How to choose a dissertation advisor

- Need to find an advisor that fits personality and goals
- This person is a guide to your research so he/she must have the time and energy to be available for you
- Dissertation advisors should teach you how to:
    - Ask important and interesting questions
    - Translate these questions into experiments with verifiable results
    - Critically evaluate the results of experiments
    - Present ideas and data to the scientific community in written and oral form
- A good advisor will also be a mentor who:
    - nurtures your career and personal development
    - acts as a confident
    - shares interest and knowledge
    - challenges you, spends one-on-one time with you
    - helps you develop an individual career plan
    - introduces you to other key scientists
- As a good student, you should:
    - establish and maintain a philosophy for high performance
    - have a positive attitude
    - have a clear vision of where you're going
    - be proactive
    - set reasonable, attainable, and challenging goals
    - seek and utilize mentor's advice
    - be accountable
- To choose a lab:
    - be familiar with all your options
    - meet and talk with faculty, postdocs and students

- listen carefully to faculty presentations
- listen to student presentations (are the students accomplishing stuff?, do they know what they're doing?, are they happy?)

❖ What to ask a prospective advisor:

- How much time do you spend with students?
- Who will supervise my daily activities?
- What are you expectations for student workload and time?
- Is the schedule flexible?
- How will I be funded?
- What lab space and equipment are available?
- How many people will be working on the project with me?
- How do you deal with deciding authorship and collaborative projects?
- Am I going to have to depend on a collaborator for equipment?
- How many students have earned a degree in your lab?
- How long did it take them?
- Where did they go after your lab and what are they doing now?
- What strategies do you use to help students hone their interests, refine their technical skills and develop independence?
- How do you guide students who are interested in pursing non-traditional and non-academic career options?

❖ How to evaluate faculty prominence:

- publications- steady record of publications in good journals
- are other people citing the articles?
- 2+ papers per year without long interruption
- grant support- how long has he/she had it- has it been renewed?
- Is he/she on editorial boards, grant review panels, giving seminars, chairing sessions or organizing meetings, writing reviews?

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Pros/cons of a Junior Advisor

Easier to relate to	Inexperienced
Enthusiastic	Little track record
Motivated to succeed	May not get tenure
Cutting edge research	May be risky area of research
Small labs	Limited resources
Want/need students	Under enormous pressure
Hands-on mentoring	Harder to develop independence (faculty gives too many directives)

Pros/cons of Senior Advisor

Experienced and knowledgeable	Generation gap
Significant track record	Beware of burnout
Motivated to succeed	May depend on postdocs
Established research	May be dated area of research
Strong resources	Large labs
Trained more students	May delegate supervision
Can foster independence	May not pay much attention to you

Many outside responsibilities- may not be as available