How To Survive as a Graduate Student

Brian Noble
David Dill, Benli Pierce,
Jay Sipelstein, Jonathan Shewchuck
Why Are We Here?

How to survive

Graduate, stay sane, have fun along the way

Learn that from people who

Have been surviving for a while
Haven’t actually graduated
May or may not be sane
Are still having fun
Where are We Going?

Ground Rules

Things to Remember

Hard facts. (Precious few)

The 3 most important factors in your career

- Your advisor
- Your advisor
- Your advisor

Strategy and tactics

Black Friday

Advice we wish we’d listened to
Ground Rules

I’d like to keep to the time limit

No names
   Not fair to either faculty or new students

Focus on what new students need to know

The talk is only the tip of the iceberg
   Many different views; hear them all and pick
Things to Remember

It is assumed you have the ability to graduate

Most of the faculty really believe this
Many of them work very hard to make this true

That said...

The only person responsible for seeing that you graduate is you

And, to a lesser degree, your advisor
Hard Facts, er, Statistics

1) Most of you will graduate

2) If you don’t graduate, it is probably because you chose to leave and do something else. There is nothing wrong with this.

3) A small number of you may be asked to leave.

We’d like to eliminate #3.
The Rabbit, the Fox, and the Wolf

Thesis

On Rabbits As Carnivores

by: R. Rabbit
The Moral

It doesn’t matter what your thesis says, it’s your advisor that counts.
Choosing an Advisor

1) Decide what you need, want, can’t live with

2) Evaluate what’s available

3) Do the research to make a good decision

4) Re-evaluate all of these steps periodically
Your Needs, Wants, and Desires

Goals
Where do you want to be in 10, 20, 30 years?
What ideas do you have about the next N?

Style
How much supervision/direction/interaction?
Do you play well (better) with others?
What do you consider “research”?
How much flexibility do you have/need?
How many working hours in your week?
Your Needs - Continued

Pragmatics
What do you think your strengths are?
What do you think your weaknesses are?
What do you need to succeed?

Topics
What areas are you interested in?
How specific are your interests?
Would you consider widening interests?

Find out what others need/want/can’t live with!
Evaluating Potential Advisors

Pragmatics
- Are they looking for new students? Should they be?
- Are they reliable?
- Are they planning on staying? Tenure?
- Is any particular background required?
- Can they afford you?

Goals
- What do they consider student “success”? What is their 5, 10, 15 year vision?
Evaluating Advisors - Ctd.

Style

- How much supervision/direction/interaction?
- Do they focus on group or individual work?
- What do they consider “research”?
- How much flexibility do they have/need?
- How many working hours in their week?

Expectations

- What ideas do they have about the next N?
  - First 2 years? Afterwards?
- What if these expectations aren’t met?
Evaluating Advisors - Ctd.

History
Have they graduated anyone?
Are their current students successful?
Do their students write papers? First author?
Do they co-author? Locally? Remotely?
Have many students switched from/to them?

Intangibles
Rising star vs. established fame
Gut feeling, personality
What the advisor will need from you
Discovering what’s Available

Go to as many IC talks as you can stand.
   You might find a new interest
   You’ll be able to compare more styles
Talk to as many faculty as you’d like
   Ask them easy and hard questions
Talk to current and former students
Read some of the papers they give you
Beware:
   Nobody is an objective observer
   Advisors/students change over time
Re-evaluate your position

If you make a bad decision, you are not doomed

Talk to people you trust about your relationship
  Each of us is too close to our own situation

Talk to people about their relationship
  Beware the grass-is-greener

Talk to your advisor about your relationship
  Especially when things are rocky
  Especially right before Black Friday
  Especially before/after major events

Manage your manager
Advisor Strategies

Changing Advisors

It’s common, and it’s okay
Will it solve anything?
The longer you wait, the worse it can be
The more often you do it, the worse it can be
The hardest thing is knowing you should

Adding Advisors

+ Work in intersection of multiple areas
+ Combine strenghts of two+ advisors
- Harder to manage them
- Slip through cracks/pulled in 2 directions
Managing Your Manager

Your advisor has specific needs
   Find ways to mesh their needs and yours
Your advisor was not taught management
   Help your advisor learn how to advise
Your advisor is not psychic
   Ask for what you need to be effective
   Tell them the good and the bad
Your advisor is not omniscient
   You will disagree with and teach them
Do all of this with respect; it will be returned
Fear, Uncertainty, and Doubt

By definition, most people aren’t exceptions

“Most people take 7, I’ll do it in 5.”
“‘I’m not good enough to make it.’”

Most people will have problems, self-doubt

Failing a qualifier
Trouble getting a thesis topic
Negative (or no) research result
‘Losing’ a year
Uncertainty about the future
“But I’ve never had FUD before!”

Quality of colleagues has probably gone up
Expectations of you are probably higher
Research is nothing like coursework
  No right answers
  No deadlines
  No termination test
  No objective evaluation scale
  Different skill set
How to Deal With FUD

Talk, talk, talk to faculty, students, friends
  FUD is not as uncommon as you may think
Good way to get perspective on solutions
Have your support structure help you
  Form study groups
Find, with your advisor, short-term goals
Keep track of your accomplishments
Have interests/friends outside these walls
  Good way to get perspective on importance
CMU Counseling Center, other professionals
A Word About Courses

Very different from anything else you’ll do here
You already know how to take them
Aside from passing or not, grades don’t matter
Failing them is not cause for great alarm
Not correlated well with research success
That said:
  Easy tick-marks for both you and the faculty
  They can contain solid, useful material
  If you are going to do it, do it well
Work together when allowed by the course
Black Friday
Advice We Wish We’d Listened To

Keep open lines of communication with your advisor.

The one person who should never surprise you
Advice We Wish We’d Listened To

Talk with other students, faculty

Get another perspective on your work
Advice We Wish We’d Listened To

There are two (or more) partners in a marriage

Only being concerned with one of them is a BIG problem
Advice We Wish We’d Listened To

Be your own advocate!

No one else will be nearly as effective.
Advice We Wish We’d Listened To

Your thesis topic has a lot less to do with your eventual career than you may think.

What you can say about it has a lot more to do with your eventual career than you may think.
Advice We Wish We’d Listened To

Keep outside interests and friends

A good way to never graduate is to never leave the building.
Advice We Wish We’d Listened To

If you feel like you should be working, work

If you feel like you should be playing, play
Advice We Wish We’d Listened To

There’s a fine line between doing no work, and doing nothing but.

You’re almost always on one side or another of that line.
Advice We Wish We’d Listened To

You probably can neither write nor speak as well as you can hack or think.

Practice these skills early and often.