

Things I wish I have known in Graduate School

1. Assign an experiment number to every single experiment performed. Nomenclature should include: Initials, year, and experiment number. For example JAL2003-001. This would allow identification of each experiment, so that one can always specifically refer to it without causing confusion.

2. Maintain an experimental log in a table format that includes:

- Experiment Number
- Date
- Notebook Reference
- Title
- Purpose
- Summary of results
- Cross reference to other experiments

The experiment log can obviously be kept as a computer file.

3. In addition to the experiment log, an experiment(s) summary slide, which includes picture of gels or data tables/graphs and the conclusions, is also very useful. This allows immediate access to the data, when one needs to be refreshed a set of experiments without having to go back and browse through the notebooks.

4. Cross-reference each notebook page by including a continued from and continued on reference.

5. Establish assay or experiment variability by determining its intra- and inter-day variabilities in completely independent experiments.

6. Establish assay robustness by using different set of reagents.

7. Always have your important results and calculations double, or even triple, checked by colleagues. The easiest person to fool is yourself.