How to Survive Graduate School

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BGS Orientation
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Overview

I. Advice for your first year
II. General Grad School Advice
   I. Lab
   II. Life
III. Resources
IV. Q&A
Disclaimer

No two Ph.D. experiences are exactly alike

http://www.mos.org/discoverycenter/system/files/aotm/snowflakes+fro+web.jpg
Tips for your First Year

http://whatshouldwecallgradschool.tumblr.com/post/93523471620/going-to-lab
Classes: Focus more on **learning**

Two toxic attitudes
- Undergrad
- “This doesn’t apply to me”
Choosing Rotation Labs: Where to Start

• Be open to fields you might not have previously considered!

• Lab environment
  – Big vs. Small
  – New vs. established PI
  – Funding
  – Previous training record
  – Publication record
Choosing Rotation Labs: Prepare for a meeting

• Dos:
  – Your homework!
    • Read faculty page
    • Read one or more recent papers, or at least abstracts
    • Talk to grad students who rotated or have joined
    • Be prepared to talk about your interests & expectations
    • Update your CV
  – Set up meetings with multiple PIs
Choosing Rotation Labs: Meeting the PI

- Look respectable and show up on time
- Let them know you are WHY you are interested
- Be prepared to tell them about yourself, your schedule, your career goals, etc.
- Ask LOTS OF QUESTIONS
  - Are you looking to take on a thesis student? How many students will you take this year? Have you talked to other students?
  - Do you have space and money available for a Ph.D. student?
    - NIH RePORTER (http://projectreporter.nih.gov/reporter.cfm)
  - Will you be at Penn for the next 5-6 years?
  - What projects are available in your lab?
  - What is your mentoring style? How often do you travel?
  - What are your expectations for your graduate students?
  - What is the lab environment like?
    - Hours, lab jobs, lab meetings?, journal clubs?
  - What have your previous students gone on to do after they graduate?
  - Can I see the lab space and meet your lab members?
Evaluating your meeting

• How did the meeting go?
  – Easy to communicate?
  – Friendly?
  – Excited?
  – Did you feel comfortable during the meeting?
  – Did they answer your questions and listen when you had something to say?
  – Were there any warning signs?
Having a Successful Rotation

• Show up when you say you will
• Write down **everything**
• Keep an up-to-date and thorough lab notebook
• *Work hard*
• Know what you are doing and why
  – Read the background papers!
  – Ask questions!
General Grad School Advice

stay alive.

http://whatshouldwecallgradschool.tumblr.com/post/96035854196/my-advice-to-incoming-students
Get an external hard drive, cloud storage or both. Use them CONSTANTLY

- 1 terabyte ~50-$60 for an external hard drive
- Amazon Cloud Drive: Unlimited $59.99/year
- Google Drive:
  - 15 GB = free
  - 100 GB = $1.99/month
  - 1 TB = $9.99/month
- Penn+Box
  (www.upenn.edu/computing/box/)
- Dropbox or Box
- Encryption/Security
Know how your assays & kits work

• Read the protocols!
  – Compare company vs lab protocols
• SAVES time in the long run!
• Consult the internet
  – Web forums


BitesizeBio.com
Organizing Samples

- Keep a detailed list of samples generated/collected in your lab notebook
- Create a system for labeling tubes
- Consider keeping a spreadsheet of freezer/fridge boxes and update as you add or remove samples

http://www.wired.com/images_blogs/wiredscience/2009/06/freezer.jpg
Read the Literature

• Seriously. Just do it
• Organize your PDFs
  – EndNote, Papers
  – Mendeley, Readcube
• Stay up-to-date
  – PubCrawler
  – Google Scholar Alert
  – Readcube
    Recommendations

http://whatshouldwecallgradschool.tumblr.com/post/51724403900/after-reviewing-the-literature
Apply for Fellowships

• National Science Foundation (NSF)
• Internal Training Grants (T32s)
• NIH Fellowships (F31 & F30 = NRSA)
• Private and/or Field-Specific Predoctoral Fellowships
Dealing with Criticism

*To escape criticism—do nothing, say nothing, be nothing.*
—Elbert Hubbard

Dos:
• Listen
• Be respectful
• Take responsibility

Do Nots:
• Don’t be defensive/react aggressively
• Don’t automatically take it personally
• Don’t try to prove the other person wrong
• Don’t concentrate on finding fault in the other person

Making mistakes is an essential part of learning!

Advice: http://www.professional-counselling.com/dealing_with_criticism_rejection.html
http://tinybuddha.com/blog/how-to-deal-with-criticism-well-25-reasons-to-embrace-it/
Social Life
Paying bills
Exercise
Cleaning the apartment
Doctor’s appointments
Car/bike repair
Dealing with Comcast
Roommate conflicts
Weddings/divorce
Vacation
Death in the family
Natural disasters

Classes
Seminars
Meetings
Homework/Study
Reading the literature
Experiments
Troubleshooting
Collaborations
Presentations
Career Planning
Grant/Fellowship Applications

http://www.ddiversified.com/tips-to-keeping-a-good-work-life-balance/
Time Management

• Get a planner/Google calendar and use it constantly
• Build in extra time
• Prioritize
• Be flexible!
Build a Support Network

Labmates

Significant Other

Friends

Family

Kittens
Eat well and try to exercise

Can’t I just do nothing?!
Give yourself a break

http://whatshouldwecallgradschool.tumblr.com/post/45060315553/dreaming-about-pipetting  Credit: Noddy
Give yourself a break

- Tons of restaurants and bars (Happy Hours, beer gardens)
- Concerts
- Philadelphia Zoo
- Art Museum (Free first Sunday of every month and Wednesday after 5 PM)
- Schuylkill River Trail (free outdoor movies during the summer)
- Professional sports
- Atlantic City (Gambling, shopping, the beach)
- Poconos (Nature and hiking)
Recap

- Choose your mentor/lab wisely
- Be proactive and manage your time
- Keep track of samples and data
- Keep up with the literature
- Maintain a sense of humor
- **Make time for FUN**
Questions?

Resources:

How to Complete and Survive a Doctoral Dissertation
Sternberg, David
N.Y.: St. Martin's Press, 1981

Getting What You Came For: The Smart Student's Guide to Earning a Master's or Ph.D.
Peters, Robert L.
N.Y.: Farrar, Strauss & Giroux, 1992

http://whatshouldwecallgradschool.tumblr.com

http://phdcomics.com/

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