If the data is stored in a binder or electronically (i.e. computer), there must be a reference in the Lab notebook that indicates where to find the raw data obtained from the described protocol.
7. NEVER rely on your memory... Always, write everything down.
8. If you keep a notepad to write the protocol or notes during the experiment, you have to make sure that the information is transferred to the laboratory notebook.
9. Language selected could be Spanish or English, but whenever possible is preferable to use English.

Every entry must have:

1. Date: 13 June 2011
2. Title – A brief description of the experiment, which could be used in the Index and give you a complete idea of what was the experiment done.
Examples:
Bad: Western Blot analysis of tau proteins

Good: Analysis of the expression of tau proteins in specific brain regions: S1 vs. P3

3. Sample – Describe all details regarding the samples that will be used in the experiment. Simply, provide the information that describes the status or condition of the starting material.

Example:

Mouse number, age and sex

Bacterial strain and plasmid

Cell Name (eg. PC12 cells) passing number, amount of cell used

4. Protocol – Describe in detail the experiment done.

Must include:

- a. Sample preparation – homogenization
- b. Describe in details the buffer used (the components must be described in molarity or % v/v)
- c. All volumes used must be described (amount of lysis buffer)
- d. Incubation time
- e. Protein/DNA/RNA concentration
- f. All details surrounding the experiment (centrifugation speed, temperature, etc.)
- g. For centrifugation you need to list the rotor used and centrifuge model. The speed should be expressed in g and rpm (eg. 10,000 x g or 12krpm)
- h. Observations: simply write every single detail about the experiment so that you or other person can repeat it by just reading your notes...!

5. Results – This section should describe the results and direct the reader to a specific page in the binder that holds the films or make a copy of the film or result obtained. Any photo or print out could be pasted on the notebook. This section should also include a brief analysis or conclusion on the results obtained and/or experiment in general (eg. troubleshooting).