# 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.

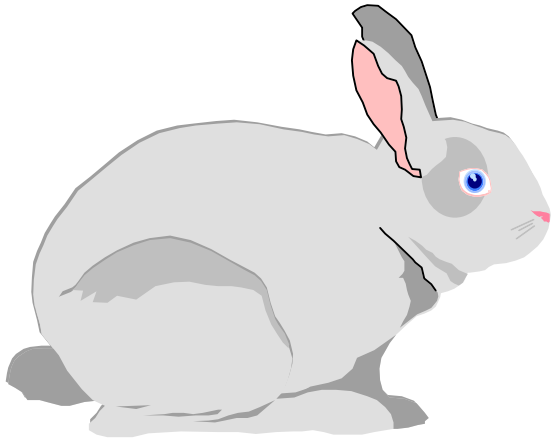
We'd like to eliminate #3.

# The Rabbit, the Fox, and the Wolf

**Thesis**

**On Rabbits As Carnivores**

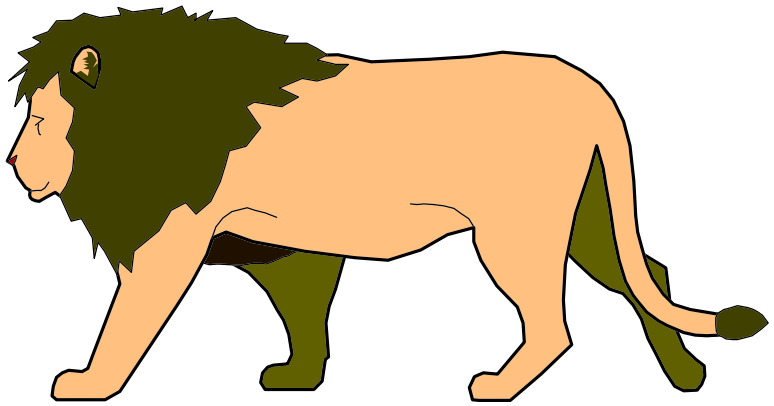
**by: R. Rabbit**



# 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-auther? 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 correllated 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 perspecitve on your work**

# Advice We Wish We'd Listened To

**There are two (or more) partners in a marraige**

**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.**