

Questions to ask before selecting an advisor

Broad questions

- Is the faculty member in a position to share his/her time and advice?
For example, what is the travel schedule? How often are group meetings? Etc
- Does the faculty member have a reputation for producing quality research in a timely manner?
- Is the faculty member's current research area of interest to you and in keeping with your graduate study goals?
- How do you see the research that the faculty member will support during your time here contributing to your career after Caltech? What else will you need to do to maximize your chances of getting your next job (postdoc, industry, etc.) and how will this faculty member support those goals?

Specific questions

- Does the professor have the time AND interest to take you on as a doctoral student?
- Is the demeanor/personality appealing and comfortable for your academic style and needs?
- Are there ongoing research activities in the professor's research group in the area of your doctoral interest? Conversely, are there too many people working on that topic already?
- Have former graduate students of the professor had good experiences and completed their programs in a **timely fashion**? **Make sure you talk to graduate students who are in their 4th or 5th years—and beyond if they are in the lab!**
- Are there sufficient research grants/projects available under the direction of the professor for you to find a suitable research area for a dissertation topic?
- Does the professor supervise appropriate space and laboratory equipment for you to have adequate space and equipment? If the equipment or supplies you need aren't present, are they willing to help you find or buy them?
- Will there be funding for you the entire time you are in grad school? **Very important!**
- Does the professor anticipate being at the university during the entire period of your planned program?
- Does the professor exhibit the ability to communicate openly, clearly, and effectively from your perspective?
- Does the professor have a history of giving proper attention to protégé who work under his/her guidance?

(Above sections adapted from <http://www.cc.gatech.edu/faculty/ashwin/wisdom/how-to-choose-an-advisor.html>)

Additional points:

- Take initiative in talking to professors.
- All people have faults, even advisors. Ask other students in that lab and also in other labs—what are the professor's faults and will they affect your career?
- How often do the professor's students attend conferences?
- What sorts of collaborations with other labs are possible?
- How does the faculty member expect you to divide your time between various aspects of your job including (but not limited to): taking classes, learning new techniques or

background information for your project, upkeep of instruments, other shared responsibilities in the lab, preparing and giving presentations or group meetings, preparing for and going to conferences, writing papers, training others in the lab (and in collaborating labs), writing grant proposals, TA responsibilities, and of course, **doing research?**

- Ask what the average day-to-day schedule is. Are you expected to work 8 am-11 pm, plus weekends? Or is 9 am-6 pm sufficient?
- Ask how much TAing you will do, and then evaluate if it is in line with your career goals.
- Ask both the faculty member and other students that have worked for them: how the faculty member is at crucial junctions in graduate student careers: through classes and TA responsibilities, during qualifying exams, candidacy, the sometimes tough 4th and 5th years, and at the time of your thesis defense. Will the faculty member provide the support you need to get through the rigorous Caltech program and degree requirements?
- Does the faculty member involve students in the grant writing process?
- How proactive is the faculty member in getting students jobs after Caltech? What sort of jobs have previous advisees of this faculty member been successful in obtaining?
- In general, try to be as clear as possible with potential advisors about your expectations and goals. Some advisors might prefer to steer students towards industry. If you are fairly sure that you want to be a professor, make sure that they--and other member of your thesis committee--**support your goals.**

Final words of advice

- We know that this feels like a lot of questions, and at some point it might feel awkward, but you and the faculty member are committing to a several year relationship. Interviewing each other for a few hours before making a decision is not only reasonable, but should be expected.
- Attend group meetings before committing
- **Spend time in the lab to get to know your future coworkers.** They will influence your career progress almost as much as your advisor, and you should be aware of the personalities and goals.

The GSC has put together a survey on different labs on campus. It can be found here:

http://www.its.caltech.edu/~gscacad/html/lab_review_survey.html

If you don't find the faculty member you are interested in listed, please contact the GSC Academics Committee at: gscacademics@caltech.edu to see how the GSC can help you learn about other faculty members histories with graduate students.