### **Lab Tips and Things to Remember**

- 1. Before starting anything, divide the work among team members.
  - Make sure not too many people are working on the same thing. Having too many people working on the same task makes it much easier to make mistakes.
  - Make sure everyone fully understands what they need to do and what is
    happening as they do their task. Understanding the information and the process
    helps the members make fewer mistakes as well as teach them the significance of
    what they are working on.

## 2. Label everything

- Label things to avoid mixing up your data and adding the wrong thing.
- A lot of things we work with are in small containers (like microfuge tubes) and have very little space for labels. Use a shortened label and write the shortened label with the detailed label so you can reference it as you are working on your lab.

# 3. Don't start anything you don't have time to finish

- Long term, starting a project that takes longer than the due date is a waste of time and resources.
- Before you start a meeting, know how long your planned lab will take versus how much time you have. If you don't have enough time or a good stopping point in the lab, reschedule the lab. If you can't reschedule the lab, delegate this task to someone who can stay later, and knows what to do. Starting a lab that you can't finish is a waste of resources and if you stop at a point that is not an ok stopping point, it will tamper with the results.

# 4. Check all your equipment

- A very important step that is easily forgotten. Using equipment that can cause your measurements to be off can cause different results and tamper with your data, or can cause you to lose your sample.
- Incorrect use of equipment can cause some of the same unfortunate problems as mentioned above.

### 5. Write down everything in your lab notebook

- Details in your lab notebook not only help you understand your results later on, but it is also useful for other team members who will continue to work on the lab.
- Labeling who worked on that piece and the date is super important because you can ask those people for more information if there isn't enough details.

# 6. Be organized about everything

- Organize in advance what you want to complete each day in the lab. This will prevent wasting time before meetings and you can just start the lab.
- Keeping your workspace organized helps members find things easier and prevents lab equipment from breaking. It also helps prevent spills and mistaked in the lab.

#### 7. Take Breaks

- Lab work is hard and mentally draining for everyone, and especially people who are newer to the lab environment. Taking breaks helps everyone's mind refresh and this will result in fewer mistakes from occurring.
- Also, taking breaks as a team helps build relationships in the team and makes the work more enjoyable and communication easier.

#### 8. Know your team

- Knowing your team makes members more comfortable asking questions and participating in team discussions. Team discussions require good conversations because it helps build the best ideas.
- Knowing your teammates is important for communication because team members will feel more comfortable to speak out in a safe environment where they know everyone.