My philosophy on rotations

The rotation is a chance for you to evaluate the projects, technique and atmosphere of the lab, and for me and for lab members to get to know you. The following guidelines will help you make the most of your 6-12 weeks in the lab.

**Time commitment.** I am aware that you may also be taking classes and teaching, and that these can be very demanding, so it’s important to discuss these ahead of time. We have a lab calendar that is useful for seeing activities and commitments of lab members. I have found that being present in the lab about 12 hr/week during your rotation is the minimal time commitment to get something out of the experience. There may be weeks (midterms and finals) where teaching or coursework are your main concern and you aren’t in the lab. That’s fine, rotations are flexible with enough planning!

**Mentoring.** For overall project discussions, you will be put in the individual lab meeting schedule. These “indi meetings” are typically 45 minutes every two weeks. During this meeting we discuss past progress, results and troubleshooting and plan for the next two weeks. These meetings may be with just you and me, or may include your lab mentor. Over the years I have become basically incompetent at the bench (save prime autoclaving and Arabidopsis crossing skills), so you will be teamed up with a postdoc or PhD student to work on a project in the lab. The lab is very generous and we love having new students. At the same time, teaching someone does take time, so it’s important that you respect the effort your mentor has made. If you’ve discussed a time to meet, make sure you are there. If an unforeseen event comes up, inform your mentor as soon as you can. If you make an experimental mistake, alert your mentor right away.

**Specific rotation project.** Your rotation project may be something designed to teach you a technique, or to explore a new direction, or to build on your current expertise. Often rotation projects are “risky”—that is they would be really exciting if they worked, but they may not. The point is to get you into the rhythm of the lab. I will not evaluate you based on any particular result. Almost never is a rotation project the same as a PhD project; usually rotation students see something else that excites them and we build a project around that.

**Final product of rotation.** Ideally, you will give a short (30 min) presentation of your project in one of our weekly lab meetings. You should prepare slides that introduce the idea of your project, provide background and context, show your results and interpretations and your verdict on what’s next. Sometimes what’s next is “don’t continue with this line of inquiry”! That’s fine and it’s quite useful information. A PDF of your presentation should be sent to me and all reagents and data generated should be documented.

**Great performance in a rotation includes:**

- Interacting with other lab members; knowing what they are working on
- Keeping clear notes of your results, depositing plasmid or seeds in stock and data in databases accessible to others
- Reading some core papers from the lab and from the field
- Reading more broadly to explore your rotation project or a project you think you might do as a PhD project.
- Active participation in all weekly lab meetings
- Active participation in journal clubs or other lab-related science events
Some suggestions for evaluating your rotation and deciding on a PhD thesis lab

Choosing a PhD lab is a difficult decision. You might feel like you have too many choices, or alternatively, you may find that you like aspects of several labs, but no one is a perfect match. My experience as a professor over the last 18 years and about 50 PhD committees is that it’s easier to develop a love for a project in a great (for you) lab atmosphere than to work on a project you love in an atmosphere you don’t.

My goal is to help you become the scientist you want to become. This might be in my lab, but it is equally possible that you would best do this in another lab. Although telling a rotation advisor you are going elsewhere can be a nerve-wracking experience for you, I know the majority of rotation students will not join the lab (1/3 odds!). Please be assured that I will support your decision, and continue to support you during your PhD here at Stanford. Rarely, there have been times that students wanted to join the lab, but I was not in a position to take on another student, or thought I would not be the best mentor for them. In those cases, I worked with the student to find alternative labs, sometimes suggesting a fourth rotation.

Some questions to ask yourself about choosing a lab

Can you identify a mentor among the postdocs and PhD students currently in the lab? Is there someone whose project is similar to yours? Or who you feel you can go to ask general lab (and life) questions?
__________________________ (mentors)

Are there projects or techniques currently in the lab that are good matches with your interests?

PhD students often introduce a new technique to bear on a core question in the lab. This is also a great way to build collaborations on campus. Do you have an idea of what might fit here?
__________________________ (some ideas)

PhD students might also take a set of established techniques and apply them to questions or organisms we don’t currently study. Do you find something here?
__________________________ (some ideas)

Is it clear what the expectations are for your project, work habits, mentoring? Do you know already what careers you might pursue after your PhD? Are there examples in the lab of people who have taken these paths?

What are other things that are important in your life? Do these interests, commitments and obligations (family, community, arts, sports, baking, faith, political activism, etc.) mesh with the expectations of your lab?