

# 2020 Academic Career Workshop - SEM

## Preparing for a Career in Academia

24<sup>th</sup> June 2020

**Dr. Peter Gammon**

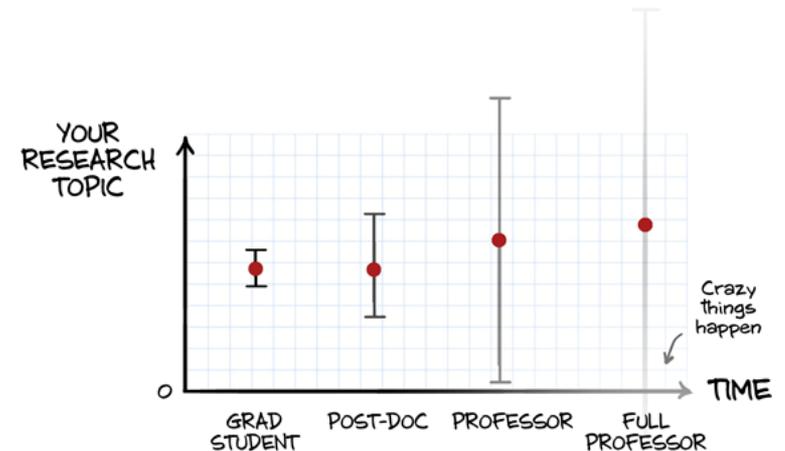
Reader | Director of Graduate Studies

School of Engineering, University of Warwick

**WARWICK**  
THE UNIVERSITY OF WARWICK

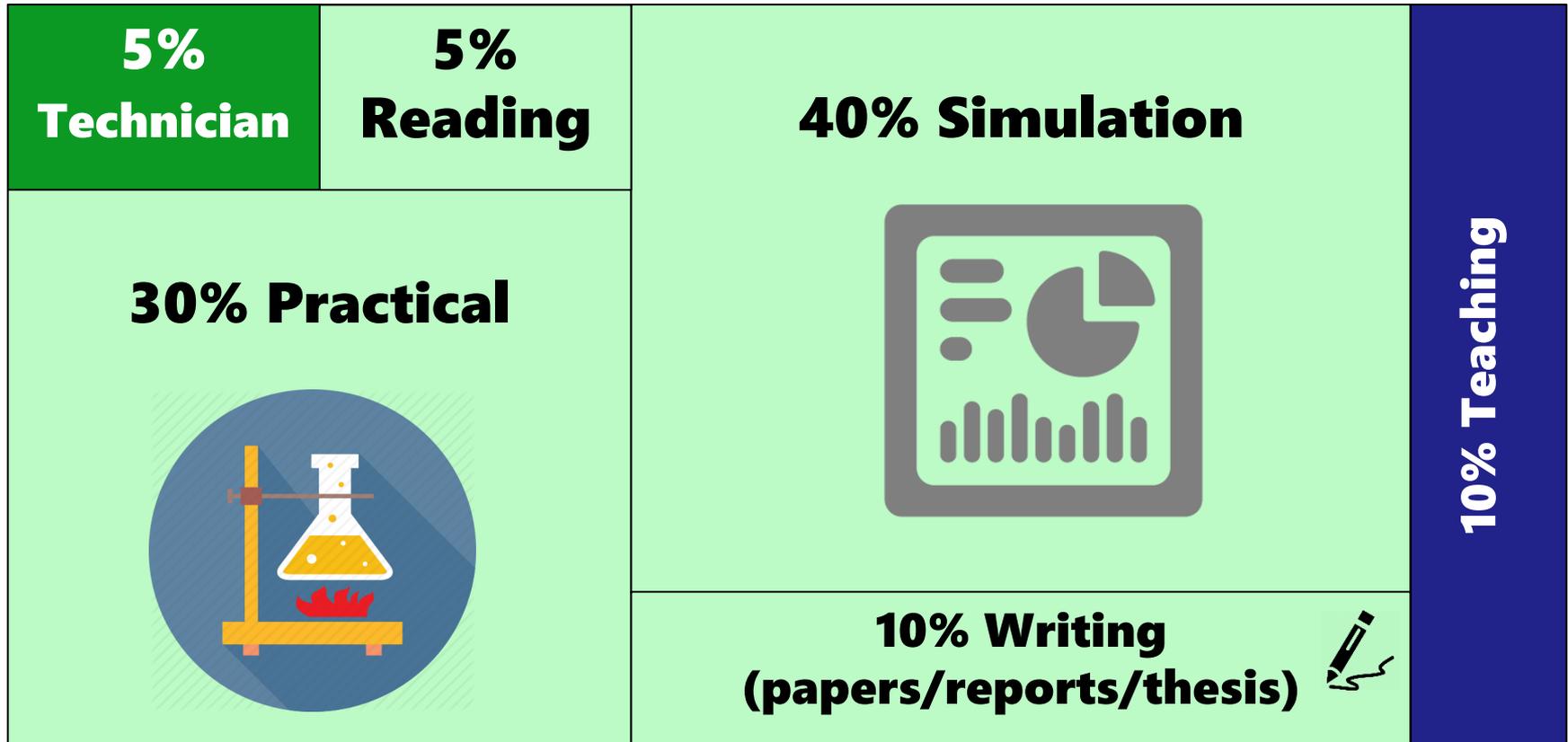
# Contents

- ▶ PhD Life and post-PhD options
- ▶ Post-Doctoral Research Assistants/Fellowships
- ▶ Assistant Professor positions
- ▶ Research Fellowships and top tips for getting them.
- ▶ Life as a 'tenured' academic
- ▶ What you can be doing now.



# Life as a PhD student

- ▶ A typical PhD lifestyle? ~85% Research



# Post PhD Job options

- ▶ Around half of you will move to “industry”

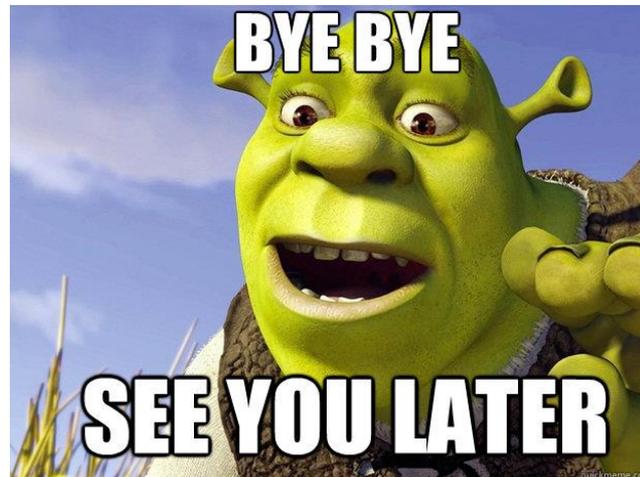


- ▶ Many move to jobs outside science

# Of all STEM PhD graduates...

According to the Royal Society ca. 2010:

- ▶ 53%\* will move to jobs outside science
- ▶ 17%\* will move to “industry”



- ▶ 30%\* become early career researchers.

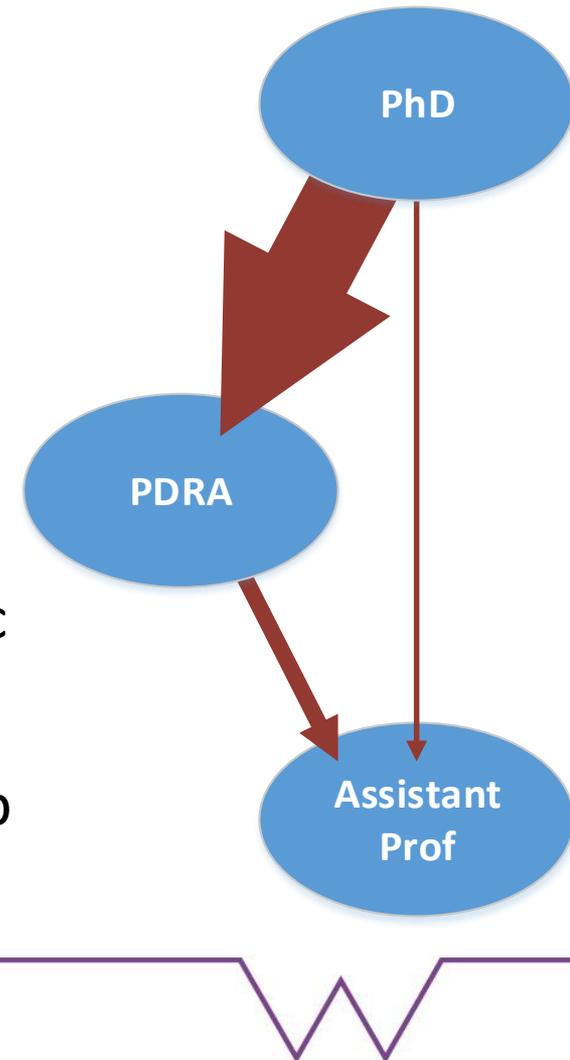
\* Numbers are a STEM average and are likely different for Engineering @ Warwick

# Getting a PDRA Position

- ▶ A PDRA position in your current group is often the easiest to get. You're trained, highly competent and known to the academic.
- ▶ However, this is a very good opportunity to:
  - Move field, subtly or comprehensively.
  - Move groups/institution/country
  - Be part of an interesting new project

This will expand your CV, build up your contacts and help you demonstrate academic freedom and diversity later on in your career.

- ▶ As with applying for all jobs, be brave, pick up the phone and discuss with the academic.

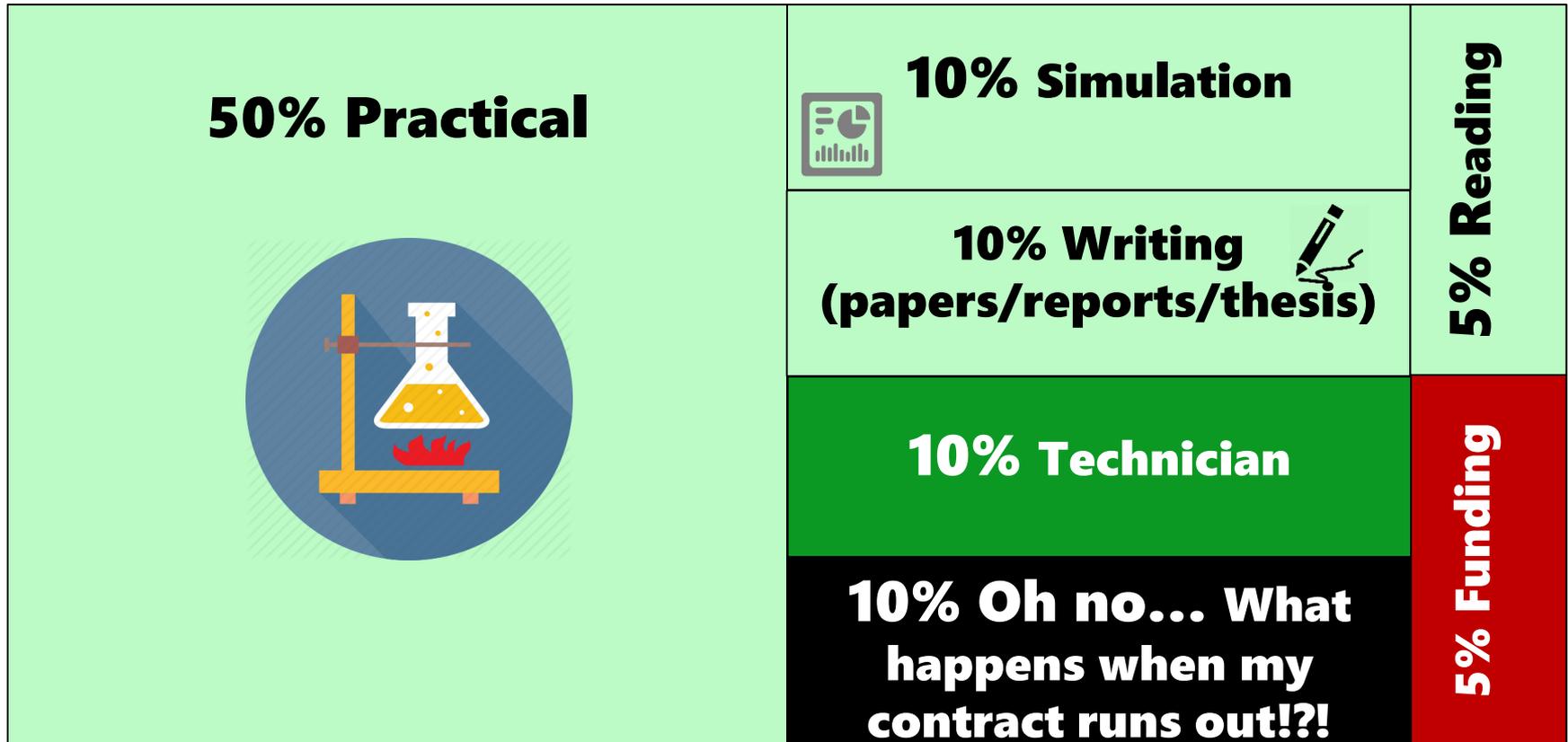


# Life as a PDRA

~75% Research

Typically no teaching

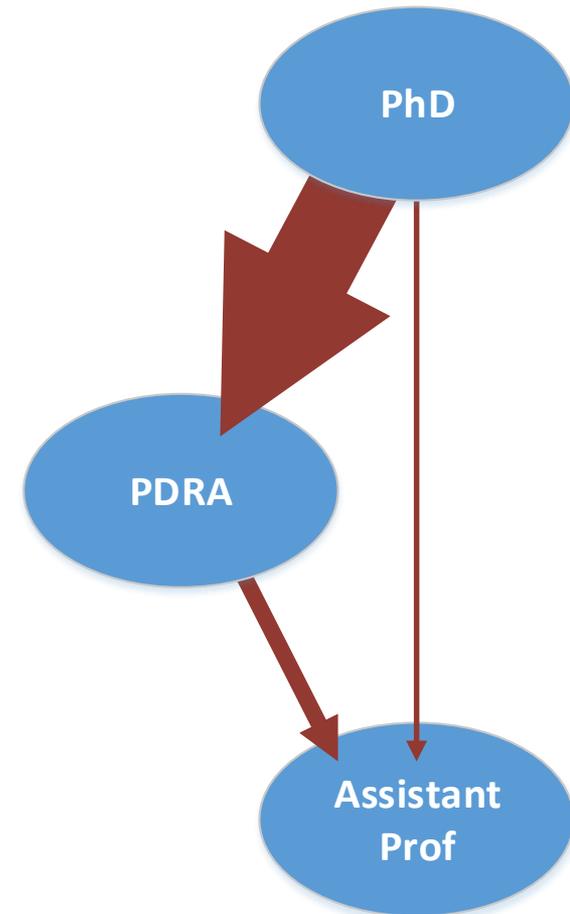
▶ A typical experience?



# Getting to a 'tenured' position

PhD/PDRA to Assistant Professor is difficult...

- ▶ Competition is tough. There are a lot of PDRAs, and few advertised Assistant Professor positions
- ▶ You will be competing globally, not locally.
- ▶ Some positions are only advertised because they have to be...

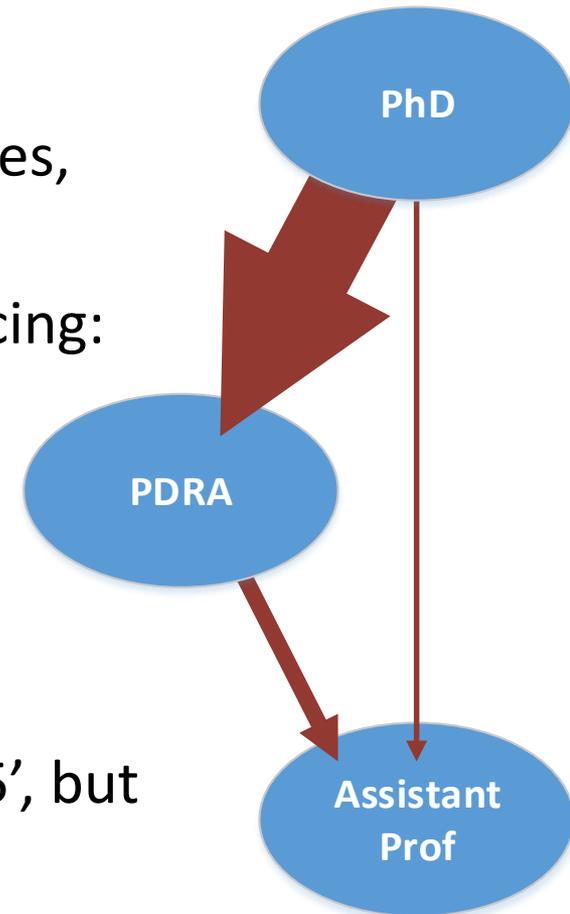


# Getting to a tenured position

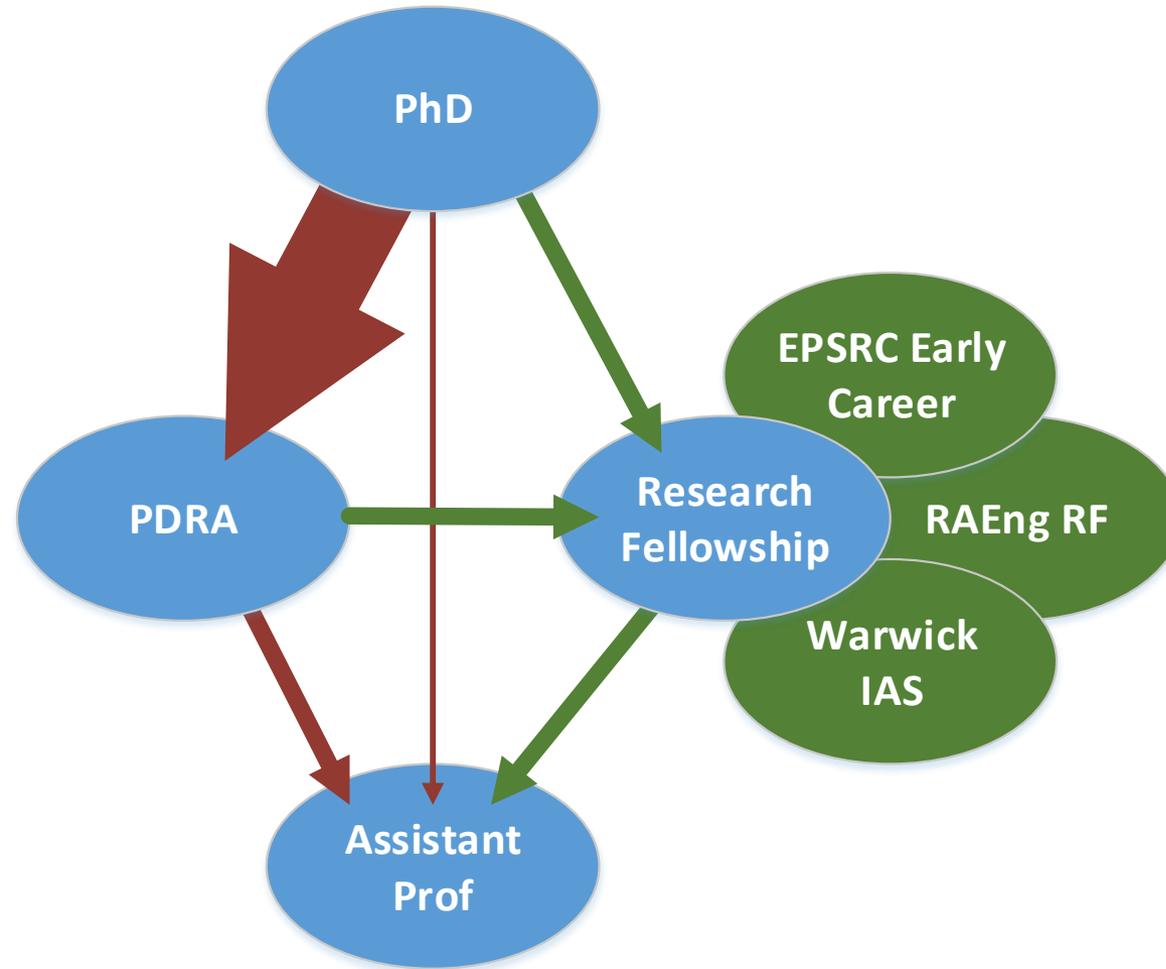
PhD/PDRA to Assistant Professor is difficult...

**However, it is possible.**

- ▶ Again, moving institutions maximises chances, and has long-term gain.
- ▶ Your CV will need to be very strong, evidencing:
  - Journals, prioritising quality, but not discounting quantity
  - Teaching – if possible
  - Funding – if possible (even small proof of concept, or travel grants)
- ▶ Consider Universities outside typical 'top 25', but recognise some can be teaching heavy jobs



# Research Fellowships

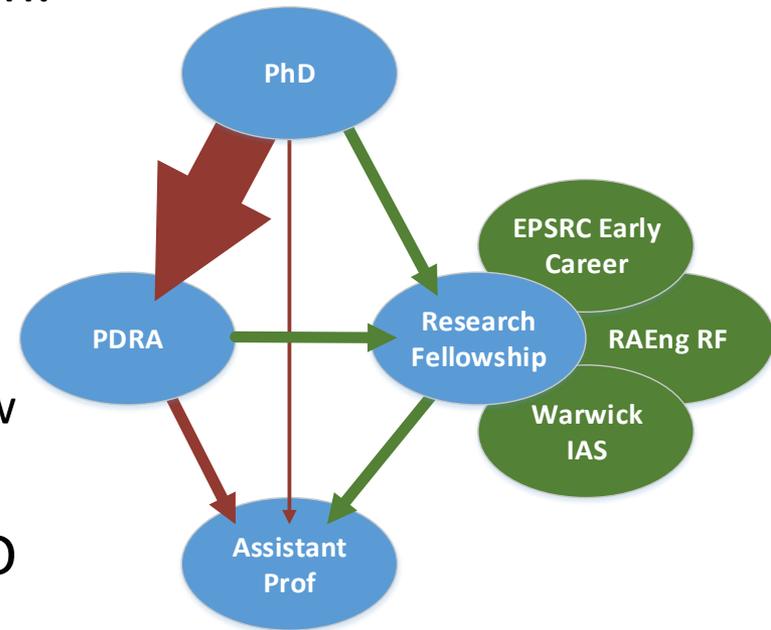


- ▶ EPSRC, BBSRC, etc.
- ▶ RAEng
- ▶ UKRI Future Leaders
- ▶ Royal Society
- ▶ Leverhulme
- ▶ Royal commission 1861
- ▶ Warwick IAS (and similar elsewhere)
- ▶ Charity (Wellcome, BHF, etc)
- ▶ Abroad

# Research Fellowships

Tough to get, but RFs offer fast career acceleration

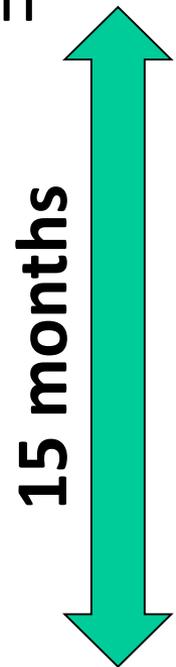
- ▶ Opportunity to do your own research, with absolute control over direction, finances, collaborators, everything.
- ▶ Typically offer fast career acceleration.
  - Assistant Prof position may be attainable immediately if grant is large enough.
  - With this on your CV you are much more employable
  - The 3-5 years of the fellowship give you time to apply for further money and grow your group (become indispensable)
- ▶ Can be applied for from PDRA or PhD
  - Relative experience will be factored in.



# Fellowships take time

The timeline for a successful RAEng Fellowship

- ▶ Sept 2007 – Began PhD
- ▶ June 2010 – Began writing RAEng Application
- ▶ Oct 2010 – Stage one submitted
- ▶ Jan 2011 – Stage two submitted
- ▶ March 2011 – Got a PDRA position
- ▶ April 2011 – PhD Viva
- ▶ Aug 2011 – RAEng Interview in London
- ▶ Sept 2011 – You've been funded!
- ▶ March 2012 – Began Fellowship at Warwick



# Top Tips for getting RFs

- ▶ **Start early** (6 months before deadline) and use R&IS, research development officers and senior colleagues for **iterative feedback**
- ▶ Approach **industry** for at least 2 LoS
- ▶ Remember the odds are against you (10-25% success rates), but **keep trying**.
- ▶ Don't be afraid to **self-plagiarise** from unsuccessful proposals to **different** funders.
- ▶ They fund both the '**idea**' and the '**person**', selling both is essential.



# Top Tips for getting RFs

- ▶ Apply to as many **different funders** as you can in parallel.
- ▶ Avoid being overly technical, or waffling in your proposal – every sentence should have **impact**.
- ▶ Reviews can be political, don't take them to heart
- ▶ When you win the grant, **negotiate**.
  
- ▶ **Prepare well in advance** - volunteer to teach, apply for travel funds etc, publish lots(!) – *more later*.



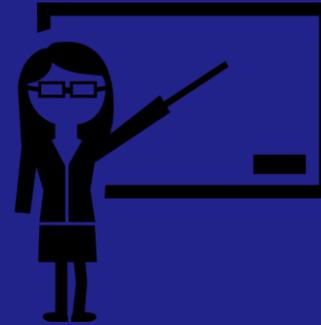
# Life as an Academic?

A Reality Check!

**40%**  
**“Research”**



**40% Teaching**

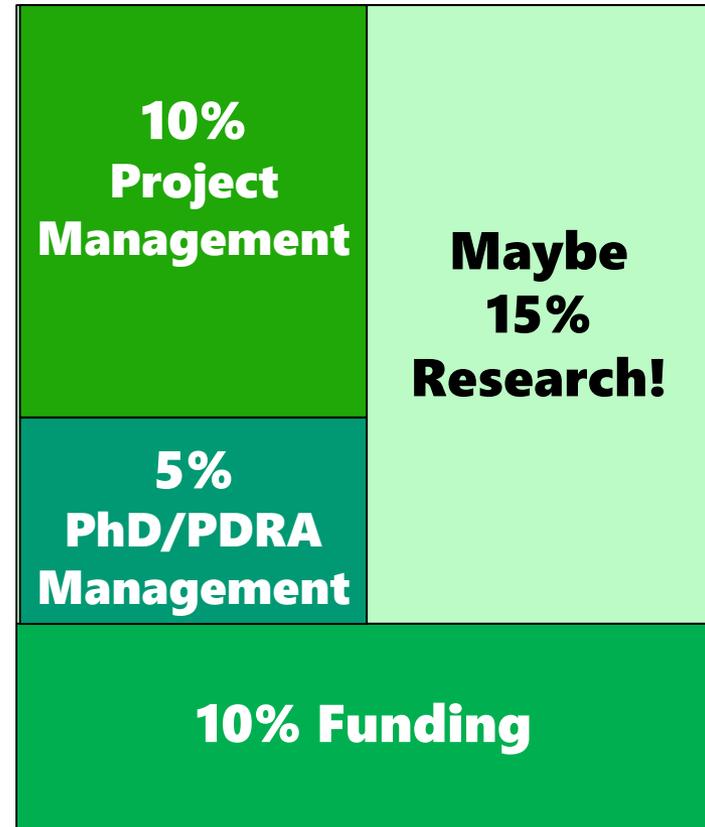
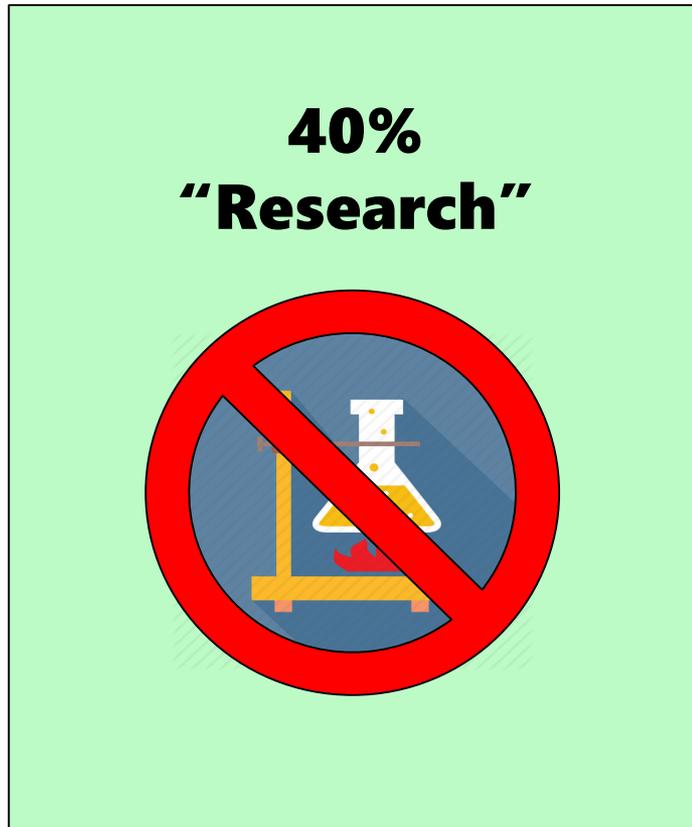


**20% Administration**



# Life as an Academic?

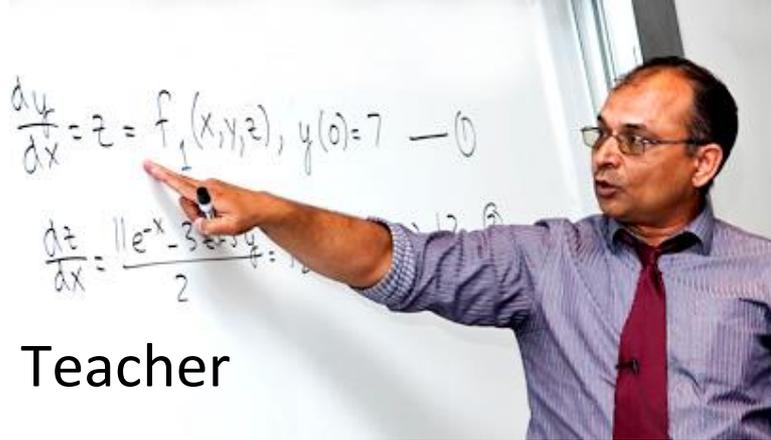
- ▶ *It's [a research] life Jim, but not as we know it.*



# Life as an Academic

Originally hired as good researchers, you will need to evolve into a:

Salesman



Teacher



Counselor



Schmoozer



Mentor



Project  
Manager



Orator



# So why do we do it?

- ▶ Academic Freedom of course!



# And Finally...

- ▶ Keep trying.



# Extra slides (for circulation)



# What you can do now to improve your academic employability?

- ▶ Research Excellence.
  - Publish in **high impact journals** – consider spending the time to submit to a higher impact journal than the usual ‘safe’ publication.
  - Build your network. **Attend conferences** and be brave: Meet as many people in your field as you can.
  - Consider alternative ways of delivering research **IMPACT:** Patents, licensing, links with industry, products etc.



# What you can do now to improve your academic employability?

## ► Teaching Excellence.

- Carry out teaching duties in the School. Could you volunteer to teach e.g. your supervisor's examples class?
- **Postgraduate Researchers who Teach (APP PGR):** A Warwick PG course ran by the Learning and Development Centre.
  - After 6 months: become an Associate Fellow of the HEA
  - After 12 months: Obtain a PG Award in Teaching and Learning in Higher Education.
  - Rolling entry – apply now!

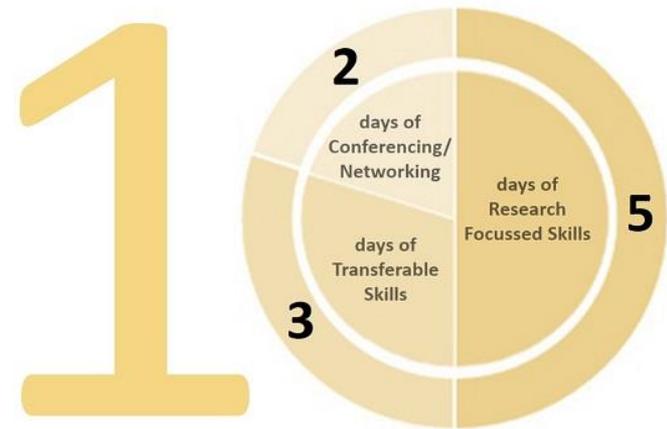
[https://warwick.ac.uk/services/ldc/teaching\\_learning/app/pgr](https://warwick.ac.uk/services/ldc/teaching_learning/app/pgr)



# What you can do now to improve your academic employability?

## ► Transferrable Skills

- RCUK (incl. EPSRC etc) recommend students carry out 10 days of personal development activities per year.
- 3 days per year should be dedicated to Transferrable Skills
- Warwick has a number of ways to support your development and provide a number of transferrable skills courses.



# ► Transferrable Skills

## – Warwick SkillsForge

Print Page | Anonymous User | Sign In



WARWICK SkillsForge

Welcome [View training catalogue](#)

### Welcome to SkillsForge

#### Sign In

Please sign in to SkillsForge using the University of Warwick's Shibboleth service:

[PGR and Staff Sign In](#)

[External users](#)



PGR Development Enquiries:  
 Email: [graduateschool@warwick.ac.uk](mailto:graduateschool@warwick.ac.uk)  
 Telephone: +44 (024) 7657 5533

### Development Needs Analysis

[Save](#) [Close](#)

History:

#### Research Ethics and Governance

	Confidence		Priority			Find me a course
	Low	High	Low	Med	High	
<a href="#">Equality and diversity</a>	<div style="width: 20%;"></div>	<div style="width: 10%;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
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<a href="#">Income generation</a>	<div style="width: 20%;"></div>	<div style="width: 10%;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
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<a href="#">Publishing and dissemination</a>	<div style="width: 10%;"></div>	<div style="width: 10%;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>



# ► Transferrable Skills

– RSSP Courses are bookable on SkillsForge

## Research Skills Development What's in it for me?



# ► Transferrable Skills

## – Warwick SkillsForge

RSSP1

### Time management

#### Summary

This event has been organised by Research Student Skills Programme. For any enquiries please contact [t.horton@warwick.ac.uk](mailto:t.horton@warwick.ac.uk).

Doing a research degree can be a real challenge in terms of managing your time and staying motivated.

This highly participatory workshop will help you understand how you work best and share tips on how to manage your time and increase your motivation.

During the workshop you will consider and discuss:

- how to plan and organise your work to meet deadlines
- how you spend your time and prioritise your activities
- how you prefer to work and what steals your time
- what you can do to manage your time more effectively.

There are no items currently available

#### Additional information:

**Who is it for?** All postgraduate research students registered one of the following degrees: PhD, MPhil, Masters by Research, EngD, EdD, professional doctorate.

**Is any preparation required?** No.

**Is catering provided?** No.

**Who is the tutor?** Kiley Brown / Vicky Crawford

### Booking Summary

#### Training and Courses

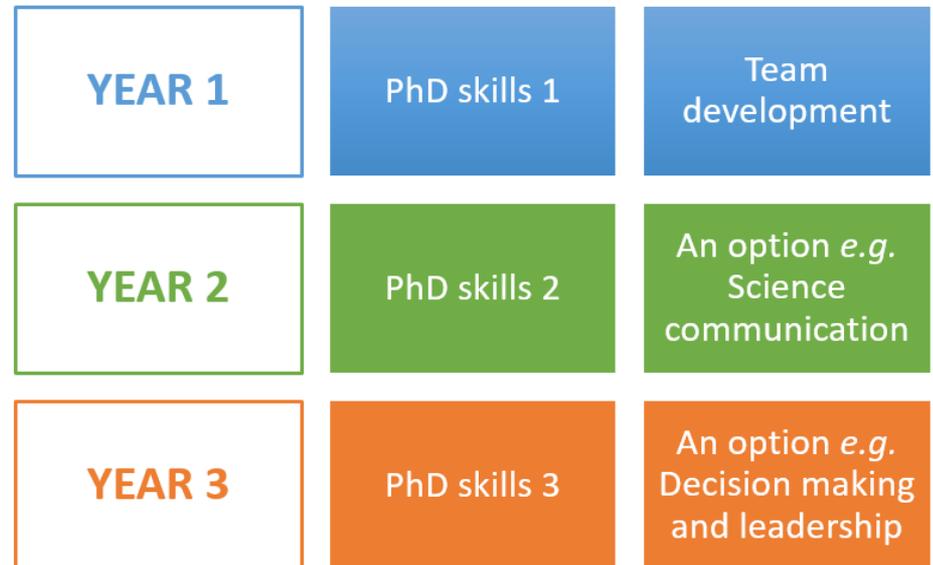
Date	Title	Status	Attendance	Credits
14/05/2018	<a href="#">GSFG1</a> - PGR Professional Development Focus Group	Finished	1 Attended	3
24/05/2018	<a href="#">GS128</a> - CS Test	Finished	1 Attended	0.5
24/05/2018	<a href="#">GS1PercentTEST</a> - Test % Event	Finished	1 Attended 1 Part-attended	8
24/05/2018	<a href="#">GS1PercentTest2</a> - Test % Test 2	Finished	1 Part-attended	1.5
05/06/2018	<a href="#">GS-ACW.1</a> - Academic Career Workshop - Arts and Social Sciences	Finished	1 Part-attended	1.5
15/08/2018	<a href="#">GS133</a> - PhD Conference 2018	Finished	1 Attended	0.5
-	<a href="#">RSSP-17</a> - Writing Skills Day	On waiting list	-	0

## ► Transferrable Skills

- **Postgraduate Certificate in Transferable Skills (PGCTS)**
- An accredited qualification, part of the University PGR Professional Development Framework
- Usually 2 modules per year. Total of six 10 CAT modules.

### Modules include:

Team working and Networking;  
Science Communication;  
Decision-making & Leadership;  
Research Ethics & Practice;  
Business, Innovation &  
Commercialisation;  
Scientific writing skills;  
Programming; Languages



# What you can do now to improve your academic employability?

- ▶ Funding Applications
  - Very difficult as a PhD student but...
  - Can you help your supervisor in the preparation of a grant proposal?
  - Apply for Travel funding - RAEng, Royal Society, Charities.
- ▶ Competitions & Prizes
  - Find them. Enter them. Win them!
  - Many student prizes at Conferences.
  - Thesis Prizes, Three minute thesis, RAEng, RS etc



# What you can do now to improve your academic employability?

- ▶ Strategically plan Research Fellowship applications
  - Look now for schemes
  - Check application dates and eligibility
  - Work on a draft application up to a year in advance – allow time to practice sales pitch (written and oral).
  - Ask the School & University for help and feedback



# And Finally...

- ▶ Keep trying.

