



## Graduate Student Professional Development Seminar

### I've Defended – Now What?

*"Tell me, what is it you plan to do  
with your one wild and precious life?"*

from The Summer Day by Mary Oliver

M.G. Lipsett  
Department of Mechanical Engineering  
University of Alberta  
February 27, 2019  
<http://www.mlipsett.com/teaching/>



## Today We Will...

Discuss career options after graduating  
from a graduate program:

MSc -> PhD

PhD -> PDF

Research Associates, Fellows, and Alternate Academics

Academia: Tenure Track

Government Labs

Industry

Entrepreneurship

Changing paths

How to prepare for life after being on campus forever



## **MSc -> PhD**

For Master's students, the easy and logical next step is to do a PhD

3



## **PhD -> PDF**

For PhD students, the easy and logical next step is to do a Postdoc

4



## **Research Associates, Fellows, and Alternate Academics**

Another path is to work in academia as a researcher under the direction of a full-time academic

Such positions are “soft-funded” meaning they are renewables contracts

Works for some

Generally a temporary option

5



## **Academia: Tenure Track**

What many people think of as their career goal when they decide to go to grad school

Most grad students do NOT become full time tenured academics

Being an academic is a great job

For the right kind of person

And it is definitely not for just anyone

6



## Government Labs

Working in a government lab may be an excellent choice for those who want an advanced technical career

Best for emerging technologies with lots of potential applications

Not so good for mature technology areas

Subject to changing government priorities

Can be bureaucratic

Can be *highly* influential in policy (at senior levels)

Some roles may require a security clearance

7



## Industry

My old favourite

For engineers, working in industry delivers the most direct value to society

8



## Consulting

A favourite

A type of engineering industrial practice

Can be individual, or a small team (or part of a big company)

Technical &/or management consulting

It is very difficult to consult early in one's career

It is difficult to get the first client

And the one after that

Then it can be very rewarding (with some risk)

Very much a self-managed career, with a continual need to stay current and maintain a network

9



## Entrepreneurship

My new favourite

Most potential for highly interesting technology development and direct impact

Not a lot of research

A lot of risk

Best for people who are comfortable with ambiguity, working in teams, and able to delay gratification

10



## Changing Paths

Let's see...

Industry: 2 years

Travel: 1 year

Grad school: 5 years (including 1.5 years overseas)

Government lab: 5 years

Industry again: 10 years

Academia: 13 years

Consulting: 8 years (in my spare time)

Entrepreneurship: 5 years (no more spare time)

11



## Changing Paths

It's okay to have more than one career

Opportunities are often geography & circumstance

So, be ready when opportunity knocks

12



## How to Prepare for Real Life After Being on Campus Forever

Being a grad student is fun  
Other than finishing a thesis, there is not much  
to worry about

But it is a temporary job  
Think of it as a real job  
Spend 35 hours a week on it  
Schedule your work phases  
Dress for work  
Keep your cv and resume up to date  
Have a “pitch” ready for a possible opportunity

13



## The Pitch

If someone asks you about yourself, in thirty  
seconds you should be able to:

- Introduce yourself
- Say what your area of expertise is
- Briefly describe what you are currently  
doing, and why it is worth doing
- Mention the kind of new opportunity you are  
looking for within the next year

Always have a business card handy with your  
contact information, in case someone asks for it,  
that includes something memorable (short  
description of your research, your photo, etc)

14



## Summary

*somewhere i have never travelled, gladly beyond*

e.e. cummings

- Any path is only a path.
  - Find yours.
  - Ask for advice
  - But don't let anybody tell you  
    how you should spend your life.
  - Good luck.
- 
- This presentation is available online at  
<http://www.mlipsett.com/teaching/>