

Guidelines for Keeping a Laboratory Notebook

Purpose of Notebook

- To record methods and results of your experiments so that
 - you can go back and figure out what you did
 - another person can interpret your results(The lab notebook is important in patent review)
- Therefore, a notebook must be clear and thorough

Ownership

- Generally, the notebook should not leave the laboratory
- The notebook belongs to the lab and institution

Type and Format of Notebook

1. Bound vs. Loose Leaf

	Advantages	Disadvantages
Bound	No lost sheets Proof against fraud	No logical order
Loose Leaf	Group experiments Maintain order	Sheets lost Harder to prove authenticity

- The bound notebook is the gold standard and will be adopted in our laboratory
 - What to look for in a bound notebook:
 - Bound
 - 8-1/2 x 11" (Able to attach photographs & printouts)
 - Numbered pages
 - Gridded pages
- ### 2. Ink not Pencil & Mistakes
- Ballpoint pen with black ink is best
 - Pencil writing can be erased (harder to prove authenticity)
 - Write legibly
 - Mistakes? Cross them out with a single line. White-Out and blacking out is not acceptable.

Content of the Laboratory Notebook

1. Table of Contents

- Title
- Date
- Page Number

2. Date of Experiment

3. Title of Experiment (e.g., Serial knock-down of DIAP1 by RNAi)
4. Purpose (e.g. To determine the relationship between the amount of RNA- used against DIAP1 and the amount of cell death.)
5. Materials and Methods
 - Protocol
 - Written
 - Pasted
 - May refer to previous protocol in notebook (note any changes)
 - Write before you begin procedure
 - Amend as you go through the experiment
 - List any calculations
6. Observations and Results
 - Everything that happens or doesn't happen is data.
 - Any writing that will facilitate data entry should be planned out in advance
 - Results may include:
 - Tables
 - Charts
 - Graphs
 - Printouts
 - Pictures
 - Gels
 - Films
 - Calculations
7. Discussion and Conclusion
 - Discuss results and implications of data.
 - Prepare a conclusion. How did the experiment go?
 - What to do next?

Maintenance

1. Record everything ASAP
2. Weekly Check-Up
3. Attach data/printout/films
4. Create tables and graphs
5. Summary for the Week
6. Record experiment in Table of Contents
7. Make plan for the following week