

Data Management in the Pelton Lab

I. Data ownership

- A. Data, samples, laboratory notebooks, and any other product of research activity are the property of UMBC, and must be left with the university when you complete your time in the lab.
- B. Academic research is based on free and open sharing of ideas and results with peers. However, sharing prematurely can compromise the ability to claim intellectual property, can lead to a loss of competitive advantage, or can cause embarrassment. Before discussing ideas and results with people outside the lab, you must be certain that you have the agreement of me and of everybody else who is involved in the research.
- C. All manuscripts submitted for publication must contain enough information for an informed reader to be able to replicate the results.
- D. Requests to share methods, data, and samples should be responded to positively, but only with my assistance.

II. Digital data

- A. The primary storage place for digital data is the laboratory computer used to acquire the data.
- B. Data files must be stored in the appropriate "Data" folder, under a sub-folder labeled with your name. Within this personal folder, the data must further be organized into sub-folders labeled with the date that the measurements were performed.
- C. Data file names should be descriptive, allowing ready identification of the file contents.
- D. You must maintain a second copy of all data files on your personal computer, laptop, and / or USB drive.
- E. All data on the laboratory computers are backed up automatically. Do not disable the backup system, and ensure that the system is working properly after the computer has been restarted or has lost Internet access.
- F. When you leave the lab, make sure the door is closed and locked.

III. Laboratory notebooks

- A. All work that you do must be logged in a laboratory notebook.
- B. Notebook entries must be consecutive and labeled by date.

- C. Do not erase or obliterate information in your notebook or remove pages from the notebook.
- D. Every data file on a laboratory computer must have a corresponding entry in your lab notebook.

IV. **Samples**

- A. Samples must be stored in the lab.
- B. Samples must be labeled with your name, the date they were made, and a short descriptive code.
- C. All samples you make must have a corresponding entry in your lab notebook. The entry must contain the same code as the sample label.
- D. Samples must be retained for at least five years after the end of the research project.