

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.

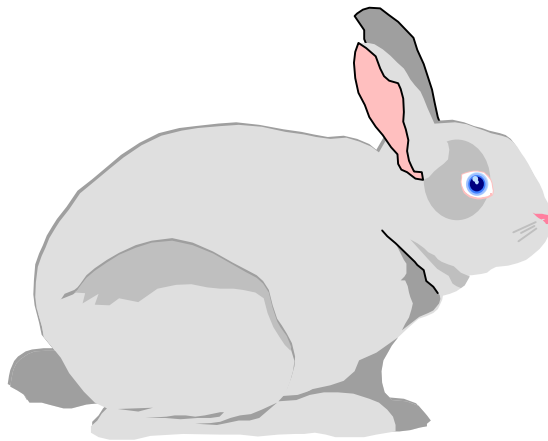
We'd like to eliminate #3.

The Rabbit, the Fox, and the Wolf

Thesis

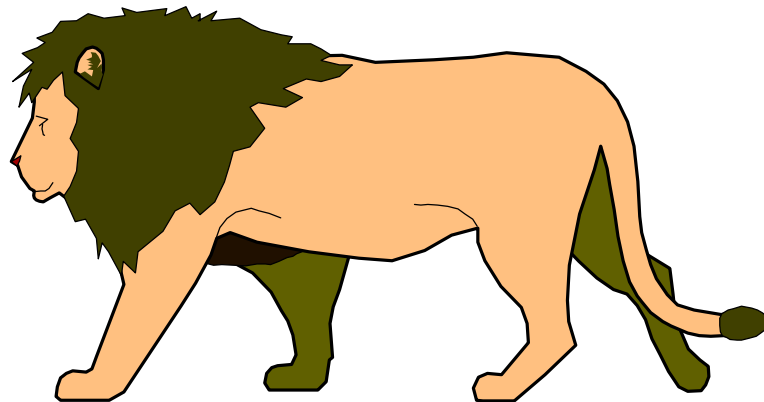
On Rabbits As Carnivores

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 strengths 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.