

# Choosing an Advisor and Labs

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## Things to Think About When Picking an Advisor

	Pros	Cons
Seniority: Established Faculty	Lots of mentoring experience, a large network of accessible collaborators, stable labs (no question of tenure, etc).	May be disconnected from the day-to-day activities of the lab. May not be as 'available' as you'd like.
Seniority: Junior Faculty	Typically very driven and very accessible to students. May be willing to invest more time in actual advising.	Can be too driven and expect too much from you. If he/she is not tenured, there is the possibility that he/she may not get it.
Advising Style: Hands On	Your research may go more quickly and your efficiency and yield may be higher.	Less freedom to pursue your interests in the way you want to pursue them.
Advising Style: Hands Off	Freedom to decide how to tackle your problems.	Slower progress as you try to figure out what's useful or not.
Famous	Association with a big name may be helpful to your future career, having industry/academic contacts, getting fellowships/grants.	PI may be spread too thin to pay much attention to your research. In extreme cases he/she may have no idea what you're doing.
Expertise in Your Interests	Can talk to you and advise you regarding exactly what you're working on.	May have preconceptions about what is important and which avenues of pursuit are promising and thereby restrict your desire to pursue 'out of the box' ideas.
High Expectations	Typically leads to higher output and greater efficiency. This is of course, not always true for everyone.	You might be working day and night, weekends, holidays, etc.
Low Expectations	Less pressure to produce means you have greater discretion over your own time and how it's spent.	You have to motivate yourself, which is hard to do. This may lead to a longer stay in grad school.

## Lab Characteristics to Consider

Demographics	A lab might consist of anywhere from 2 to 150 members and while some labs are heavy on graduate students others are mostly filled with Postdocs. Typically, a large lab means you'll probably have very little contact with the PI while in a small lab you can likely count on more personal time. In larger labs with many Postdocs you might get more of your 'advising' from the Postdocs than the PI.
Publication Record	This should give you an idea of the quality of research coming from a lab as well as the expectations that an advisor might have for his or her students vis a vis graduation.
Graduation Time	Some advisors push students through very quickly while others may like to keep you around when, after 3 years of learning, you finally start becoming productive.
Competitive vs. Collaborative	You might be surprised by how much this varies from lab to lab. Of course it is not necessarily bad for a lab to be competitive—some people work more efficiently as a result of competition (the fundamental assumption of a Capitalist society). On the other hand, a friendly and collaborative environment may prove more fertile for others.
Social Environment	Do you enjoy being around the other members of this lab? Do you want to be friends with lab mates? Or would you prefer to keep friends & work in separate compartments?
Structure	Most MIT labs consist of a single PI with students/postdocs / technicians working under him or her. Other labs (say at Harvard Medical School) might be headed by a 'director' with associate and assistant professors under him/her, and students/Postdocs/technicians under them. This is important because it will dictate who you will mostly interact with.
Where People End Up	Some PI's have a great record of placing their students in academia while others have extensive industry connections or experience with startups. Something to think about if you have a good idea of the career path you'd like to pursue... ask the PI for the contact info of previous graduates who might be able to give you good information about that particular lab versus the real world.
Work Hours	In most labs there is an established work culture—if everyone in your lab works 24/7 but you like to work 9-4 Mon-Thurs it's a safe bet that the lab will change you rather than the other way around.