How to Make the Most of Student-Advisor Relationships

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What is an Advisor?

• According to the dictionary, an advisor is:*
  • somebody whose job is to give advice about a subject

• In the academic environment:
  • Someone who knows the rules needed to successfully complete a graduate program
    • Course obligations
    • Teaching obligations
    • Research expectations
    • Time limitations
  • Provides a map to complete your degree

*http://dictionary.cambridge.org/
What is the PhD Student-Advisor Relationship?

• A relationship is defined* as:
  • the way in which two things are connected
  • the way in which two or more people feel and behave towards each other
  • the way in which things are connected or work together

• The PhD student-advisor relationship is often described as an apprenticeship.

• An apprentice is defined* as:
  • someone who has agreed to work for a skilled person for a particular period of time and often for low payment, in order to learn that person's skills

*http://dictionary.cambridge.org/
What is a Mentor?

• A mentor is defined* as:
  • a person who gives a younger or less experienced person help and advice over a period of time, especially at work or school

• A mentor helps you navigate a path to your destination
  • May help you decide what that destination is
  • There are many different decisions
  • Helps prepare you to succeed

*http://dictionary.cambridge.org/
Have More Than One Mentor

• Ideally, your research advisor is your primary mentor
• A single person isn’t the best person for everything
  • We’re all more skilled at some things than others
• Good to have multiple mentors for different topics and skills
  • Research advisor for high level research ideas
  • Post-doc / senior grad student for practical research ideas
  • Industrial research mentor
  • Teaching faculty mentor
Two (Extreme) Advising Relationships

Hands-off

Hand-holding

Communication and agency are key.
Kelly Shaw
Associate Professor
Williams College
What Are My Advising Experiences?

Student
- Duke University
- Princeton University
- Stanford University

Advisor
- University of Richmond
- Reed College
- Princeton University
- Williams College
Trilce Estrada
Associate Professor
University of New Mexico
Global Computing Lab @ UD circa 2009
My advisor: Dr. Michela Taufer
My trajectory

- **2007**: Started PhD
- **2012**: Finished PhD
- **2013**: Started TT job
- **2019**: Got Tenure
- **2022 +**: Lived happily ever after
My trajectory has been more like a labyrinth.
My advisors and the mentors that I have made along the way have made all the difference
Data Science Laboratory @ UNM
What is the role of the advisor in the relationship
Your advisor is a teacher

Teach you:
• Research skills and strategy
• How to evaluate existing research
• Communication and presentation skills
• Professional and ethical behavior
Your advisor is a guide

Guidance on:

• Courses to take
• Research topics
• Publication venues
• Career planning
Your advisor is your promoter

• Foster and promote your career
• Enable career opportunities, visibility, and awards
• Support and encourage you through your job hunt and beyond
Your advisor is your network seed

• Your advisor can expose you to opportunities for networking at conferences and other events.

• Their colleagues and your research lab peers will become important nodes in your network.
What is your role as a student in the relationship
What is Your Role as a Student?

• Manager of your graduate experience
• Need to be proactive and organized
• Need to effectively communicate
  • Goals
  • Areas for growth
  • What does and does not work for you
  • How advisors and mentors can help
• Need to seek out and take advantage of other resources
• Need to be open to your advisor’s and mentors’ guidance
Manage Your Advising Relationships

• Meet regularly
  • Bring work products to discuss short-term progress
  • Periodically discuss longer term plans

• Decide on communication frequency and mechanism
  • How to get help between meetings
  • Pre- and post-meeting emails
  • Shared electronic notebook
Manage Regular Advising Meetings

• Bring a written plan (e.g., Powerpoint slides)
• Start with contextual review
  • Problem you’re working on and why it’s important
  • Target deliverable
  • Progress made so far
  • Current and future problems
• Discuss recent accomplishments
  • New definitions, classifications, related work, understandings, progress on infrastructure, experiments, proposed solutions, …
• Discuss problems or challenges
  • Bring detailed examples
Manage Regular Advising Meetings (cont.)

• Agree on what to accomplish next
  • Propose next steps
  • Discuss and revise accordingly
    • e.g., too ambitious, too limited, pursue some intermediate steps or totally new direction
  • Discuss concrete goals or products for next meeting
  • Provide written summary on next steps
Manage Discussions of Longer Term Plans

• Discuss longer term goals and strategies for achieving those goals
  • Paper submission
  • Acquisition of skills or experiences
  • Career goals

• Review your overall progress
  • Ask if you are making adequate progress
  • Discuss your strengths and weaknesses
  • Discuss how you can build on your strengths
  • Discuss how you can address your weaknesses
  • Ask about specific opportunities
    • Internships, workshops, fellowships, teaching opportunities
Navigate Your Own Path

- Find and explore opportunities to develop your skills
  - Research methods, statistics, data visualization, etc. course
  - Workshop on specific technology needed for research
  - Writing workshop
  - Teaching workshop
  - Talks (including practice talks)
  - ...
How to find a research advisor and how to decide if they are a good fit
How do you find an advisor

• Before joining the program:
  • Google interesting research areas/projects
  • Email the professors
  • Meet them at conferences
  • Have someone to recommend you

• After joining the program:
  • Apply for existing funding/research opportunities
  • Take classes and impress the professor
  • Volunteer for a research project and participate in their research lab
Personality

• **Extreme:** your advisor is your pal, and that prevents them from giving you constructive criticism.

• **Extreme:** your advisor is mean or grumpy, you are scared of them, and you cannot communicate with them effectively.

• **Middle ground:** your advisor is friendly and open to communication, they are able to tell you the hard truth about your work.
Funding

- **Extreme:** your advisor has no funding and they are not actively looking, or there are no funding opportunities for the specific research area.

- **Extreme:** your advisor has plenty of funding, but their role is to act as a money-maker and they are not involved with students or research.

- **Middle ground:** your advisor has funding and can support you through the program, or they can provide you with opportunities of external support.
Mentoring style

• **Extreme:** your advisor hand-holds you. But you never learn to be self-sufficient.

• **Extreme:** your advisor gives you no guidance and let you stumble on your own. You may learn to land or you may perish trying.

• **Middle ground:** your advisor gives you the tools to succeed, they are vigilant but not overprotective.
Working style

• **Extreme:** your advisor is apathetic and never available. You do what you want, whenever you want. The end result can be catastrophic.

• **Extreme:** your advisor is controlling and micromanages you. Their expectations may be unrealistic.

• **Middle ground:** your advisor understands your working style. They can push you without breaking you. They provide you with realistic and well defined goals and standards.
Research lab and collaboration environment

• **Extreme**: your advisor leaves the research lab to self-manage; there is no guided collaboration. The environment feels disorganized.

• **Extreme**: your advisor is authoritarian, nobody has a voice except for them. The environment feels heavy.

• **Middle ground**: your advisor promotes a healthy and collaborative research lab, everybody feels heard and appreciated. The environment is supportive.
What to do when the relationship is not working
What can break the relationship

• Why the relationship fails:
  • Mismatched working styles
  • Mismatched expectations
  • The relationship is one-sided
  • Lack of funding

• How to tell that it is failing:
  • Communication is breaking
  • Frequent arguments
  • Lack of interest from at least one side
  • Inconsistencies and contradictions
How to repair the relationship

• Open/frank communication
• Setting up boundaries
• Define common and realistic goals and expectations
• Define contingency plans
• Balance the effort
• Find a co-advisor
• Talk to your peers in your research lab
• Talk to your peers in other labs
Despite all of this, the relationship can still fail
How to break up with your advisor

• You don’t need to stay on an unhappy situation
  • Find another advisor on your same department
  • Switch programs/universities

• The way in which you make your exit matters!
  • **Best case scenario:** your old advisor is an ally, participates in your committee, writes a recommendation letter
  • **Worst case scenario:** you made a lifelong enemy, whose only goal in life is to ruin your career

• Do NOT burn all the bridges
  • Communicate, be polite, be helpful
At the end, it’s all about balance

• You and your advisor form a symbiotic relationship for 2 to 7 years
• But the care and commitment to each other can last a lifetime
How do you find additional support?
How Do You Find Additional Support?

• Create or join peer networks
  • Paper reading group
  • Qualifying exam study group
  • Thesis writing group
  • Online student groups
  • Conference student groups

• Find additional mentors
  • Senior research member of group
  • Research group alumni
  • Industry researcher in your area
  • Former research mentors
  • Teaching faculty mentor

• How do you create connections?
  • Volunteer to present your work
  • Ask for feedback on preliminary research
  • Ask questions after a talk
  • TA for a faculty member
  • Do an internship
  • Participate in “Meet a Senior X” programs
Thank you!

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