**Stated clearly**

How would I state and explain my goal as clearly as possible to somebody else? Simple everyday terms.

Deliver a high-quality end of rotation presentation that is the result of a successful rotation where new skills were learned and applied.

**Specific**

What: What exactly is the state in the future that I want to reach (desired result)?

Have a successful and productive rotation that culminates in a high-quality lab meeting presentation.

Why: Which are the specific reasons, the purpose or benefits (the project, the team, the organization)?

A high-quality presentation will indicate that I have contributed meaningfully in some way to the lab’s goals. While not every goal will be reached it should be doable that I will have contributed by helping with methylotrophic methanogen isolation, confirming methane production from trimethyllysine soil enrichment, or the C1 DRAM module.

Why: Why is reaching this goal meaningful and essential to me?

The presentation is the culmination of the work done in a rotation. Delivering a good presentation means two things to me: I was productive and accomplished something, even if something small, and I put together and delivered a quality scientific presentation. Both of these things are important to my growth as a scientist.

Who: Who- apart from myself is involved?

Jared Ellenbogen - Primary contact and mentor during the rotation

Kelly Wrighton - Mentor and PI

The Rest of the Wrighton Lab - Tertiary, but available and good source of assistance

**Measurables**

Which indicators of quality and quantity are there to measure/observe my progress?

Set up soil enrichments to measure methane production from Trimethyllysine substrate

Successfully inoculate and grow a methanogen

Run DRAM by myself at least once

Help Jared with C1 DRAM module

Generate rough draft of presentation

How will I know when my goal is accomplished?

Feedback following delivery of the presentation and the end of my rotation.

Self-feedback as well.

**Action oriented**

How will I reach my goal? Which competencies and skills must I have?

Making scientific figures for the presentation

Be able to speak intelligently and competently about the presentation topics

Unix Terminal basic commands

How to use DRAM

How to process 16S data

Methanogen culturing

Using a GC

Which authorization or resources must I have? (data in place, approval, etc)

Access to server

Access to lab software/accounts

List at least 3-5 milestones on the way to this goal. Try breaking your goal down into smaller products that you can achieve to know you are on course.

* Milestone 1
  + Use metagenomic data to try and isolate novel methylotrophic methanogen
  + Select MAG to try and isolate
    - Interpret genome to select conditions for isolation
  + Perform dilution-to-extinction isolation experiment
  + Potentially perform Agar-plug experiment
* Milestone 2
  + Complete 16S Rumen project
  + Attend lab meetings
* Milestone 3
  + Rough draft of presentation
  + Including practicing the presentation
  + Generation/acquisition of figures

Under each of the milestones – what are some action items that you need to accomplish to hit that milestone.

**Realistic**

How realistic is my goal regarding myself (life), the context/environment, financial constraints? What are some areas that could influence your progress towards the goal (this isn’t a bad thing, this is being realistic that our lives are busy and complicated at times).

Obligations from classes

* Homework, Literature, Exams etc.

Obligations as a GTA

* Grading/Time spent teaching

Obligation outside of school

Scheduling conflicts with Jared

* Both busy, meaning times when I could be making progress he will be unavailable
  + Will have to rely on more than just Jared. Self-directed and ask for help from other lab members.

Is my goal in conflict with my other goals, if yes what can I do to find a compromise here.

**Time-based**

When will I reach the goal?

March 5th

Are there secondary dates if I don’t meet this goal? How firm is this goal, is there a final date I must account for.

Firm date, end of rotation.

When will I start working on the goal?

January 8th

For the key milestones listed above what are these timelines? These are your checkpoints for making sure your goal setting is realistic.

1- Set up the isolation experiment by end of January

2- 16S project will be done Feb 27th

3- Rough draft by March 1st

How are you prioritizing this goal on your schedule and in your life? Specifically, address how you have allocated time to goal-dependent activities/milestones.

Having a productive rotation and high-quality final presentation is one of my top priorities. Time in between 8:30 am and 5:30 pm during the weekdays that is not being used for classes or GTA duties will be devoted to the rotation.

Share your goal with someone else- Think about adding your milestones to your and Kelly’s calendar, with a reminder before (2 weeks, 1 month).

Shared with Jared