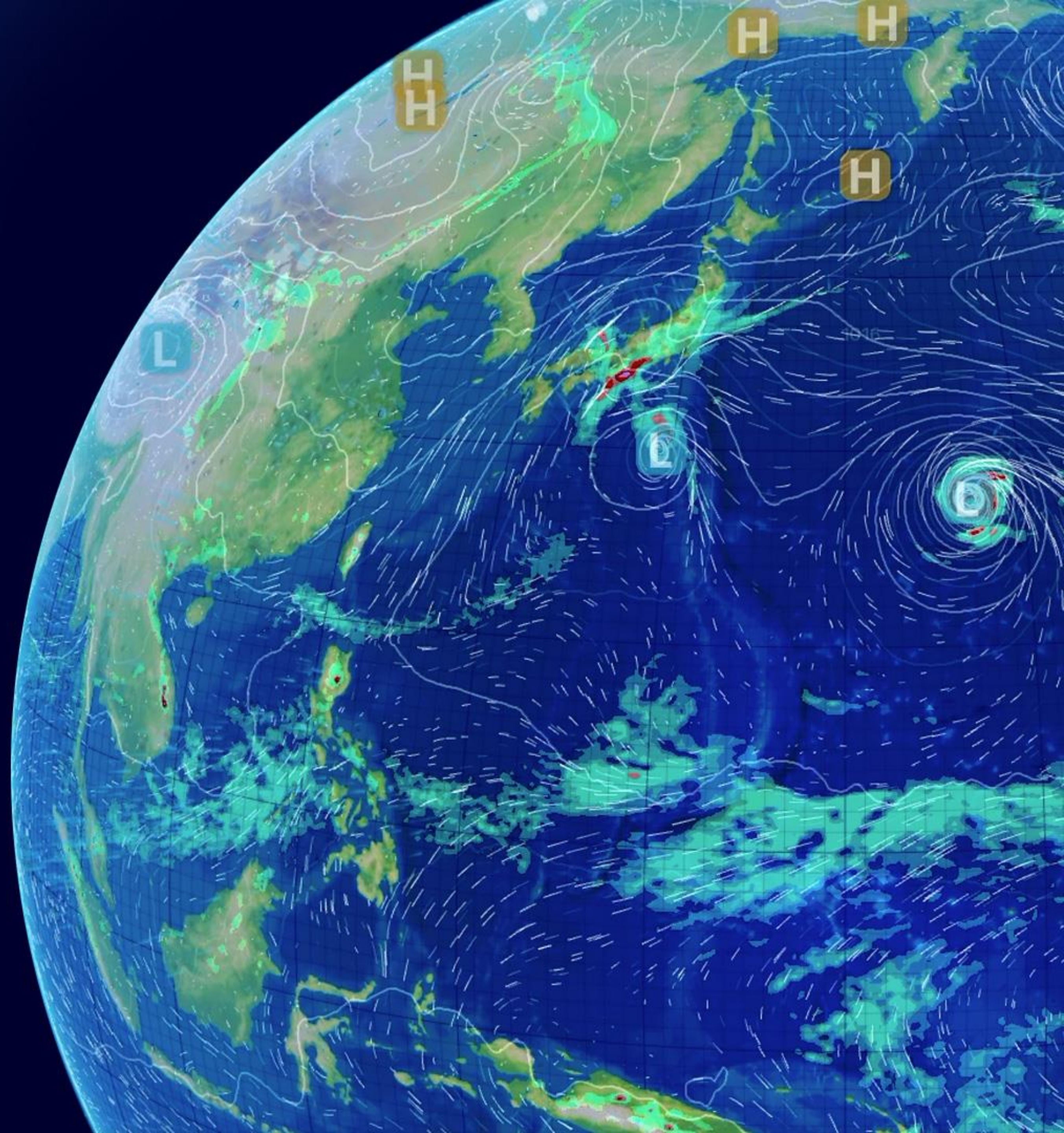


From post-doc to private secretary

Dr Natalie Garrett
Private Secretary to the Chief Scientist

6th February 2020





Today I am going to give you a brief overview of my career since my PhD.



I will sprinkle in some advice and reflections.

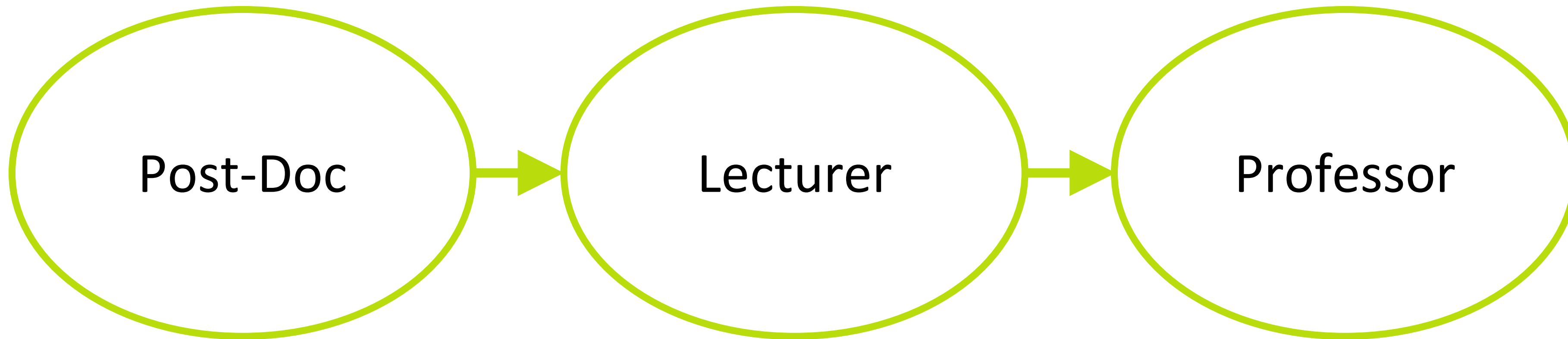


Hopefully after this, you will have more ideas to implement for your own career development.

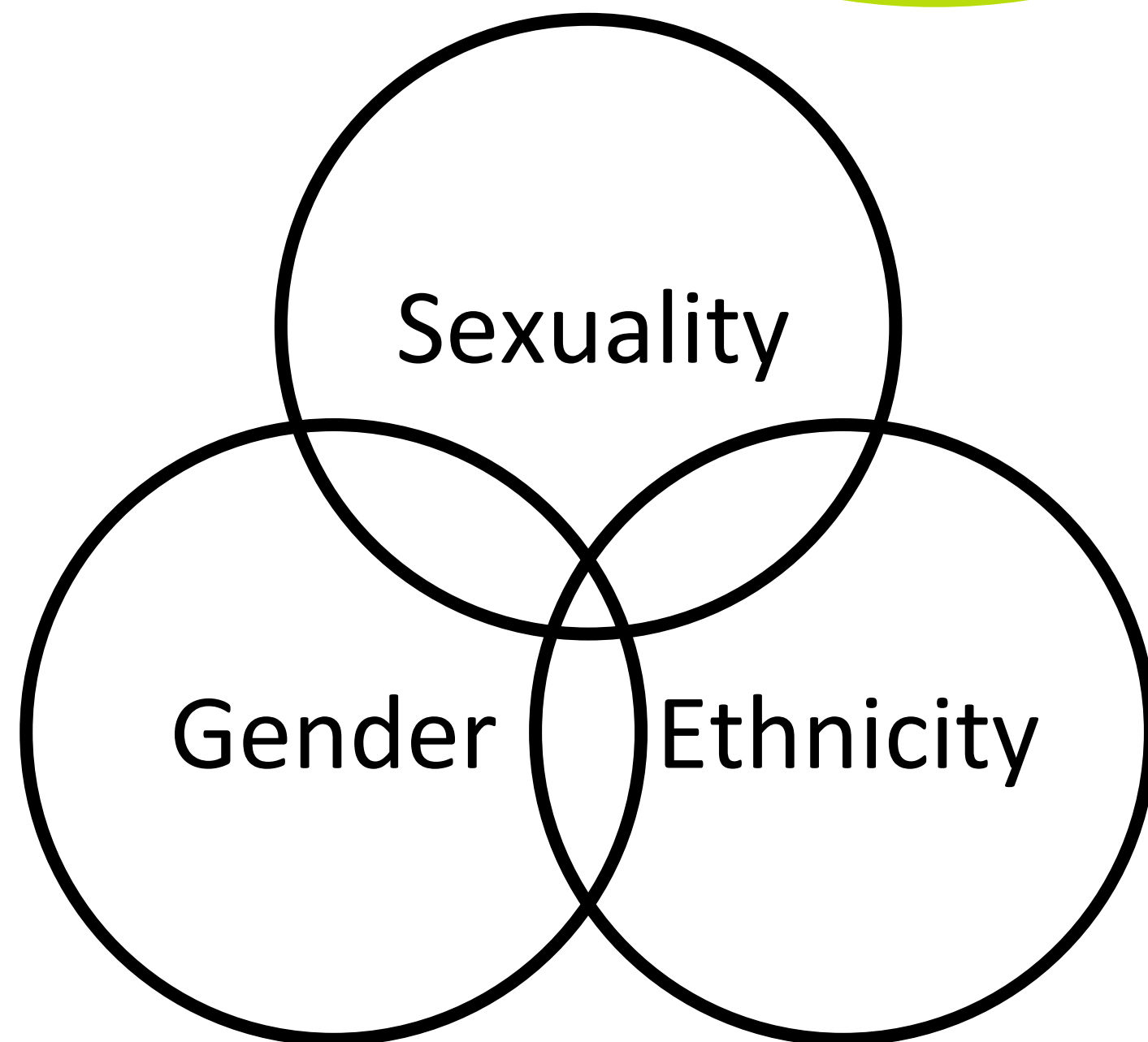
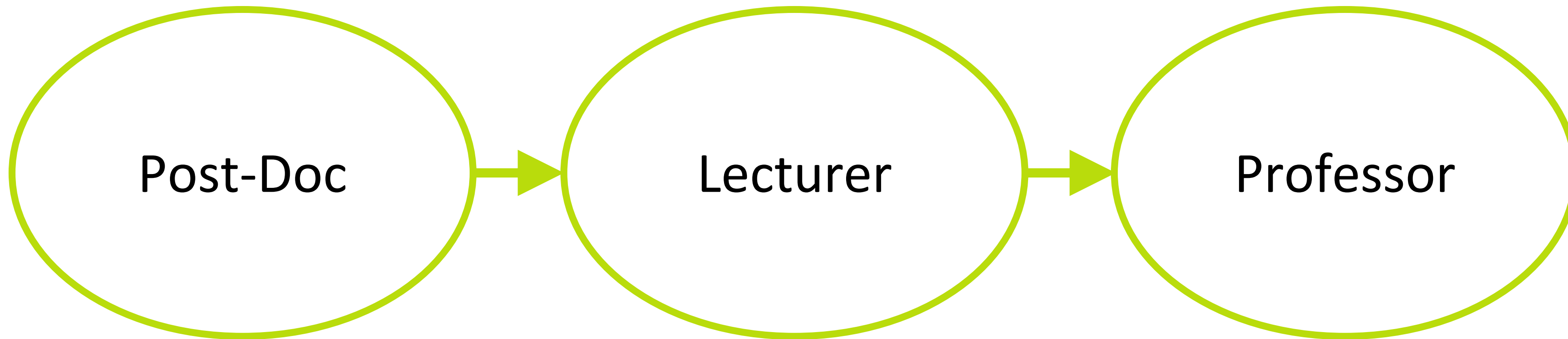


Please interrupt with any questions! (People accessing remotely: please keep your microphones muted until/if you want to ask a question).

A model academic career path...

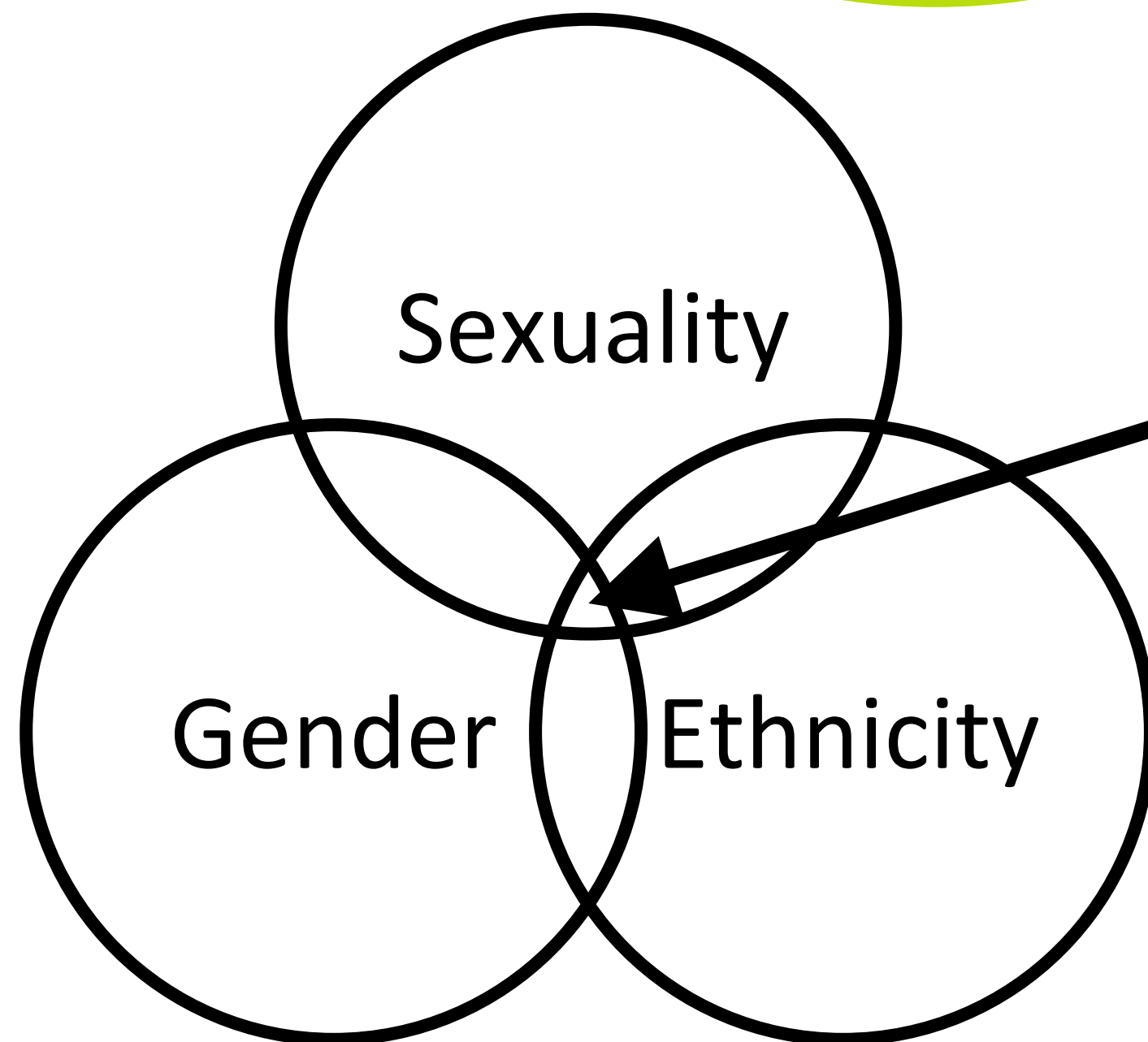
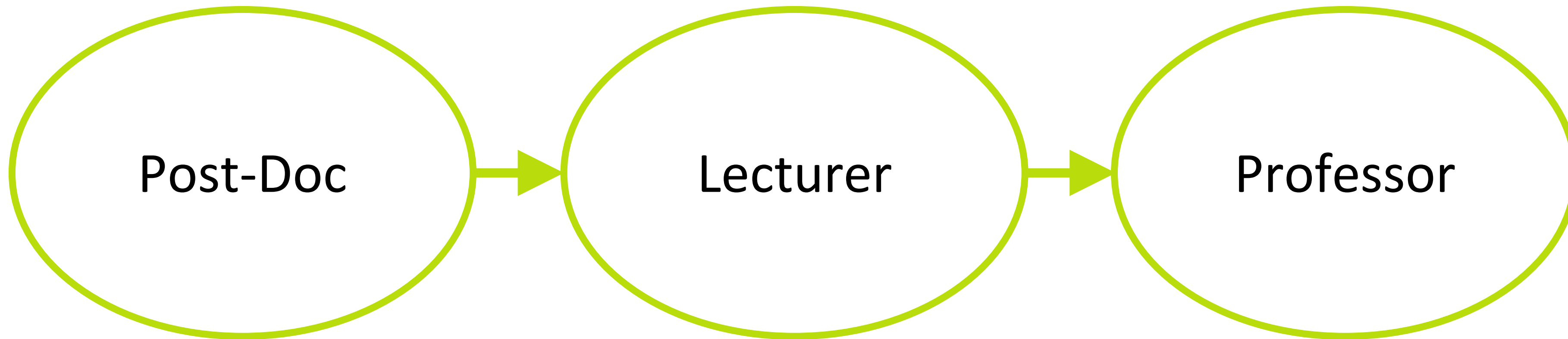


A model academic career path... (not to scale)



Your chances of progressing along this career path are unfortunately affected by a lot of things that are outside of your control.

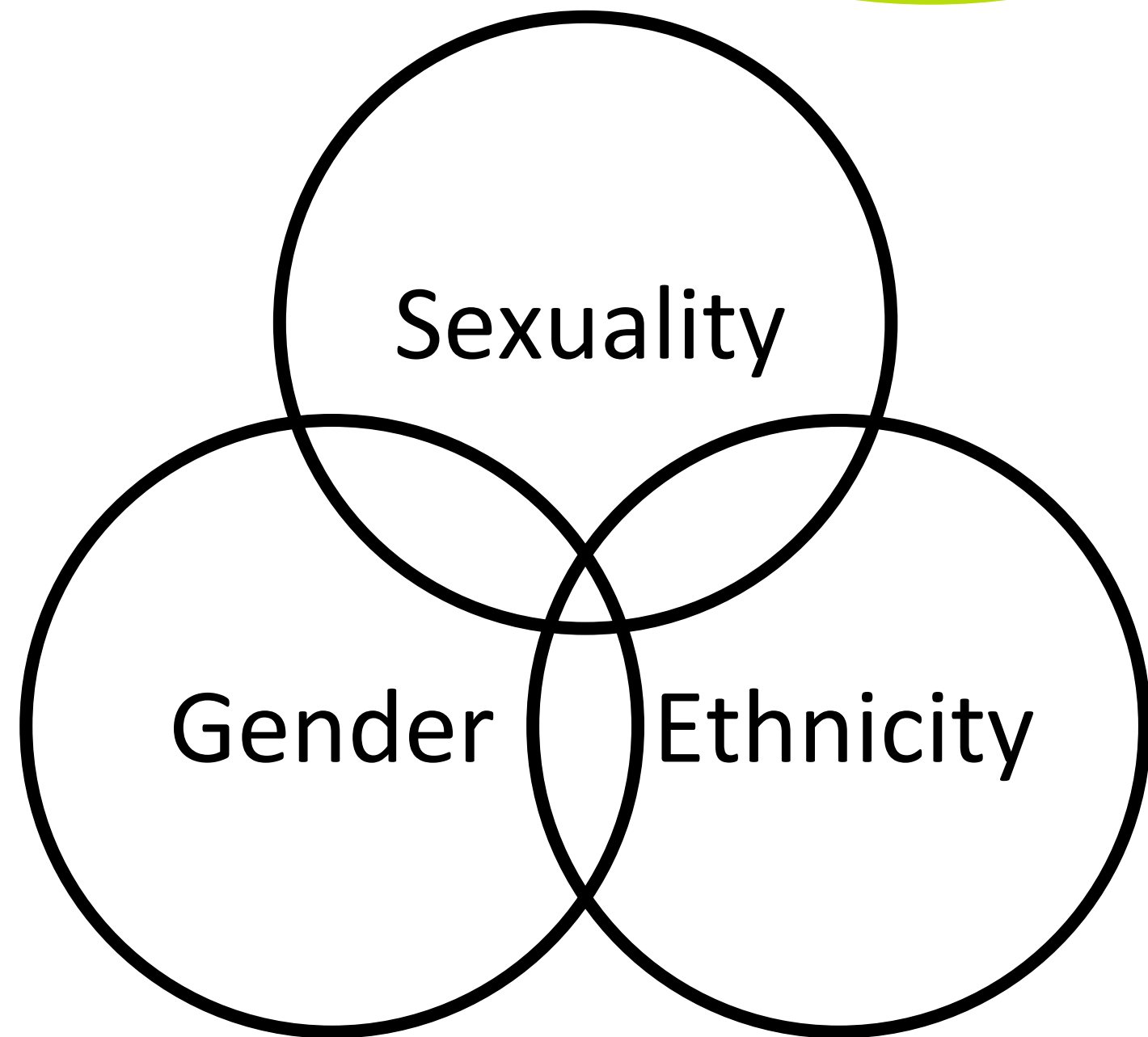
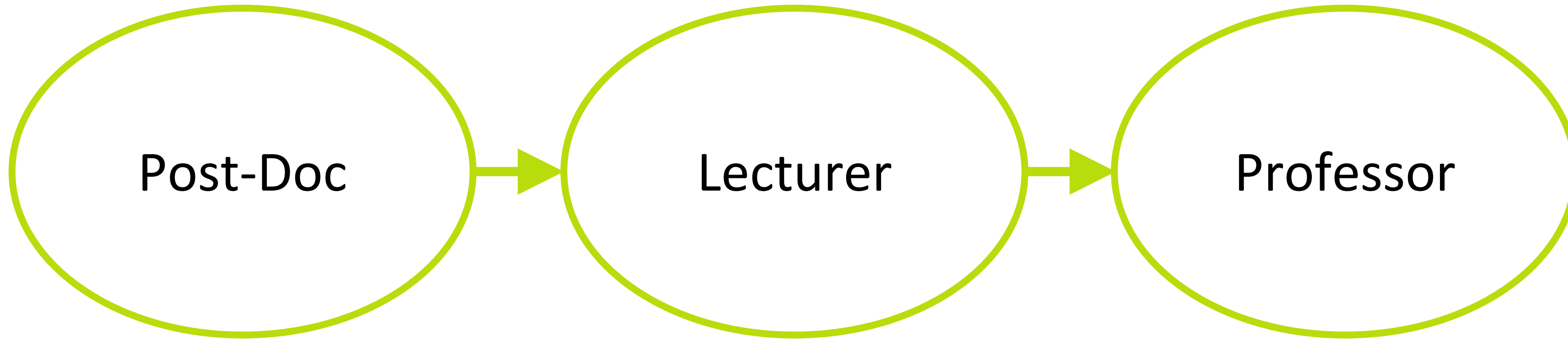
A model academic career path... (not to scale)



Intersectional issues:

- Fewer job opportunities
- 'Leaky pipeline'
- Lower pay
- Higher admin burden
- Discrimination
- Etc.

A model academic career path... (not to scale)



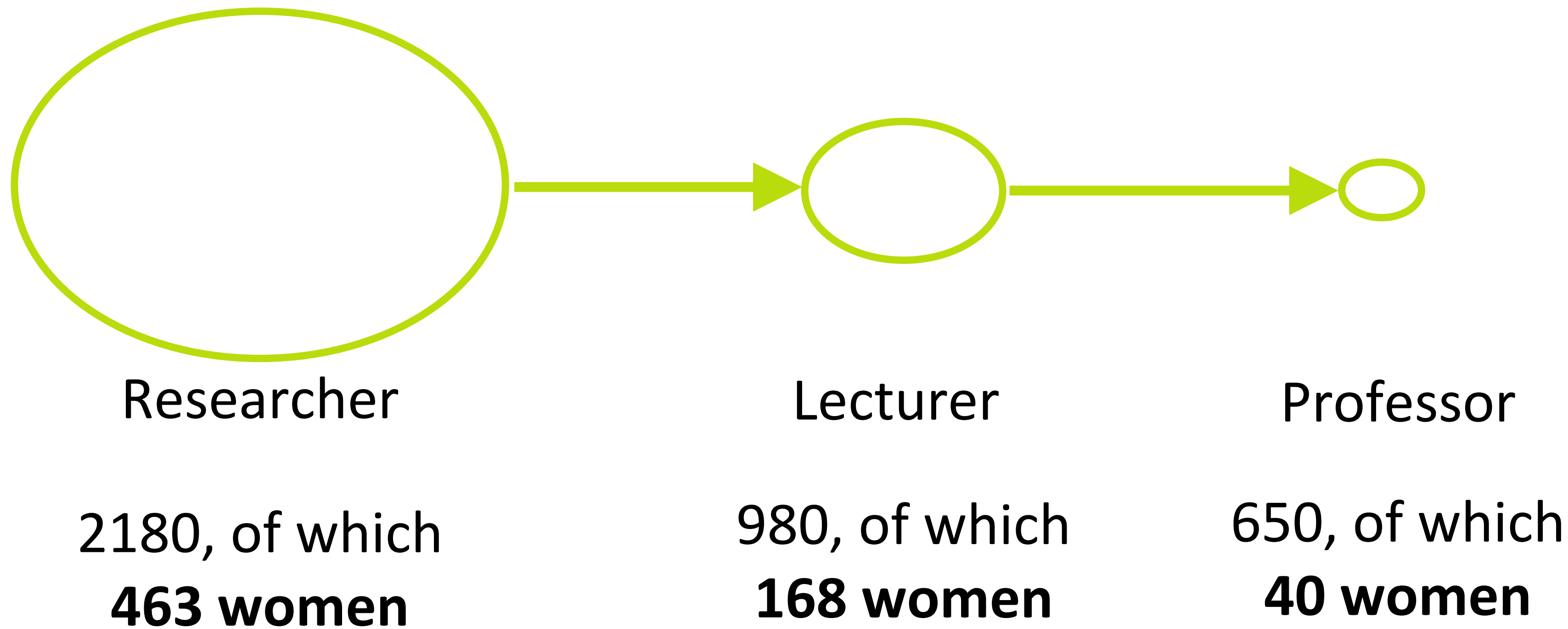
Acknowledging that there is bias in the system doesn't detract from the achievements of people who have succeeded within it.

We would *all* benefit from a fairer system.

I worked hard to get to where I am



A model academic career path... (to scale, for women in Physics in the UK)



*Data from 2010

A note on applying for Fellowships...

Dr. Izzy Jayashinge: UKRI Future Leader Fellow



A note on applying for Fellowships...

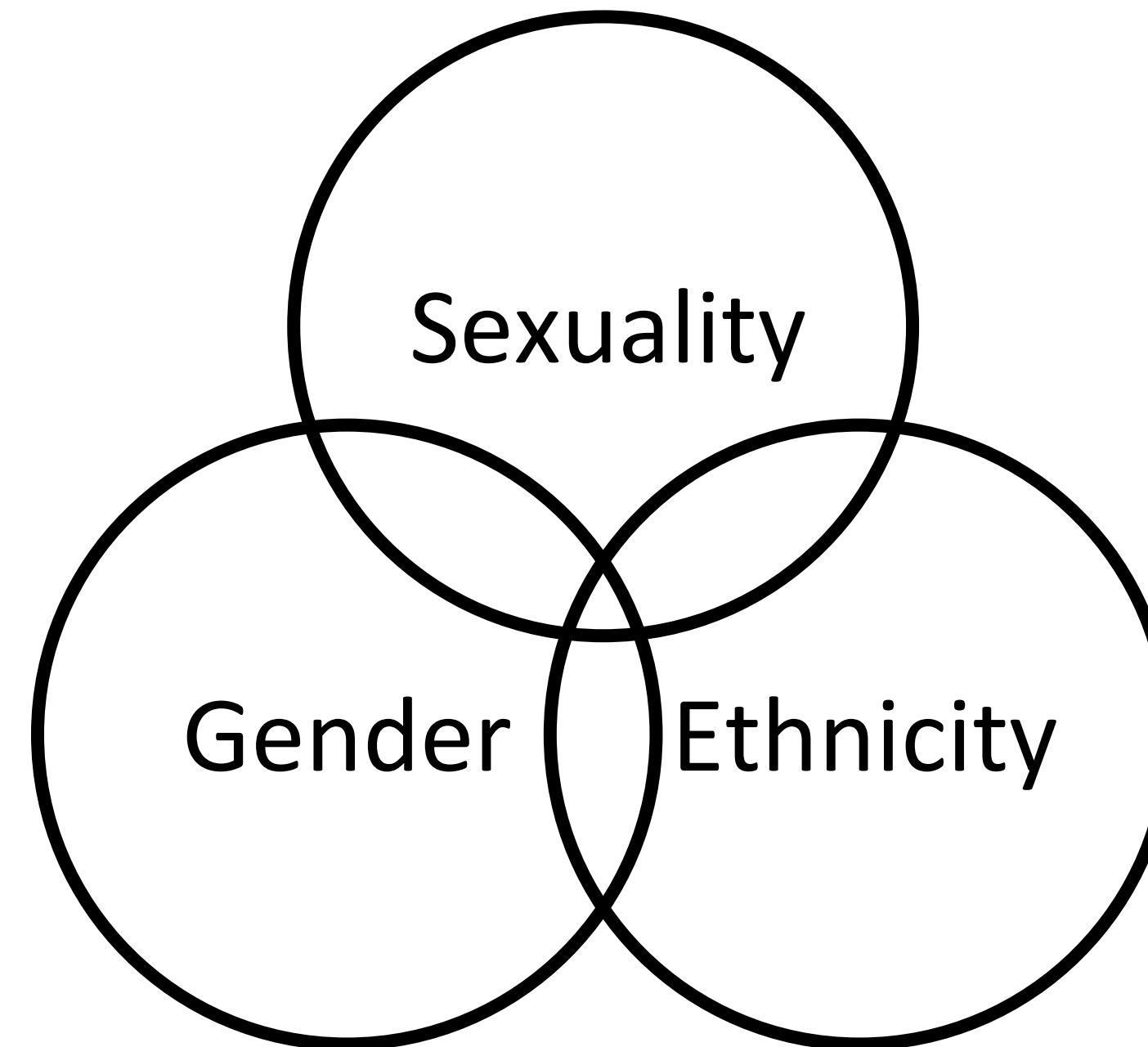
Dr. Izzy Jayashinge: UKRI Future Leader Fellow
Submitted and failed at 22 fellowship applications before being successful!



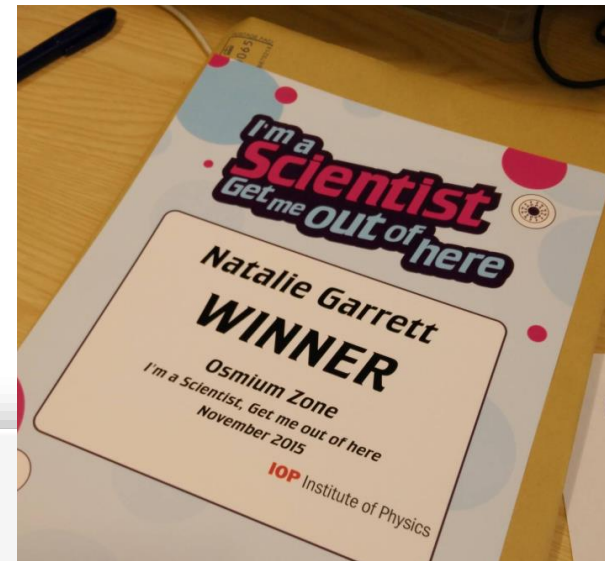
- Success rates are very low, e.g. only 7% success rate for Leverhulme, up to ~25% for EPSRC.
- So, once you've polished your ideas and made the best proposal you can, it's a numbers game as much as anything else.
- This needs a lot of resilience

A note on applying for Fellowships...

Dr. Izzy Jayashinge: UKRI Future Leader Fellow
Submitted and failed at 22 fellowship applications before being successful!



How to improve your odds



Natalie Garrett

“ I am thrilled to have won, thank you so much everyone who voted for me! You can still ask questions for the next week I think, so please do ask away! ”

- ✓ Publish papers (the more lead author papers, the better)
- ✓ Apply for funding
- ✓ Independent research
- ✓ Take training opportunities
- ✓ Networking
- ✓ Enter competitions
- ✓ Review grants (EPSRC)
- ✓ Invited talks
- ✓ Supervise/teach

2009: runner-up in the Institute of Physics ‘Very Early Career Woman Physicist of the Year’ award



College of Engineering, Mathematics and Physical Sciences

Physics PhD student wins prestigious scholarship

PhD Physics student Natalie Garrett has been awarded a British Federation of Women Graduates (BFWG) scholarship.

The awards are given to women in their third year of a PhD degree, who show academic excellence.

Natalie was one of 130 students to apply for a BFWG scholarship, of whom only four were selected for an award. She plans to use her £5,500 scholarship money to help fund a trip to Australia, for a research collaboration.

Natalie is based in the [School of Engineering, Mathematics and Physical Sciences](#). Her research involves cutting-edge techniques using laser light interacting with nano-metallic particles both to image and to selectively kill cells. Nano-shells have received a lot of attention in recent years and Natalie's research focuses on trying to understand exactly how they affect cells at the molecular level. She also uses metallic platforms inspired by butterfly wings in order to make measurements of minute quantities of chemicals that can interact with living cells. These provide a unique means of performing highly sensitive measurements of wet biological samples.

Natalie Garrett said: "I thought it was fantastic to have even been shortlisted for this award, so I was overjoyed when I won! To have my work acknowledged in this way is very gratifying. The BFWG does brilliant work supporting women graduates, which is particularly important in Physics where women are sadly still under-represented."



Natalie Garrett

Female scientists took to their soapboxes at city centre spectacle

A host of Devon's leading female scientists took to their soapboxes at the weekend to showcase their fascinating science to the general public at a free event in Exeter city centre.

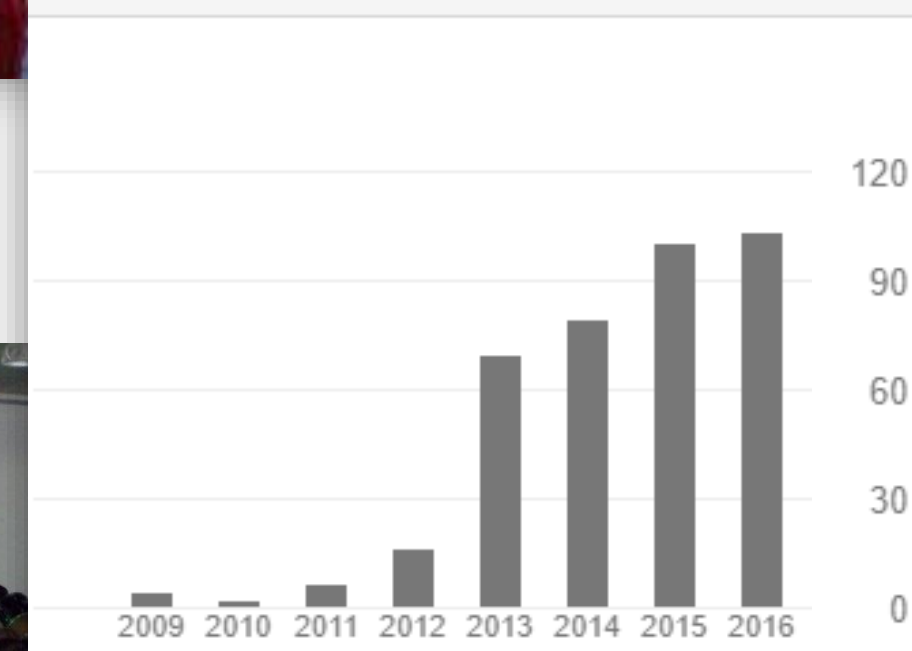
On Saturday 13th June 2015 Princeshay Square was transformed into a hub of scientific learning and discussion, with 12 experts speaking on subjects as far ranging as the human brain, alien planets, animal migration and marine fish poo.

This event was part of a nation-wide initiative by Soapbox Science, which aims to bring science to the people and challenge gender stereotypes in science careers by raising the profile of women in science. Its organisers want to make sure that everyone has the opportunity to enjoy, learn from, heckle, question, probe, interact with and be inspired by some of our leading scientists.



Dr Natalie Garrett, from Exeter's Physics and Astronomy department, gave a talk entitled "Brilliant brains and biophotonics".

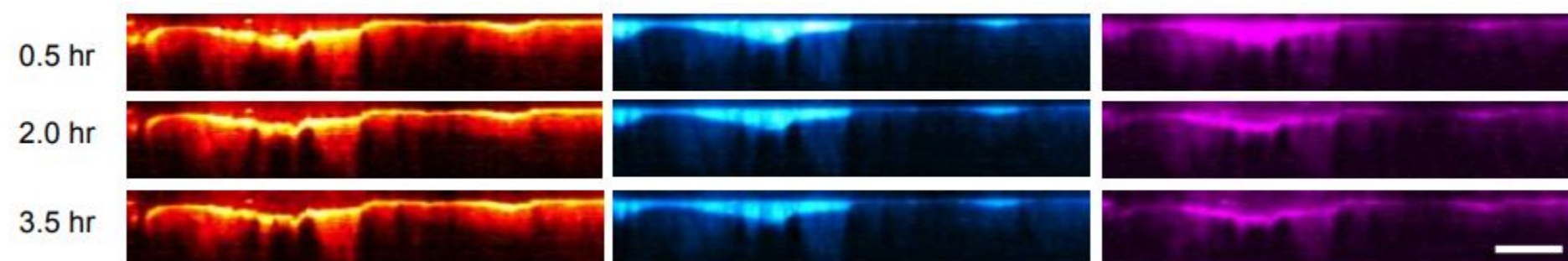
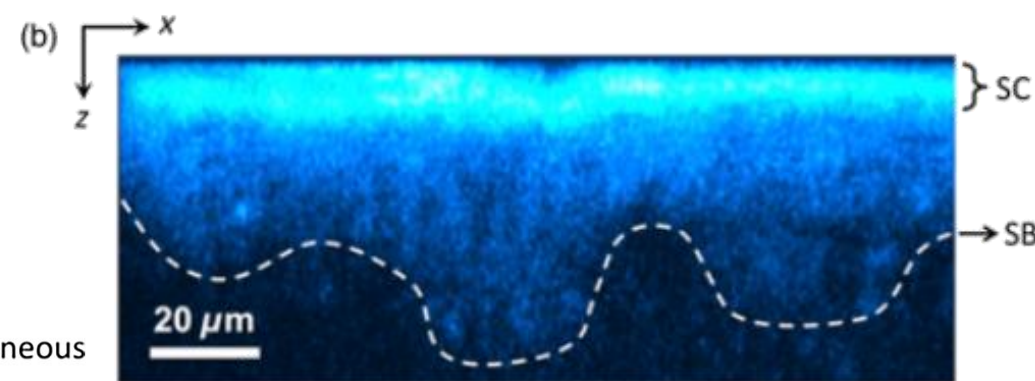
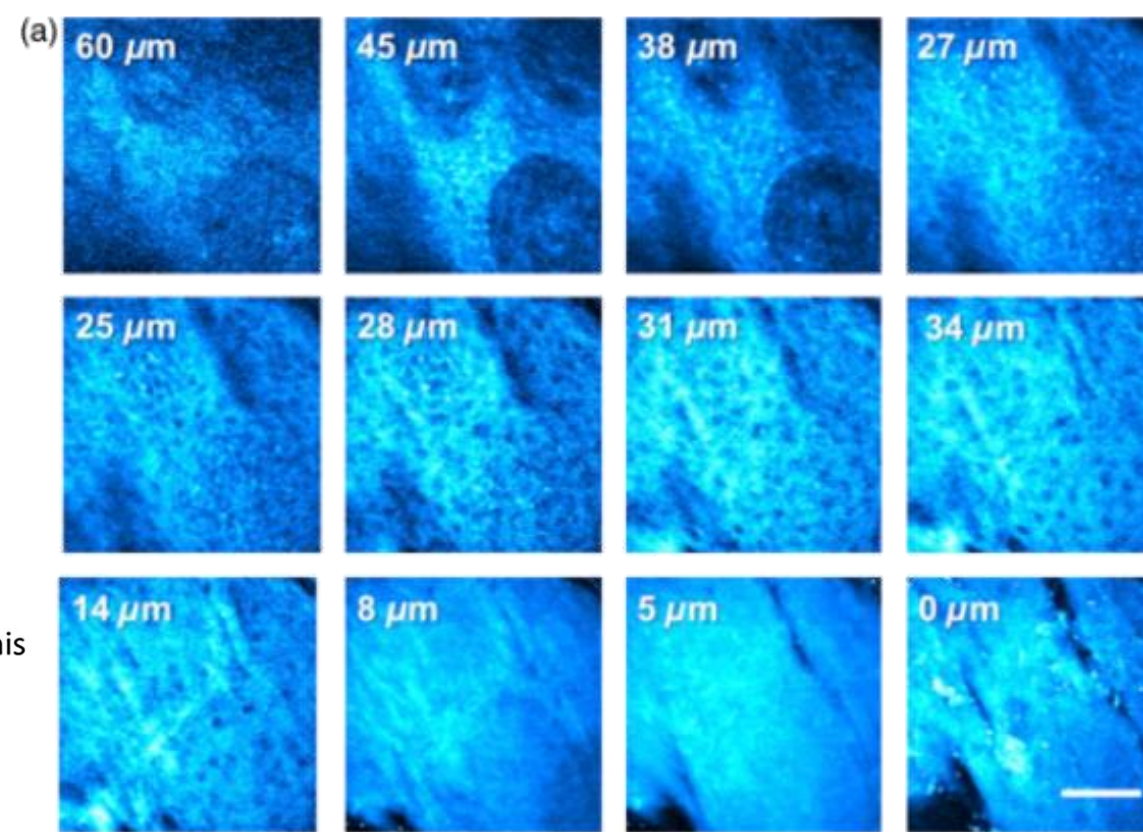
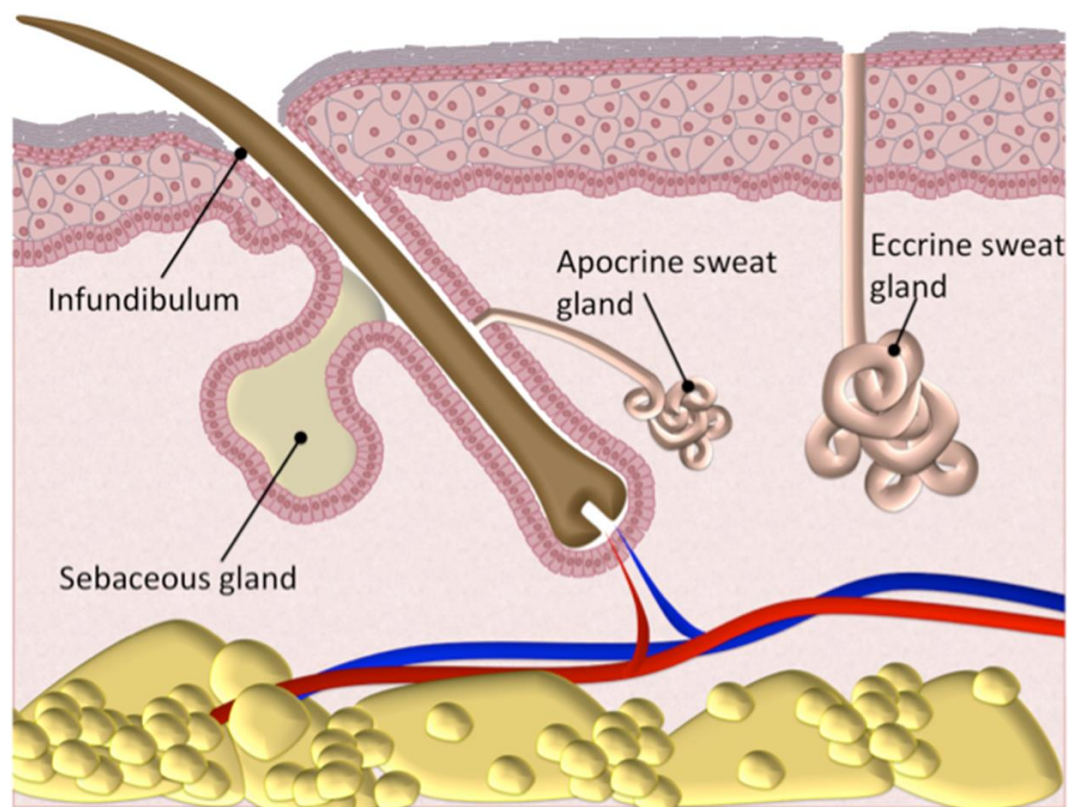
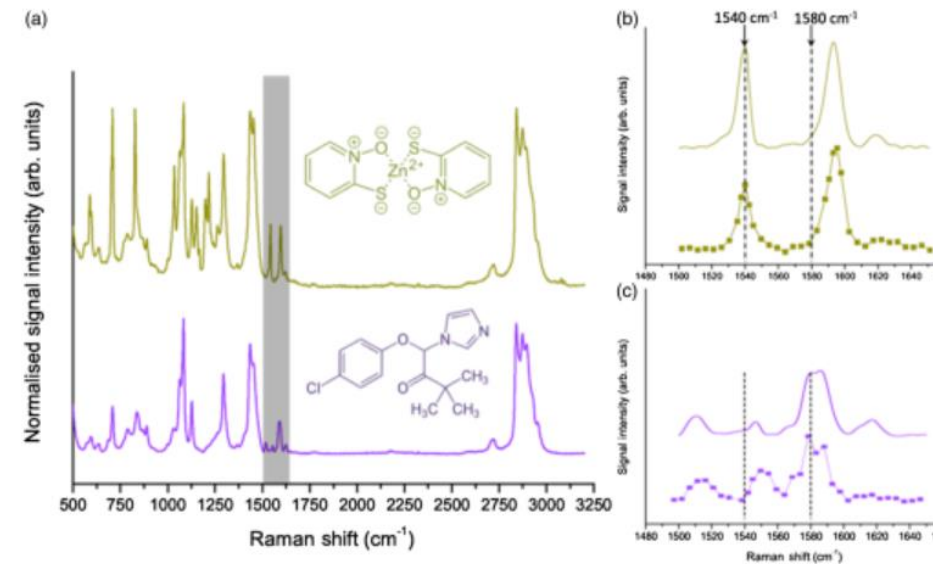
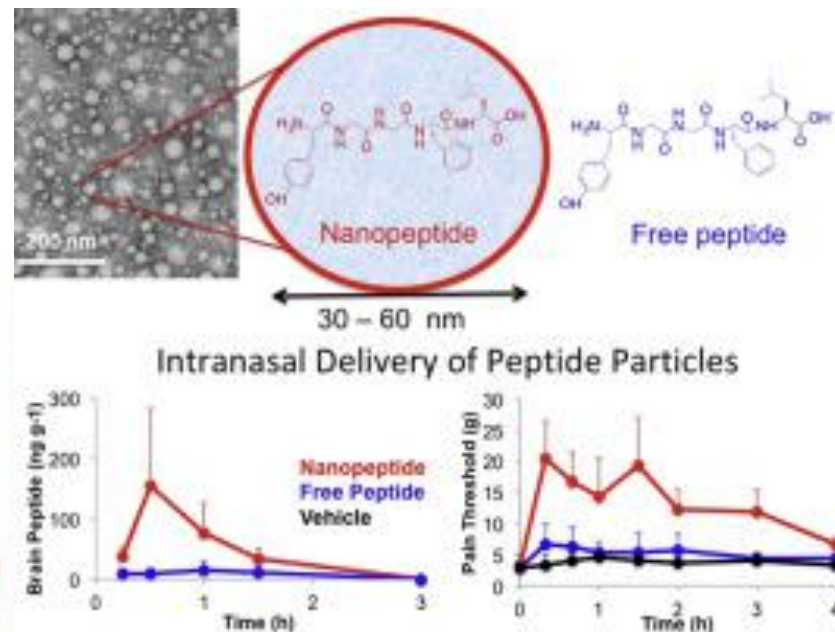
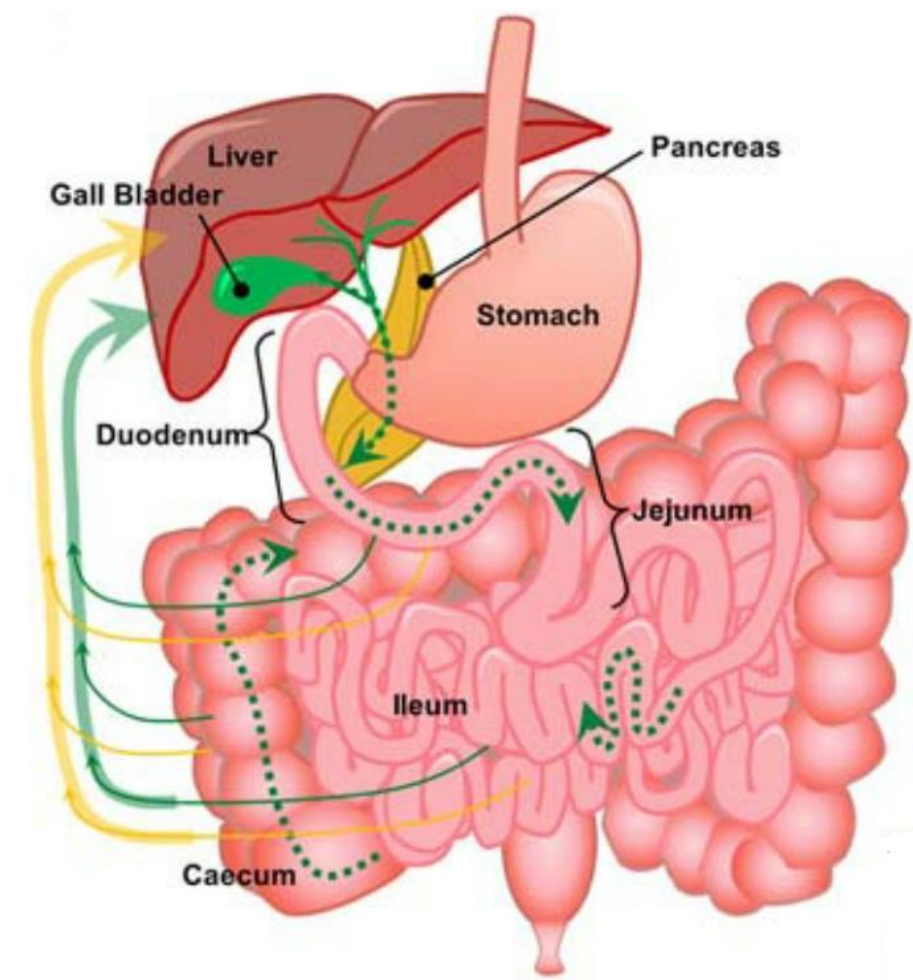
Citations per year




▼ Funding (1)

An investigation into butterfly wing-based surface enhanced Raman scattering (SERS) substrates to study nano-scale anti-malarial drug interactions and molecular processes in single living cells.

Royal Society (London)
2011-09 to 2011-10 | Grant
GRANT_NUMBER: TG102078



- I worked with external stakeholders (GSK, Syngenta, Unilever, LeoPharma...)
- Designed experiments to answer strategically important questions about pharmaceutical products
- Delivered compelling results to short timescales, in a clear and concise manner



CEMPS Twitter poster competition

Tweet us a poster of your research on **Tuesday 2nd June** and you could win up to **£100 in Amazon vouchers!**

All CEMPS post-docs and PhD students are eligible to enter. One entry per person.

Entries must be tweeted as an image to the appropriate ECRN Twitter account:
 @PhysicsECN for Physicists and Astrophysicists
 @EngineeringECN for Engineers
 @MathsCS_ECN for Computer Scientists and Mathematicians

PhD students must also include #ECNpostersPHD in their entry tweet, post-docs must use #ECNpostersPD. Full details and rules will be circulated via email/Facebook/Twitter. This is a Researcher-led Initiative-funded competition.

RESEARCHER DEVELOPMENT www.exeter.ac.uk/as/rdp/

Prof Monika Ritsch-Marte: Early career workshop

Friday 27th November, 3.30 – 4.30 p.m.

Senior Common Room, 7th Floor, Physics Building


All CEMPS and CLES Early Career Researchers, and any undergraduates considering a career in academia, are invited to attend a workshop where Prof Monika Ritsch-Marte (Medical University of Innsbruck) will answer your questions about progressing in an academic career path.




RESEARCHER DEVELOPMENT www.exeter.ac.uk/as/rdp/


- I also helped found a support network for Early Career Researchers

Finding Funding



Join your fellow CEMPS Early Career Researchers for an afternoon of high-octane grant searching and competition trawling.

Get that grant!
Find that fellowship!
Capture that competition!
Eat some tasty pizza and cake!



When: 12.30 – 3.00 Wednesday 22nd July 2015
 Where: Teaching Laboratory room 121 (1st floor) Physics building
 For further details & registration, email : cemps-ecrn@hotmail.com

Supported by: RESEARCHER DEVELOPMENT www.exeter.ac.uk/as/rdp/

2015 CEMPS Science Outreach Essay Competition

HAVE YOU GOT SOMETHING TO SAY ABOUT SCIENCE?



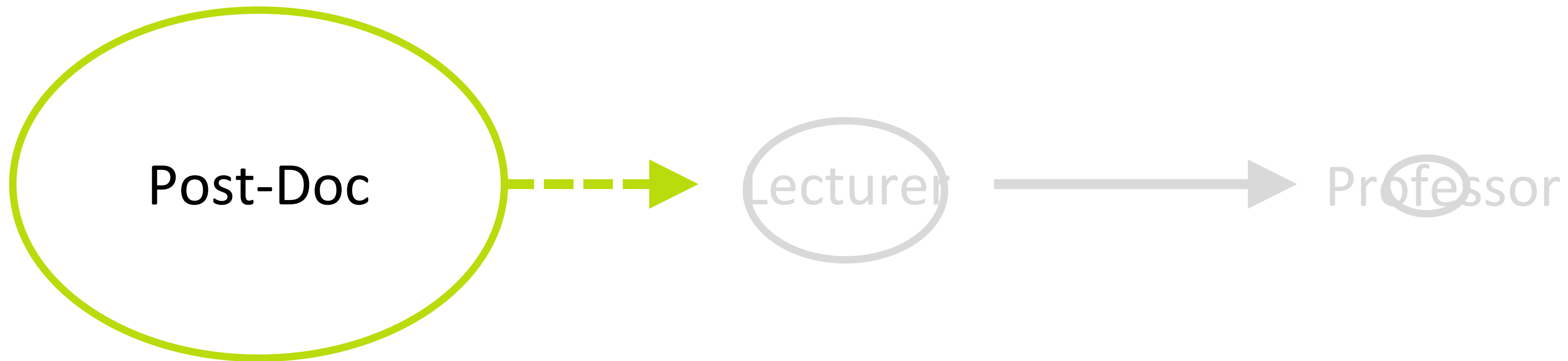
THE RULES

- *One entry per person.
- *Email your ESSAY as a PDF to: CEMPS-ECRN@hotmail.com by 6 p.m. on 6th JULY.
- * Top prize (x 1) = £200 Amazon voucher.
- * Runner-up prize (x 2) = £100 Amazon voucher.
- * Write about a TOPIC related to your RESEARCH to appeal to the GENERAL PUBLIC.- keep it SIMPLE, no jargon!
- * Each essay must be no more than 800 WORDS long, including title.
- * Only for CEMPS early career POST-DOCS, PHD STUDENTS and LECTURERS.
- * See the Researcher Development web page for full details and mark schemes.

Funded by: RESEARCHER DEVELOPMENT www.exeter.ac.uk/as/rdp/

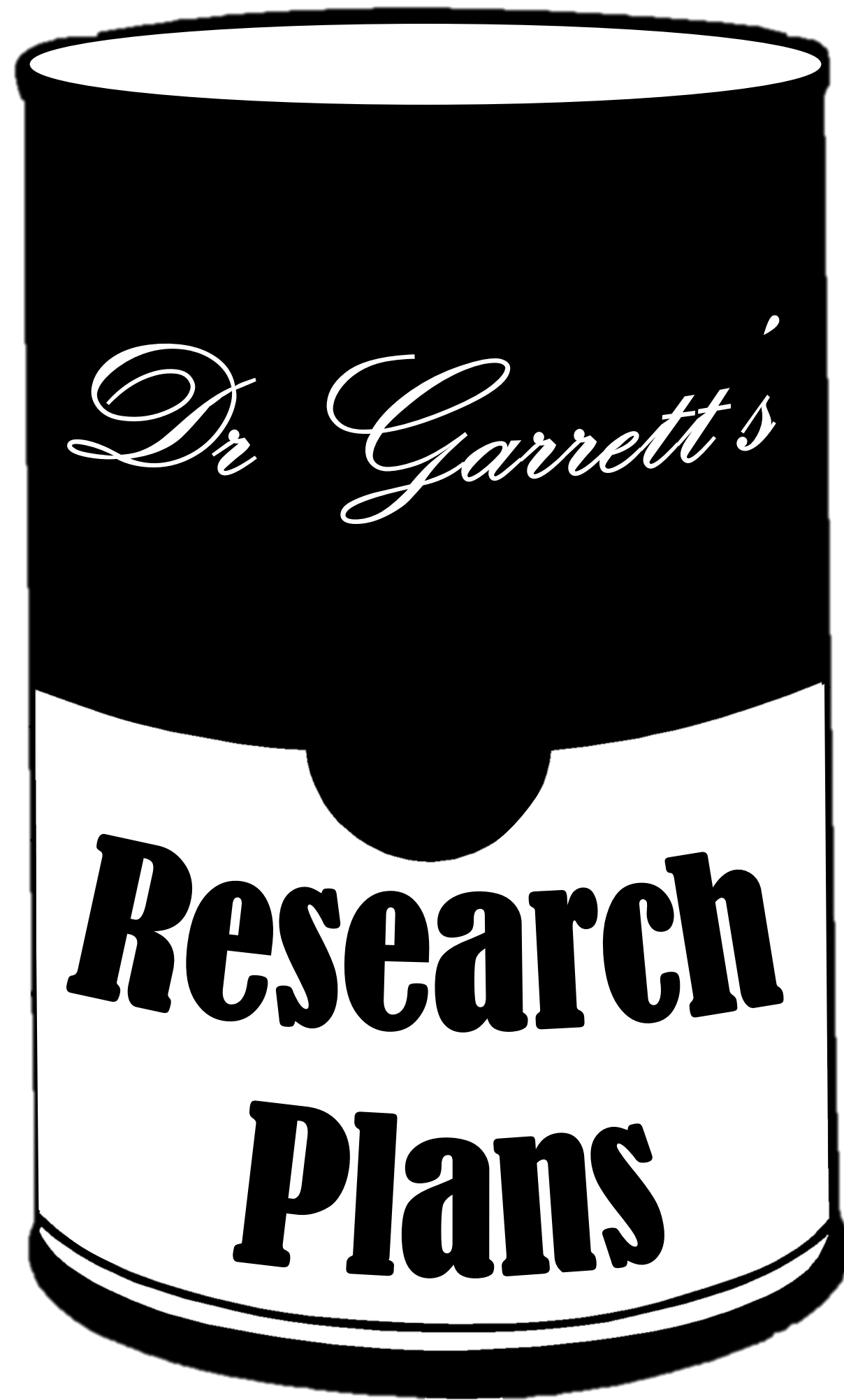
- I won funding for this network to run events (e.g. CV building, finding funding, career mentorship meetings etc.)

The best laid plans



- ✓ In 2015, I applied for a lectureship in my research group
- ✓ I was told I was “the best candidate for both the presentation and interview”
- X They chose an external candidate...

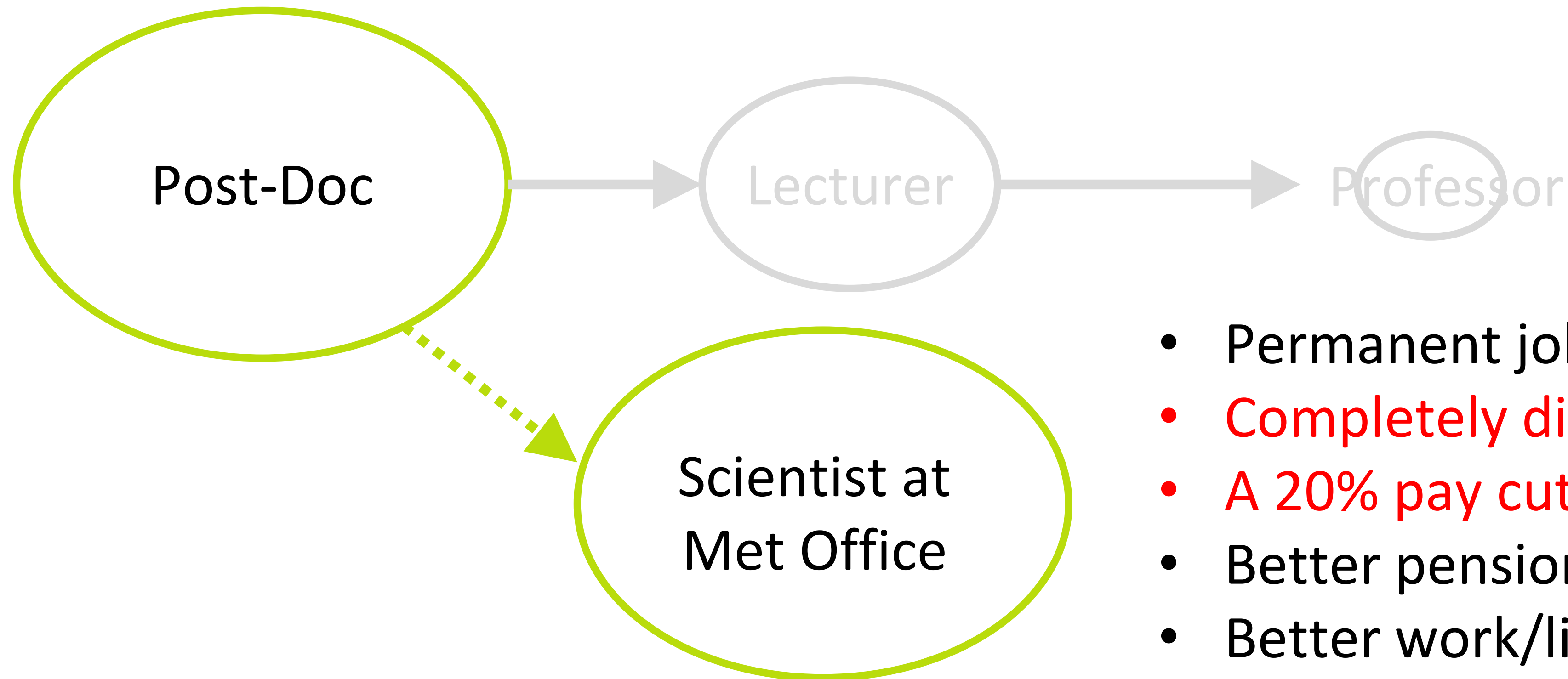
What would I do differently now?



Packaged my research plans as a product aligned to my customer's needs:

- ✓ Market research: what were the strategic aims of the hiring PI?
- ✓ What were the long-term aims of the department/University?
- ✓ Supply and demand: scope interest in my 'brand' from competitors.

The best laid plans



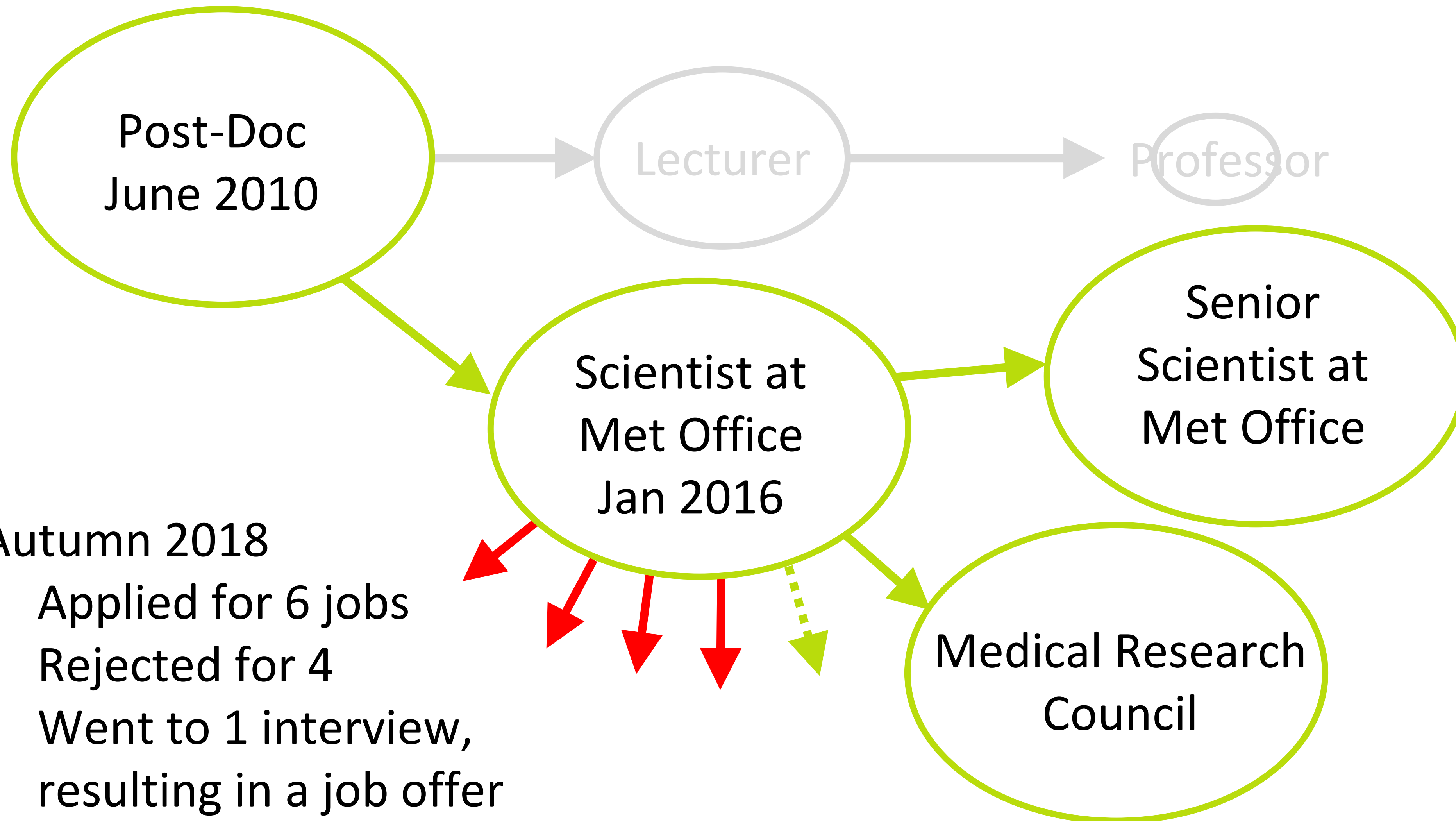
- Permanent job
- **Completely different field!**
- **A 20% pay cut**
- Better pension
- Better work/life balance
- HR said opportunity for promotion within 1st year...

My Met Office Work




- Most of my time was spent coordinating an EU-funded project: Climateurope
- I formed a network of European scientists, policy makers, funding bodies and businesses who use or provide climate information
- I ran the social media channels
- I organised and ran events of Climate Services

The best laid plans: Progression



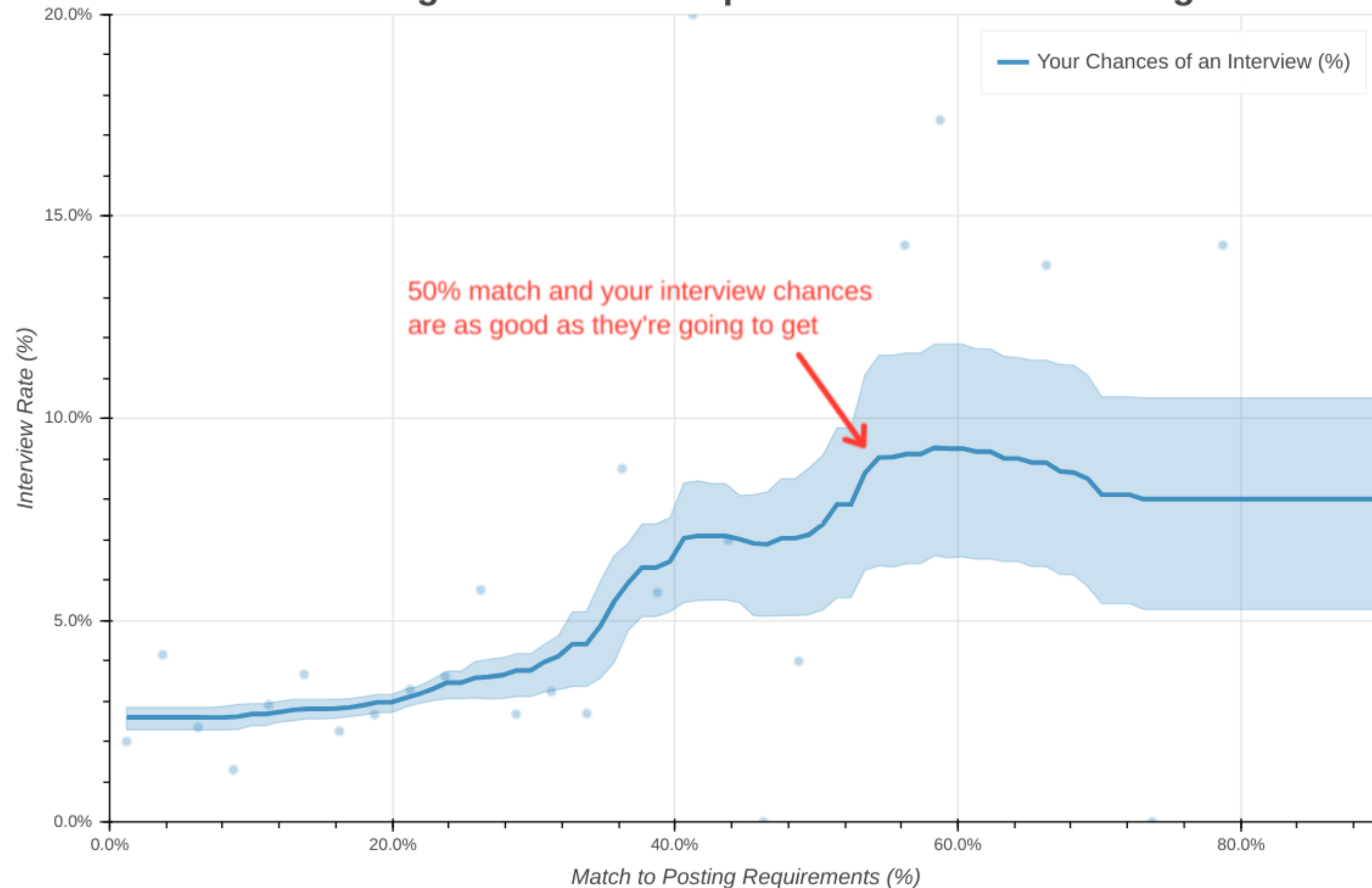
Autumn 2018

- Applied for 6 jobs
- Rejected for 4
- Went to 1 interview, resulting in a job offer

A note on applying for jobs...

Analysis of job postings and resumes for 6,000+ applications across 118 industries

Matching 50% of Job Requirements is Good Enough



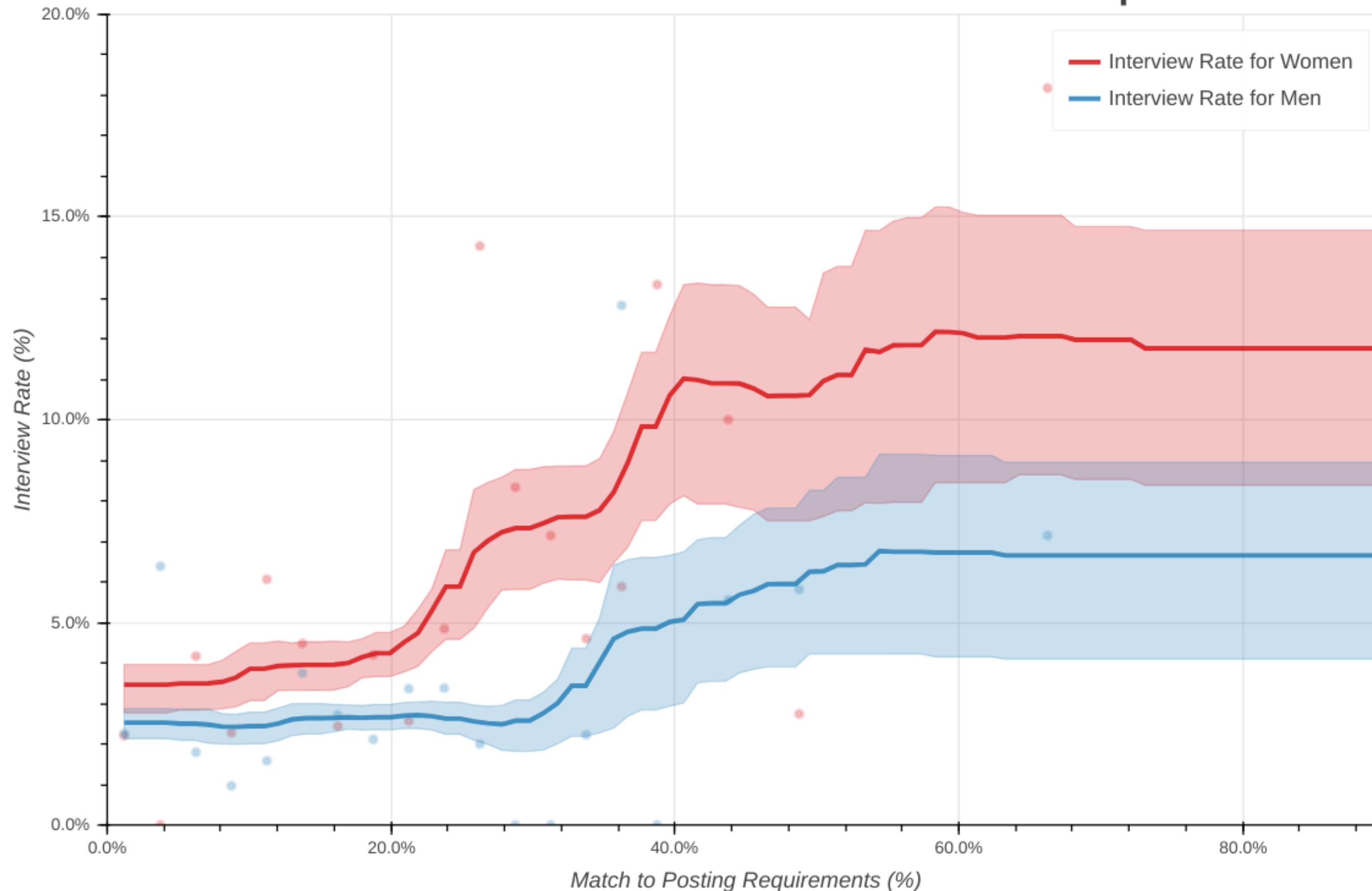
- Don't be put off applying if you don't match all the criteria...
- Your chances of getting an interview are equally low if you meet 50% or 90% of them!
- E.g. for every STEM lectureship post at the University of Exeter they typically receive 100 applicants.*

*Source: conversation with Head of College

A note on applying for jobs...

Analysis of job postings and resumes for 6,000+ applications across 118 industries

Women Get Interviews With Fewer Matched Job Requirements

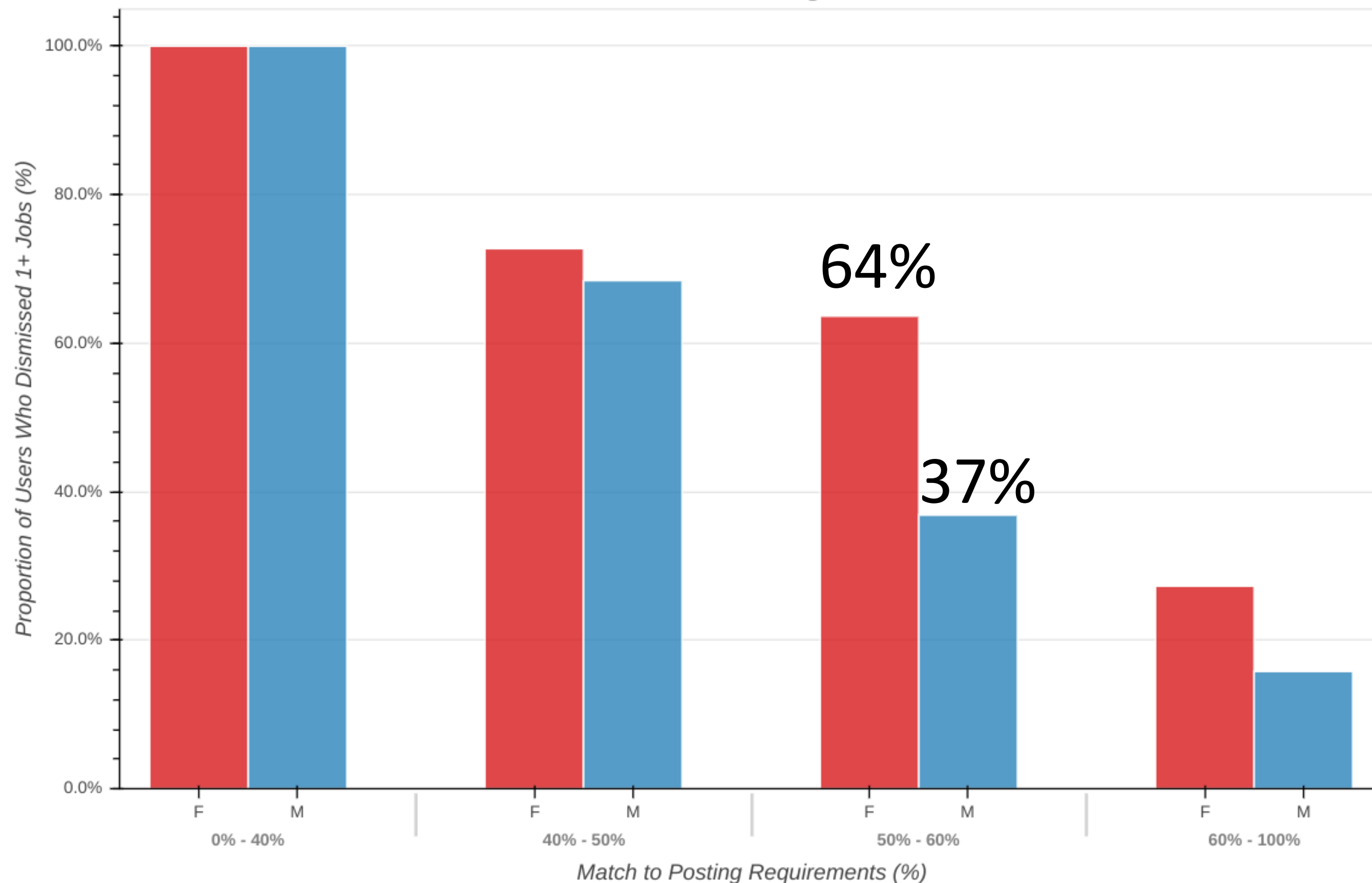


- On the face of it, women seem to get to interview with fewer matched requirements...

A note on applying for jobs...

Analysis of job postings and resumes for 6,000+ applications across 118 industries

Women Dismiss Jobs at Higher Rates Than Men



- On the face of it, women seem to get to interview with fewer matched requirements...
- But this could be an artefact caused by candidate de-selection combined with equality and diversity shortlisting requirements.
- Let's stop self de-selecting!

The best laid plans: Progression vs new job

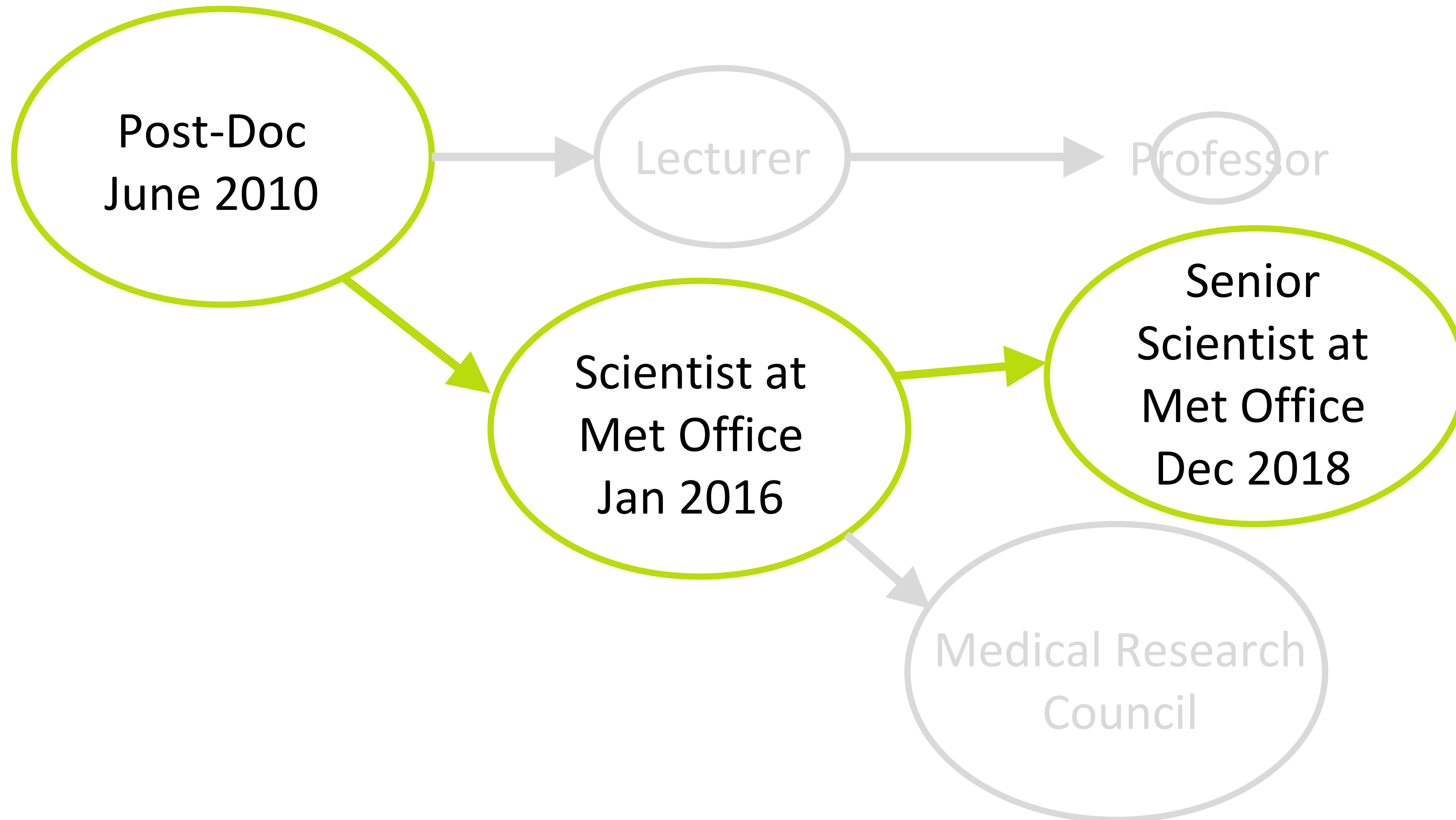
Senior
Scientist at
Met Office

- Salary (finally) higher than my old post-doc salary
- Permanent
- Happy working in the team
- (Promotion only if I stay)

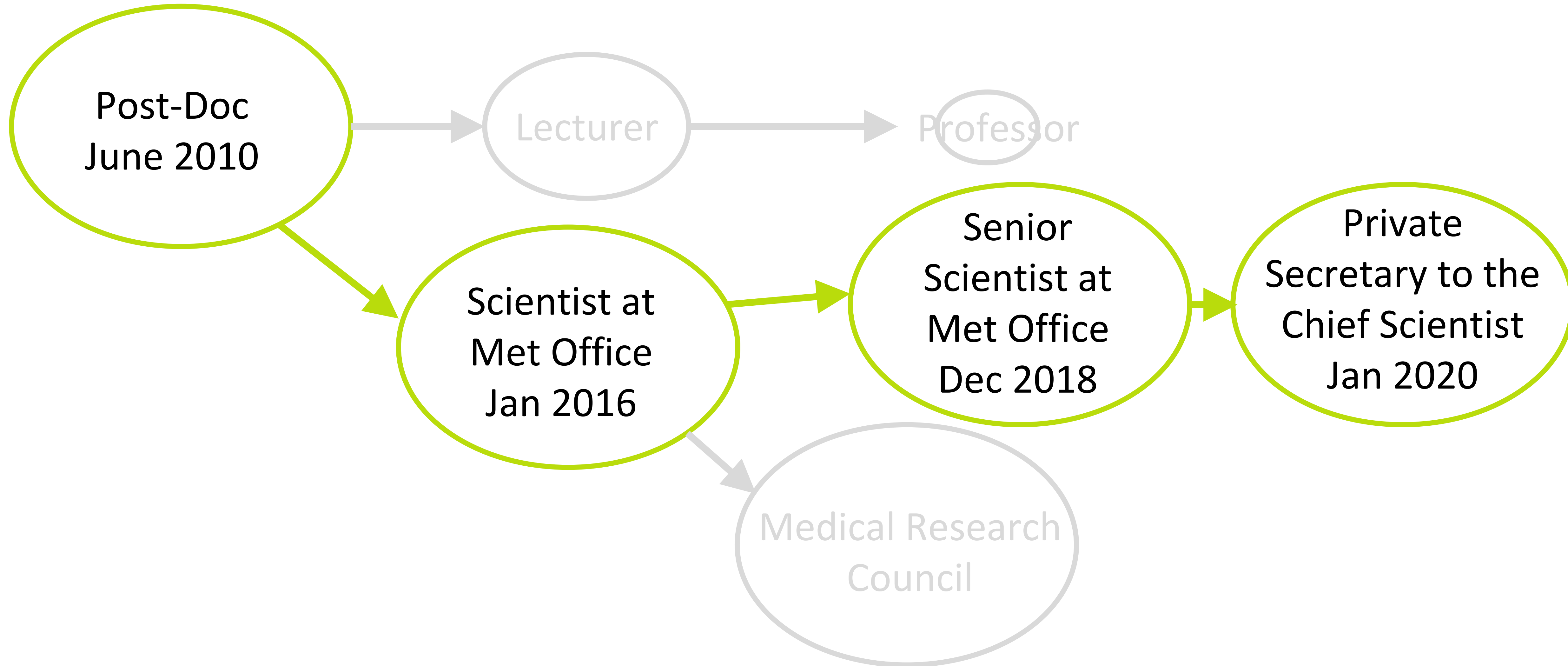
Medical Research
Council

- Higher salary BUT
- **Commuting - costs would reduce my take-home pay**
- **No relocation expenses, lower pension**
- **2 year contract**
- Interesting job, new challenges and opportunities
- Unknown team dynamic

The best laid plans: 1 year later: now what?

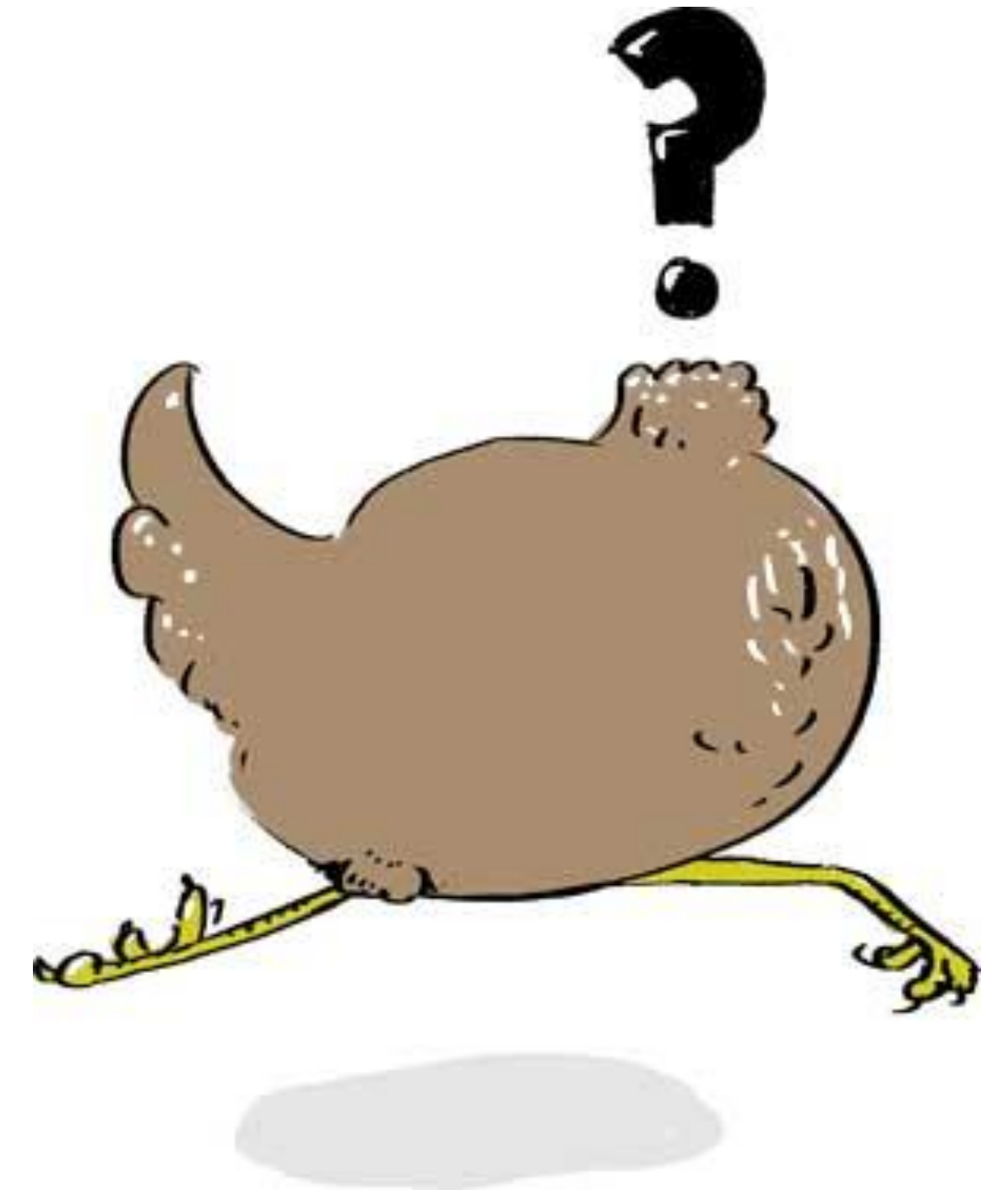


The best laid plans: 1 year later: now what?



Private Secretary

- Ensure the Chief Scientist is briefed on major issues
- Establish and maintain effective relationships with the support offices of key stakeholders, including the Government Chief Scientific Adviser and the Executive Chairs of NERC and EPSRC
- Draft scientific reports and presentations
- Coordinate the scientific content for high-level external visits
- Lead on special projects
- Attend meetings and accompany the Chief Scientist on external visits
- Work with the Private Secretaries and Executive Assistants of the Met Office Executive Directors to ensure an effective flow of information
- ...



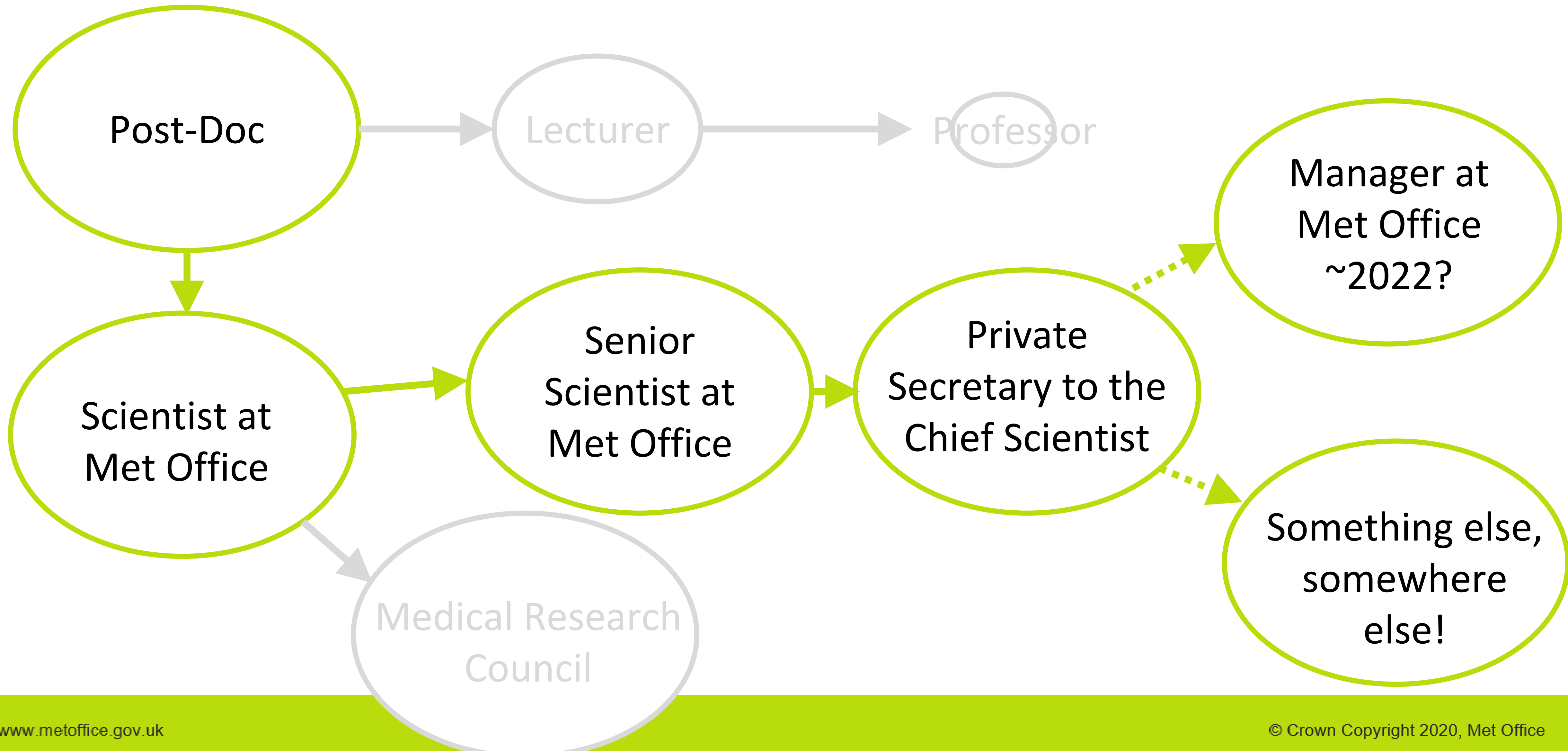
My first three weeks

The best laid plans: What next?

Always have
an exit
strategy.



The best laid plans: What next?



Natalie's Top Tips for making the most of your career:

- Work out what motivates and matters most to you
- Be true to yourself
- Be brave – apply for the thing (and be prepared to fail!)
- Find a mentor
- Do regular CV MOTs – get feedback
- Regularly search for opportunities
- Have a plan (including an exit strategy)...
- But be prepared to change it!

And remember: if it's not in writing, then it's not real