

Surviving Graduate School

Getting the most out of the relationship with your research advisor

- **Meet Regularly** – you should persist on meeting once a week or at least every other week because it will force you to make regular progress and it keeps your advisor aware of your work.
- **Prepare for your meetings** – arrive at each meeting with:
 - Topics to discuss
 - Review of what you have done since your last meeting
 - List of any upcoming deadlines
 - Notes from your previous meeting
- **Email him/her a brief summary of EVERY meeting** - this helps avoid misinterpretations and provides a record of your research progress. Include (where applicable):
 - Time and plan for next meeting
 - New summary of what you think you are doing
 - To do list for yourself
 - To do list for your advisor
 - List of related work to read
 - List of major topics discussed
 - List of what you agreed on
 - List of advice that you may not follow
- **Show your advisor the results of your work as soon as possible** - this will help your advisor understand your research and identify potential points of conflict early in the process.
 - Summaries of related work
 - Anything you write about your research
 - Experimental results
- **Communicate clearly** - if you disagree with your advisor, state your objections or concerns clearly and calmly. If you feel something about your relationship is not working well, discuss it with him or her. Whenever possible, suggest steps they could take to address your concerns.
- **Take the initiative** – you must be responsible for your own research ideas and do not have to clear every activity with your advisor.

Getting the most out of what you read

- **Be organized**
 - Keep an electronic bibliography with notes to the paper files
 - Keep and file all the papers you have read or skimmed
- **Be efficient** - only read what you need to
 - Start by reading only the conclusion, scanning figures & tables, and looking at their references
 - Only read the other sections if the paper seems related to your topic or will give you another perspective
 - Skip the sections that you already understand
- **Read PhD theses** - although they are long you can quickly learn about what has been done in the past and use them as examples. Especially focus on:

- Background sections
- Method sections
- Your advisor's thesis - this will give you an idea for what he/she expects from you.

Making continual progress on your research

- **Keep a journal of your ideas** - write down what you are thinking about even if you think it is stupid. It will help you keep track of your progress and keep you from going in circles. Do not plan to share it with anyone, so you can write freely.
- **Set some reasonable goals with deadlines**
 - Identify key tasks that need to be completed
 - Set a reasonable date for completing them (on the order of weeks or months).
 - Share this with your advisor or enlist your advisors help in creating the goals and deadlines.
 - Set some deadlines that you must keep (e.g., volunteer to give a student seminar on your research, work toward a conference paper submission deadline, etc.)
- **Keep a to do list** - Checking off things on a to do list can feel very rewarding when you are working on a long-term project.
 - List the small tasks that can be done in about an hour
 - Pick at least one that has to be completed each day
- **Discuss your research with anyone who will listen** - use your fellow students, friends, family, etc. to practice discussing your research on various levels. They may have useful insights or you may find that verbalizing your ideas clarifies them for yourself.
- **Write about your work**
 - Early stage: Write short idea papers and share them with your advisor and colleagues.
 - Intermediate stage: Find workshops and conferences for submitting preliminary results. This can also help you set deadlines.
 - Advanced stage: Target relevant journals.
- **Avoid distractions** - it is easy to ignore your research in favor of more structured tasks such as taking classes, teaching classes, organizing student activities, creating web pages like this, etc. Minimize these kinds of activities or commitments.
- **Confront your fears and weaknesses**
 - If you are afraid of public speaking, volunteer to give lots of talks.
 - If you are afraid your ideas are stupid, discuss them with someone.
 - If you are afraid of writing, write something about your research every day.
- **Balance reading, thinking, writing and hacking** - often research needs to be an iterative process across all of those tasks.