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Doctoral Times

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The Job World After the PhD (Part II)

The Newsletter for
Doctoral Researchers

“Those without experience need not apply”: creating your own work experience



I AM IN A CATCH 22. I want to become a journal editor, but the majority of job applications ask for editorial experience, or at least suggest editorial experience is desired. *But how do you gain editorial experience if you are excluded from every vacancy due to lack of it?* I began seeking voluntary editorial experience: writing several pieces for the university newspaper during my Master’s degree, managing my own blog, and even editing my partner’s manuscripts. However, I always feel like I need to do more – I want to obtain more job-specific editorial work to show I have the right skills set. Sometime last year I was invited to write a piece for the Doctoral Times for their previous edition on ‘Money’. It was at this point I realised that if I could commission and edit a whole edition for the DT, it would complete my portfolio.

So, I asked if I could.
And the Doctoral Times team said yes.

I created and gained my own editorial experience...

It’s not the first time I’ve created my own work experience. My background is science, and I have always been involved in science communication, but I wanted to do more to communicate science outside of writing articles and blogs. This led me to establish **Pint of Science in Sheffield** upon beginning my PhD. Pint of Science is annual science festival that brings researchers to local pubs to present the latest happenings in the world of science. I had attended a previous festival in Birmingham and thought it was a great way to communicate science, as it gets scientists out of the lab and into a relaxed and informal environment. I couldn’t believe it wasn’t already in place when I moved to Sheffield, and saw this as a chance to create my own work experience. *Could I organise a three-day outreach festival? What would it take? Could I do it alongside my PhD?* I took on the challenge. I contacted the Public Engagement and Impact Team and sold them the idea. They loved it, and were happy to support me in organising the festival. Pint of Science Sheffield is now in its third year, and keeps growing in success.

During the first year of the festival I received many requests from audience members for more events just like Pint of Science, but more frequent. The scale of Pint of Science is too large for it to be turned into monthly events, but I had come across a similar set up where PhD and Early Career Researchers are invited to a local pub to present their research in just 10 minutes, with no PowerPoint presentation. **PubhD Sheffield** was born, and again, another experience I created off my own back!

I believe anyone can do this – create their own work experience – no matter what field or sector you are in, *or wish to be in*. You just have to bite the bullet and not be afraid to ask. You never know what the outcome will be. I was nervous to ask the Doctoral Times team to hand over the great responsibility of putting together a whole edition, which all doctoral students in the university will read. *Would they trust me? Would they think I had enough experience to do it in the first place? Would they just say no?* But I wouldn't know what they thought unless I asked them, and that's what pushed me to go ahead and just ask. And I'm so glad I did, because I wouldn't be in the position I am right now, with some fantastic editorial experience under my belt. It could even be the work experience that gains me my first editorial position (I hope!). So, what would I suggest when looking to gain relevant work experience to boost your CV and help you gain that first position after your PhD?

Create your own opportunities!

There are some great positions and resources already out there to help you gain relevant work experience, but if there isn't, set it up for yourself. Do a Google search. Or a LinkedIn search. Or speak to friends and colleagues (always a great, but sometimes forgotten, resource). Find a company, a charity, a university department, or anything that is relevant to the future position you want to apply to, and draft a polite request. State clearly what you are looking for, in the terms of skills and experiences you wish to gain, and why you want to gain it with that particular company, or with help from that particular department. State why you believe your voluntary work experience could benefit them too. *And just be brave*. Some may say no. Some may say they do not have the resources to take you on right now. *But some will say yes!* And best of all, it gives you a great sense of accomplishment - to say I created that opportunity, and I have made a difference to my future career prospects.

So I hope you can create your own opportunities too! Enjoy the next few pages where you will hear from others who have created their own experiences, built businesses, CV tips, and much, much more! **Thank you to all the contributors in this edition!**

Devon

Guest Editor

IN THIS ISSUE

Advice

- Have you heard of *visita*? - *page 3*
- Social impact of careers - *page 5*
- Doctorate Extension Scheme - *page 7*

Jobs outside academia

- My career as an editor - *page 11*
- Trainee patent attorney - *page 13*
- City-slicking squirrels - *page 15*
- Technology transfer - *page 17*

Start-up businesses

- Windspire - *page 19*
- Tribosonics - *page 21*

Public engagement

- Engagement at TUoS - *page 23*
- PubhD - *page 27*
- Get involved - *page 29*

CV tips

- Preparing for interviews - *page 32*
- CV application tips - *page 33*
- Failing interviews - *page 35*
- Top CV Tips - *page 37*
- Top CV No No's - *page 39*

The value of a PhD

- How to maximise your PhD - *page 41*

Have you heard of *v i s t a* ?



Dr Kay Guccione
Mentoring & Coaching Consultant

I'd be surprised if you hadn't as word comes around the PGR mailing lists monthly – but have you taken time to consider why we have put such energy into crafting these initiatives to support you to consider careers beyond your immediate environment?

The route to an academic job is firstly, not that attractive for many PhD graduates. Many of us feel it doesn't utilise our best skills, and it doesn't bring out our best selves. In fact, lots of people start their PhD knowing that they don't want to stay in the academy forever.

Secondly, permanent academic careers are really hard to come by. Only around 10% of PhD graduates in the Sciences and up to 40% in the Arts will gain tenured academic positions. And, did you know... postdocs are frequently on fixed-term contracts (75% UK-wide) making the employment market in research relatively precarious and not for everyone. The life-span of a post-doctoral period is usually 6-8 years and then most postdocs move into new careers across varied employers and sectors.

Funny then that we often see careers beyond academia referred to as 'alternative' careers, they're not that alternative if the vast majority of PhD graduates seek them!

v i s t a aims to raise awareness amongst PhD and postdoc researchers of all the hundreds of fulfilling, high profile, and exciting careers available 'out there', and how to develop professional portfolios and gain experiences that set you up to get them.

What are the *v i s t a* initiatives?

v i s t a [seminars](#) are monthly, 1h, lunch-time sessions where PhD graduates give us the insider details on their roles, employers, and how their job compares to their time in academia. We have welcomed 864 researchers to hear from 66 speakers since September 2015, and the speakers get consistently excellent feedback. The series is shaped and planned according to the feedback researchers give, making a co-created and relevant set of seminars each year.

Not everyone can make the seminars, so in January 2017 I launched *v i s t a* [blogs](#) -- a more accessible version of what we do in the seminars. Posted each Friday at 9am, these career profiles, currently averaging ~120 views per post, with popularity growing as the resource develops.

v i s t a [mentoring](#) has over 150 PhD graduate mentors in as many different roles. It's an online platform so can also be accessed from any location. Sign yourself up, make your profile, and connect for a 1:1 chat with a willing mentor or two!

So what kind of things do our *v i s t a* people say?

Advice from the *v i s t a* network

Below I have listed the 5 categories of advice we hear consistently from *v i s t a* seminar speakers and bloggers -- for who knows better than them how to transition into new roles and succeed in new areas!

1) DON'T MAKE ASSUMPTIONS: people often use 'boring' 'admin' 'dispassionate' 'restrictive' 'desk job' 'grown up job' 'managerial' to describe their fears about non-research careers. "On leaving my academic path, I was scared that I wouldn't fit into a service provision department, that I would find the set hours and formal hierarchies restricting, but I have found that this hasn't been the case. The work is exciting, I care far more about it than I ever did my research and I find the only problem is that it's no longer considered acceptable to work overtime at the weekends!"

Dr Beth Hellen

*Research Services Librarian
University of Sheffield.*

2) BUILD YOUR NETWORKS: telling people you're looking for roles, can often lead to roles finding you. "My biggest tip is to talk to as many people as possible. Opportunities come your way if you get out of the lab and widen your network."

Dr Amy Moore

*Assistant Director of Academic Services
Institute for Cancer Research*



3) REMEMBER HOW SMART AND QUALIFIED YOU ARE:

You know you have banked the qualifications, now it's time to see them in a new light. "Remember all of the other skills you have gained. Sometimes it is hard to prove to employers you have work experience as the role of a PhD student is often misunderstood. Think through your day-to-day activities and map common 'competencies' onto them to help you going into applications and interviews."

Dr Rosie Davis

*Stakeholder Management Coordinator
Science & Technology Facilities Council*

4) DON'T NEGLECT YOUR EXTRA CURRICULAR:

We have so much for you to get involved in at the University of Sheffield! "Expand your expertise broadly, take an interest, engage in meeting various work groups, or special interest groups, and seek to develop your network and contacts through shared interests, this will help create opportunities to find a job. Volunteer for an organisation that you believe in and offer your expertise. I personally learned valuable skills, and gained more confidence through doing this."

Dr Rossana Espinoza

*Online Content Developer for the
Centre for Academic Practice
Enhancement*

5) MAKE THE JOB FIT THE LIFE YOU WANT - not the other way around!

"Make sure you are working in an area that you really love and you feel has the potential to provide future employment where you want to live."

Dr Stuart Fraser

*Commercialisation and Intellectual
Property Consultant*

A banker can save more lives than a doctor - and what this means for your career

Matthew Allcock
Applied Mathematics PhD Student

Really? How can a banker, whose job it is to make a few people a lot of money, save more lives than a doctor, who is saving lives every day? Research into the social impact of different careers shows that this really can be the case.

Direct impact

When considering how our career impacts the world, we tend to think about its hands-on impact – how people’s lives are directly changed by the work we do. As you might have guessed, a banker will have somewhere between zero and hardly any social impact. On the other hand, research completed by [80000hours](#) shows that the average doctor can expect to directly save 90 lives during their career. It’s wonderful that one person can have positive impact to so many people’s lives.

Replaceability

However, direct impact does not give the full story. In most jobs, there is a finite supply of resources for hiring new employees. The NHS has a limit on the number of doctors they will train each year, for example. This is why medical schools are oversubscribed and competitive.



Therefore, it’s important to consider a job’s marginal impact, rather than its direct impact. What would happen if I chose not to become a doctor? My position would be filled by the next best applicant, so those 90 lives would still be saved, just by someone else instead of me. A doctor’s marginal impact is calculated to be about 5 lives saved over the course of their [career](#).





Putting your money where your mouth is

There is one more piece to the puzzle – *salary*. A banker's salary of, say £100,000, is considerably more than a doctor's, at £70,000. A high salary can be of personal importance, but [evidence](#) shows that increasing a person's salary further than about £50,000 does little to further improve their happiness.

So, if I earn a high salary, I can use the extra money I earn to drastically change the lives of many other people with minimal impact on my own. Let's say I choose to donate 10% of my future salary; after all, this is well over the threshold, where more money doesn't equal more happiness. By donating to the most effective charities (givewell.org.uk), I can expect to save 150 lives with my lifetime donations as a doctor, or around 215 as a banker. A doctor can save more lives with their chequebook than they can with their stethoscope – and a banker can do even better!

In conclusion, with my well-placed donations combined with my direct impact, as a doctor, I could save around 155 lives during my career, or around 215 as a banker. *What does this mean for you, if you don't want to be a doctor, and definitely don't want to be a banker?*

After your PhD, you're likely to be in a privileged position of financial security, earning more than most people in the UK. The great thing that we can learn from the surprisingly high social impact a banker can have is that you can have a large impact in almost any job after your PhD by donating a portion of your income to the most effective charities.

What do you want from your post-graduate job? Probably money. Maybe an opportunity to travel. Probably a flexible working environment. Try thinking about how you can use your career to make the world a better place. You will spend about 80,000 hours of your life on your career – use that time to make the world into the place you would like it to be.

I have found the [80,000hours career guide](#) very helpful when thinking about how to find a career with a great social impact whilst making me happy. If you want to meet other people who are interested in making an evidence-based positive change in the world – an idea known as effective altruism - come along to Giving What We Can Sheffield's regular [events](#), or contact them at gwwc@sheffield.ac.uk.

The Doctorate Extension Scheme (DES) – A Welcome Career Opportunity For PhD Students

David Barrott
Senior International Student Adviser

Since 6th April 2013 nearly 200 PhD students at The University of Sheffield have taken up the opportunity of extending their visa to work in the UK for 12 months upon the completion of their PhD. We hope this article will raise awareness to ensure that as many students that are eligible for scheme do not miss out on this opportunity if interested.

Background

On 6th April 2012, UK Visas and Immigration (UKVI) abolished the Tier 1 Post Study Work (PSW) visa, limiting options for international students to get work experience in the UK upon completing their studies. One year later, they then introduced the Doctorate Extension Scheme (DES) visa under the Tier 4 visa system (which covers Students, Postgraduate Doctors and Dentists and Students' Union Sabbatical Officers). This has been a welcome opportunity for doctorate students to gain work experience in the UK.

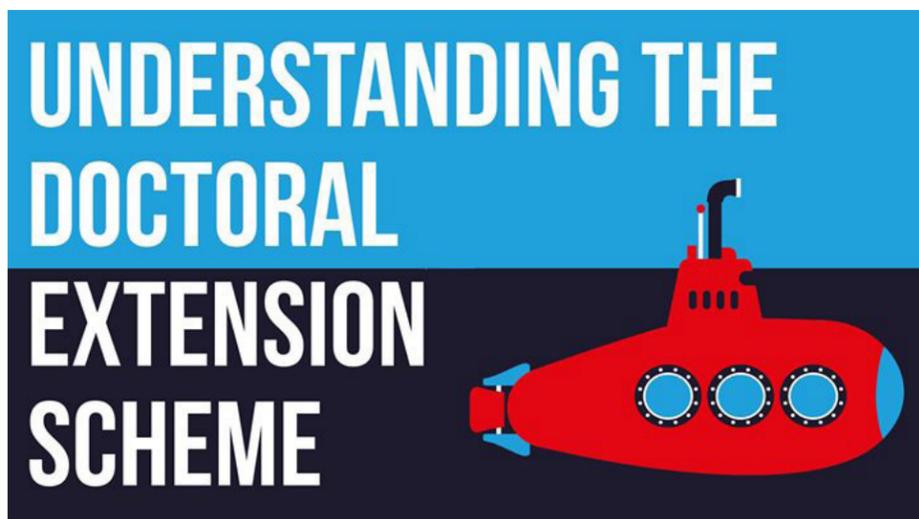


What you can and can't do with a Doctorate Extension Scheme visa

Once you have received confirmation of the award of your doctorate, you will then be able to work full time, with the only restrictions being that you cannot work as a doctor or dentist in training, or as a professional sportsperson or sports coach. It is also possible for you to be self-employed, which is not permitted under the Tier 4 visa that you have had for study.

You can start working without the usual Tier 4 work restrictions once the award has been confirmed. It does not matter if the award has been made before the estimated award date on your CAS or if the DES visa application has yet to be decided by UKVI. There is also no need to work at a particular level, but there may be considerations for you to make if you do intend to continue to be employed in the UK after your time on the DES visa.

There is also no need to work at a particular level, but there may be considerations for you to make if you do intend to continue to be employed in the UK after your time on the DES visa.



“ If you are interested in DES, you should seek initial advice from the Student Advice Centre ”

Who is eligible for DES?

To apply for a DES visa, you must:

- Be a non-EEA national with a valid Tier 4 (General) Student visa
- Apply for the visa inside the UK (you cannot apply for a DES visa outside the UK even if your Tier 4 visa is still valid at the time)
- Have a Confirmation of Acceptance of Studies (CAS) issued by the University. This shows that the University is going to be your ‘sponsor’ under this scheme.

There are also some other very important specifics that are essential for you to remember:

- You must be studying a ‘doctorate’ as defined by UKVI, such as a PhD (so a research masters such as an MPhil is not acceptable for the purposes of DES)
- You must submit the visa application 60 days or less before the estimated award date of your doctorate. The estimated award date will be calculated by the University after the outcome of your viva is known
- It is important to remember that the visa application must be submitted before the doctorate is awarded, not after. Don’t miss out on the opportunity by making your preparations for applying too late!
- You will need to meet the other Tier 4 requirements, including maintenance, which you should already be familiar with from previous Tier 4 applications
- The International Student Support Team will assess your eligibility to apply for DES before a CAS is issued to you

“ If your DES visa application is successful, you will be granted a visa, which expires 12 months after the estimated award date confirmed on your DES CAS ”



What obligations will you have?

DES is a sponsored scheme, which means the University remains your Tier 4 sponsor as it has been whilst you have been studying with a Tier 4 visa. Therefore, you and the University continue to have obligations to UKVI whilst you are sponsored on the scheme. You will sign a declaration before getting your DES CAS which outlines your obligations, but the most important things to remember are that:

1) Being sponsored under DES requires the University to make two contacts with you during the duration of your DES visa. For each contact, the University's Careers Service will send a questionnaire for you to give an update on how your job search and working is going. It is vital that you respond to this, as the University is required to report to UKVI if you do not respond to these contacts, which could lead to your DES visa being cancelled.

2) You also need to let the University know if you have decided to leave the UK permanently and do not intend to return to the UK on your DES visa, or if you have been granted a further visa in a different immigration category.

What you should do, and when

If you are interested in DES, you should seek initial advice from the Student Advice Centre (Level 3, Students' Union) on whether DES is the best work option for you or whether you also have other options such as Tier 1, Tier 2 or Tier 5. Ideally, you should do this between the submission date of your thesis and your viva.

There is further information online at:

<https://www.sheffield.ac.uk/ssid/international/next/immigration> and <https://www.sheffield.ac.uk/ssid/international/immigration/cas>

If you have any questions, please contact the International Student Support Team:

<https://www.sheffield.ac.uk/ssid/international/immigration>



If you decide that DES is the best option for you, you can then request a DES CAS application form from International Student Support (Level 6, Students' Union) – ideally just before or just after you have had your viva.

Once the outcome of your viva is known, your supervisor will need to confirm the date that they expect you to submit your final e-copy and confirm this on your form. The International Student Support Team will then make an appointment to assess your eligibility for DES, and calculate whether a DES CAS can be issued to before your visa expires.

If so, a further appointment will be made for you before the estimated award date that has been calculated and before your visa expires for your visa application form and supporting documents to be checked, and for the DES visa application to be submitted.



What happens after DES?

If your DES visa application is successful, you will be granted a visa which expires 12 months after the estimated award date confirmed on your DES CAS.

DES is a visa category under Tier 4, and as such is not a category which leads to settlement in the UK. Further study in the UK under Tier 4 is possible after DES, but it would need to fit within the 8 year time limit for study in the UK under Tier 4 (including the time you have spent in the UK on your DES visa).

Following on from DES, it may be possible for you to apply inside the UK for a visa under some Tier 1 and Tier 2 visa routes if you meet the requirements for them.



My career as an editor at Nature

Dr Katie Ridd

Global Editorial Talent Manager, Springer Nature



During my undergraduate degree at The University of Sheffield I was fascinated by the intricate workings of gene regulation. After completing a final year laboratory project with Professor Simon Foster, I decided to undertake a PhD at Liverpool John Moores University where I looked at using gene regulation as a readout for measuring toxicity. I continued with this theme in my first postdoc but used the skin as a model system. My final postdoc at The UCSF Cancer Center focused on understanding skin cancer in humans.

I didn't really plan to move away from academia. I was trying to apply for my own funding in the UK and write papers. I had a six-month window to fill so applied for a locum position, temporary fixed term position, at Nature Protocols, part of Nature Research. Whilst I didn't get my own funding, I had already decided that the editorial role was something that I really enjoyed.

I could work really hard every day and see the fruits of my labour. I was reading and learning about new methods, expanding my scientific knowledge, and I was also helping researchers to disseminate their protocols; further advancing discovery. What I really liked doing as a postdoc was reading about exciting discoveries; as an editor this was a large part of the role.

There are always many editorial opportunities at Springer Nature; when a permanent position became available at Nature Communications, I jumped at the chance to join the editorial team of a new journal.

As an editor at a journal that publishes primary research, my job was to read papers and decide whether I thought they met the editorial threshold of the journal. I'd use my knowledge of the field and the journal to reach my editorial decision. For suitable papers, I'd organise the peer review process, interpret the reviewer's comments and communicate with the authors.

Editors also commission review articles, both at our research journals and our dedicated reviews journals. Editors travel to conferences to keep up to date with the latest advances in their field and visit institutes to meet with potential authors, encouraging them to submit their work to us, or commissioning content. Our editors find that this is a really rewarding way to use their existing knowledge, stay close to science, further expand their network within their community, and continue to learn.

“ “ Aside from having access to the most exciting discoveries in my research field, the best part of my work, for me, has been **helping other people** ” ”

I have always really enjoyed assisting authors in publishing their work, helping them to make the most of their papers. It's a great place to work with likeminded colleagues who are also passionate about science and science communication.

The role of an editor does indeed have its challenges; there are multiple deadlines that need to be met to ensure that we are providing the best author service possible. Great communication skills, time management and organisation are therefore a must to be successful. Diplomacy is also a very useful skill to have as an editor, we need to foster the conversation between authors and reviewers; and we are aware that we aren't always delivering positive news.

People ask me how they can prepare for an editorial career at our journals. I always suggest that researchers get involved in the submission and peer review of their own papers. Help write the cover letter, use the submission system and read the letters you receive from the journal, whether the outcome is positive or not.



If your supervisor peer reviews papers for a journal, ask if you can get involved (they would need to ask permission from the editor). Being really familiar with the peer review process can help understand what it is that we do as editors. This is with the caveat that our job as an editor is different to that of a reviewer.

Researchers interested in an editorial career also ask me about development. Many of our editors do stay within their editorial teams. We have many long serving editors who are driven by reading the best and new science on a regular basis. There are many other editorial and publishing roles at Springer Nature and all of these are advertised on our editorial and publishing careers website: www.springernature.com/editorial-and-publishing-jobs

You can also find out more about [who we are](#) and [what we do](#) on these webpages.

At the moment, I am on a secondment from Nature Communications; I am working with our Human Resources department on strategies to recruit and train our editorial and publishing staff. I also focus on the career development of our employees.

SPRINGER
NATURE

Intellectual Property – An alternative path for STEM PhD graduates

Dr Peter Heins

Dr Peter Heins is a Trainee Patent Attorney at Marks & Clerk LLP. He is an alumnus of The University of Sheffield and was a PhD student in the University's Department of Automatic Control and System Engineering between 2011 and 2016.



So you are nearing the end of your PhD and as if getting those last minute results, writing your thesis and preparing for your viva are not stressful enough, you also need to start thinking about what you want to do after finally getting the much coveted title “*doctor*”.

For those studying PhDs in science and engineering (STEM) subjects, the common thinking is that there are only two career paths to pursue post-PhD: academic research or industrial research. Of course, in reality there are many other paths that can be taken. However, a profession which is often overlooked by STEM PhD graduates is Intellectual Property Services.

Intellectual Property (IP) is a broad term which includes: copyright - for artistic works, design rights - for the appearance of a product, trademarks - for a company's branding, and patents - for technical inventions. It is the latter of these which could provide a rewarding career for those graduating with a PhD in a STEM subject.

A Patent Attorney is a person who helps secure patent protection for their clients' inventions.

Their responsibilities include:

- drafting new patent specification
 - guiding existing patents through examination
 - aiding clients whose patents are being infringed
 - aiding clients who are potentially infringing a patent
 - advising their clients on IP strategy
- ... as well as countless others.

Although primarily working with patents, Patent Attorneys often also help clients gain design rights. Patent Attorneys are essentially legal professionals with technical expertise who specialise in IP. The legal services they provide could potentially make (or lose) a lot of money for their clients. Therefore, the profession is well regulated and one is required to pass exams before qualifying as a Chartered Patent Attorney.

“ If a career in academia or industry does not interest you, but you would still like to use the skills and knowledge you have amassed during your PhD – **the Patent Attorney profession may be for you** ”

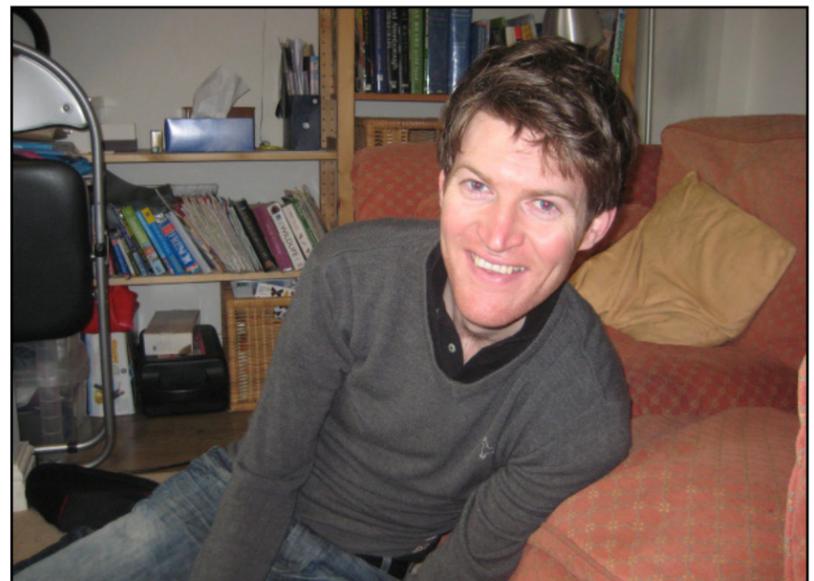
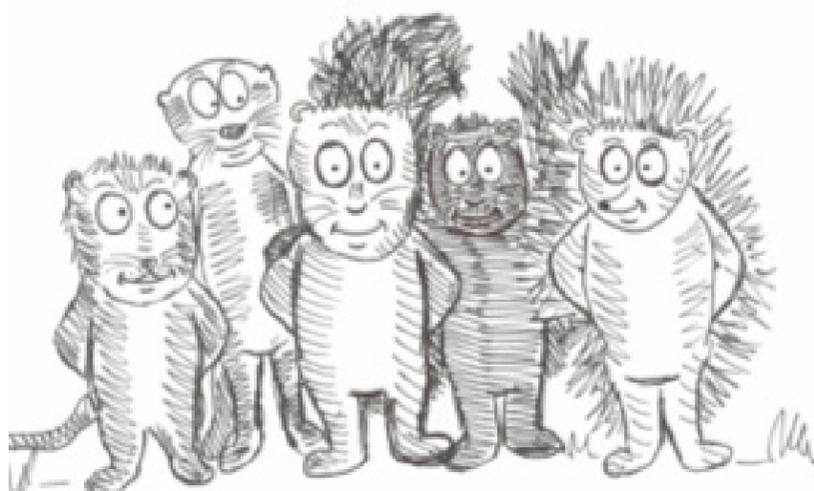
City-slicking squirrels & life after the University of Sheffield

Dr Colin Bonnington

I studied at the University of Sheffield, for my doctorate from 2009 to 2013 and loved it. I looked at the impact of the non-native, North American, grey squirrel on birds in Sheffield, both in terms of nest predation and competition at bird-feeders.

My research was pretty diverse and included me trapping and ear-tagging grey squirrels (which was fun), placing taxidermy models of different animals next to bird's nests to see the birds' reaction (all in the name of science!) and more orthodox surveys, like point counts to get an idea of the number of squirrels and birds living in the city.

My PhD helped me to develop in so many ways; not least it gave me confidence to stand up in front of an audience to wax lyrical about my work. I was also able to provide training for other students who kindly assisted with some of my fieldwork. This included them helping me to ear-tag squirrels which was a pretty tough job on your own and keeping me company standing for days on end counting birds and squirrels.



Through the experience of publishing in scientific journals, during these research years, my writing ability undoubtedly rocketed (although this may be due, at least in part, to that ability being set at a pretty low bar at the start!)

Since 2013, I have worked for a large engineering consultancy called AECOM where I mainly carry out bird surveys, but still dip my toe into other surveys, including on the odd occasion, squirrel surveys.

Luckily with the background I have from my time at the University of Sheffield, I am still very keen in research and my work has allowed me to continue analysing data and writing up studies, intended for scientific journals. As well as me benefiting from any such publications, my company also gets plaudits, so everyone's a winner really.

As a hobby, as well as the usual kind of things I enjoy, like playing sport (golf, football, racket sports) and socialising etc., I also write and illustrate children's stories, and one of these called **'The Grey Tale of Mrs Sciurus'** will hopefully be published before too long.

This story is actually based on my PhD research and touches on a number of issues which were apparent during this work, like squirrels acting as thieves at bird-feeders and egg-eaters! This story though is ultimately about acceptance and belonging, and I've used animal characters in a child's story as a way to consider prejudice issues, which are unfortunately all too apparent in everyday human life (you just need to turn on the news).

As grey squirrels are originally from North America and now live in the UK, this made for a good, relevant, protagonist in my story. A publisher is doing a final proof-read and helping me with the layout as we speak and I hope it will be available (in all good book stores, and probably some not so good bookstores as well!) into the New Year.

If you have any children aged around 7-8 or perhaps a niece or nephew who is keen on animals and quirky stories, and you're looking for a book for them which provides a moral message that we should all abide by, this may just be the ideal birthday present for them!

In the meantime, you can check a few of my illustrations from the story and some more info at my Twitter and Facebook pages below. Feel free to contact me if you have any comments about my story and the idea.

After this story, I have a few more on the way. The next one, not wanting to badger you too much, is about badgers!



<https://www.facebook.com/bonzsbooks/>



[@bonz_books](https://twitter.com/bonz_books)



colinbonnington@hotmail.com



How I am working in Technology Transfer post PhD

Dr Sayali Haldipurkar



I've always enjoyed science and been academically successful, and therefore went on to do a PhD, which seemed like an obvious choice.

While doing my PhD I learned two things about myself:

- 1) I enjoyed interacting with people and building relationships
- 2) I wanted to know what the end result of any given project would be.

Unfortunately, during my PhD I realised that, although I was thoroughly enjoying my project, it left me feeling unsatisfied, because a PhD is dominantly self-managed and self-conducted – so interacting with people is quite minimal. And, it is an on-going process with no clear end product.



While looking for jobs during my fourth year, I managed to scoop up a job in a technology transfer company called **IN-PART**. This company works between universities and industries, facilitating licensing and collaborative alliances between the two.

Here, I work as a Research Officer where I am involved in interacting with our industrial clients, maintaining and building relationships, as well as science communication, process development and marketing. It is a small company with a start-up culture, so I get to wear many different 'hats', and the vibe of the office is fun and young, yet professional and productive.



In this job I can finally weave in my experience of research and academia, with my passion for relationship management and communication. The skills and experiences I gained during my doctoral studies led me to a career that I very much enjoy.

My extra-curricular activities

I was heavily involved in societies and activities such as:

- The Medical Post Graduate Society
- The PGR forum
- Bake sales
- Charity events
- Competitions e.g. Biotechnology Yes

This gave me an exposure to a lot of people, helped me develop my personality and interpersonal *'real-life'* skills that help me in my job today. I can't recommend these activities enough, especially for PhD students as it can often be an isolating experience, interacting with other PhD students can help you in obtaining a support system.

On leaving academia

I decided to move away from academia at least for now for two main reasons.

Firstly, I think I am the kind of person that wants to see a product or a service as an end point. Being a scientist is indeed a very noble profession as their main job is to produce knowledge. But for me, I see myself fitting in a business setting working for a client or customer.

Secondly, I've only ever studied and been in a safe abode of a school or university all my life. I wanted to step out into the real world and see where it takes me and how I like it. I believe it is worth giving new things a try, for you may never know you like or dislike something unless you've spent some time doing it.

The value of doing a PhD and the skills I acquired

I thoroughly enjoyed my PhD time although peppered with a lot of stressful situations. Although I did not choose to go down the academic route, I feel I have obtained some amazing skills. This includes:

- critical thinking
 - reasoning and rationalising
 - independence
 - managing time, people and failure
 - resilience
 - adaptability
 - commitment
 - good work ethics
- amongst so many more...

However, the big key learnings for me were:

- 1) You can never prove anything – you can only provide enough evidence to support or discard a hypothesis
- 2) Question EVERYTHING
- 3) Correlation does not imply causation.

Had I not done a PhD I would have never learned these – and they have revolutionised the way I approach every project or issue at work. I believe this puts me a cut above the rest.

My main advice for PhD students

would be to socialize, try different activities and to try different jobs during or after their PhD. Academics is great but there roads ahead are only getting narrower. So it is better to start putting your eggs in different baskets early on!

A jump into the unknown

Dr Sarah Barber
CEO Windspire and Mindspire



The German word for “self-employed” (“selbstständig”) is the same as the word for “independent” and “autonomous” – quite fitting for the experience I’ve had in the first nine months of setting up my own business.

I was at the University of Sheffield from 2004 to 2007, where I completed my PhD in the Sports Engineering Research Group. Before that, I studied Engineering at Cambridge University. Directly after my PhD, I did a postdoc at ETH Zurich in Switzerland, where I discovered my passion for wind energy (and the German language).

I’ve been working in the area ever since – firstly as a wind energy expert at a utility company, then as the Chief Technology Officer of a start-up company (both in Switzerland). Following this experience, I considered setting up my own company, as I had really enjoyed the excitement and autonomy the start-up environment; however, at this point I didn’t really have a fixed idea about what my company might do.

Therefore, I decided to gain more experience in the industry, and moved to Germany, where I managed a team at Fraunhofer Institute for Wind Energy Systems in Bremerhaven. During this time, I was selected for a career development programme for women, and as part of this, chose to complete a business coach training qualification.

Due to some changing personal circumstances, I returned to Switzerland after three years in Germany and reconsidered the idea of setting up my own business. I quite quickly developed a very promising idea of offering wind energy consulting services utilising my technical capabilities and experience combined with business coaching and workshops for engineers.

I then spent about a year (in my spare time, whilst still working for Fraunhofer) writing and rewriting a business plan. Gradually something exciting started to unfold – [mindspire](#) and [windspire](#) were born. In April 2017,

I took the jump into the unknown.

Even though I haven’t made very much money yet, I don’t regret the step one bit, because I’ve already learned more than I could possibly imagine! I’ve been able to utilise the skills I acquired during my PhD (as well as some skills I’ve learned since then) – and I’ve developed some new skills, too.

Four main skills that I acquired during my PhD have been indispensable in the last nine months:

Firstly, doing a PhD made me work *independently and autonomously*. Of course, I received support from my supervisor, but I was expected to manage my tasks and time myself as well as to find solutions to all sorts of problems. Doing this for three years during my PhD definitely gave me a good basis for the working environment as a business founder.

Secondly, completing my PhD required learning a lot of *discipline*. I didn't have a boss telling me what to do or putting me under pressure to perform – I was largely left to myself and had to try and test different methods for keeping up my discipline. In my opinion, this is the most important skill required for self-employment, especially at the start.

You have to be disciplined enough to get up every day and work on your idea, to send requests, to go to events and to meet people, even though most of them are not interested. I definitely have my PhD to thank for my high level of discipline that I have needed in my self-employment up to now!



Thirdly, completing my PhD required a large amount of *persistence*. I would sit for weeks and weeks on end doing some mundane task, not knowing what the outcome would be, and then when it failed, repeating it again, for weeks and weeks (sound familiar?). Eventually it DID work though! Through this experience I learned to be persistent. I learned to keep going and not to give up easily. Now, when I receive a rejection from a company (which I do, regularly), I just try again with someone else, and then again with someone else, and again and again.

Finally, I learned to be *confident in my own abilities*. I managed to complete my PhD and I managed to reach my goals. It made me realise that I am capable of completing difficult and complex tasks effectively. This knowledge and - more importantly – my belief has been essential for starting up a business, because even when I am overwhelmed with problems and difficult situations, I know that I am capable of mastering them - *at least most of the time*.

In summary, I believe that the experience and skills that I gained during my PhD stood me in good stead for success as an entrepreneur – but to know for sure, ask me again how I'm doing in about a year from now!

Got a business idea? How to start a start-up...

Dr Phil Harper
CEO Tribosonics Ltd

What was your PhD?

I did my PhD in Mechanical Engineering in the field of Tribology (the study of wear, friction and lubrication) at the University of Sheffield. My PhD was focused on developing new techniques for measurements in Tribology using ultrasonics.

What made you decided to create your own start up?

I did the PhD because there was an opportunity to start a business right from the start. Looking back, I think the possibility of starting a company was the reason for the PhD, not the other way around.

How did you begin researching 'how to start a start-up'? Did you attend any courses/training?

I did some modules at the university on entrepreneurship and business planning. They were broadly useful. There were also a number of 'how-to' books. However, I think the only way to really learn to run a start-up is to do it! Same as riding a bike - you can only learn so much in a classroom or by reading a book. At some point, you just have to get on the bike.

What is your start-up business?

I set up Tribosonics Ltd, a company that develops measurement technologies in a wide range of markets including Formula1, Nuclear, Aerospace, Off-shore Wind, Internal Combustion Engines, Oil & Gas, etc.



What skills do you need to become an entrepreneur?

Only one really - creating value. I think I'm only really learning this, 11 years in. Creating value (ultimately value for customers, but also for employees, suppliers, the city, the country, etc.) is all that matters. Being laser focused on this, doing whatever it takes to achieve this, is the only skill necessary.

What were the biggest challenges you faced when you started your business?

I didn't really know what I was doing. We hadn't sold anything before I started the company. I had to start from scratch: finding customers and developing a commercial model. When you start a company, you have to do a bit of everything - you are the CEO, the CFO, the COO, the technical lead, the admin person, the technician, the cleaner. Looking back now I think my biggest challenge was not having a clear business model/plan focused around creating value.

What are the best ways for researchers to obtain start-up capital?

Figure out how to create value. Formulate a strategy. Work out how to package it. Get the right people around you. If you do all of this, people will throw money at you. Believe me, money is not the issue. Creating value is the issue. If you need money had have clearly articulated your 'value story' then develop your network, enter business planning competitions, enter funding competitions. I did this and won £40,000 from the Royal Academy of Engineering. This money allowed me to get started.

What enterprising skills do we have as researchers?

I think it is generally difficult for academics to make the transition to entrepreneurial success. It's been true for me. It is not common to find people who are both the technical lead and the commercial lead. Steve Jobs is a well-known exception. In that respect, I think the skill sets are not well aligned. However, I think that if you can learn to hone your research skills around value, how it is created, what can destroy it, how it can be protected, what it looks like commercially, etc., then I think this can be incredibly powerful. As a researcher, you have many of the right skills (strategic thinking, analysis, research, planning, innovation), but you may need to channel these into a new mind-set.

What value do enterprising skills add, within or outside academia?

Enterprising skills, in particular thinking about creating value, are hugely valuable. They prevent waste because they constantly orientate you around creating value in whatever situation you are in.

Being able to think through how value is created and how to avoid waste gets you to a beneficial outcome much quicker. It means that you become impatient with mediocre. You strive for excellence.

How should you go about protecting your intellectual property when starting a new venture?

There are many aspects to an IP strategy, but it must be built on a foundation of creating value. Patenting is one (very expensive) route to go down. But there are many others. Which one you choose depends on the value you are able to create and the strategy you are taking to create that value. Get good advice. There are lots of IP advisers out there. Only some are really exceptional. Finding the right support is critical. Avoiding 'average' is crucial.

Sometimes start-ups fail.

How do you manage risks as an entrepreneur?

Well I don't really think Entrepreneurs are risk takers. The first risk that any Entrepreneur takes is a small one. The next is a little bit bigger. The next is bigger again. After a few years they are taking huge risks. But each one I take is only a little bit bigger than the one before. You do have to manage risks in any business start-up. Thinking about the risks, anticipating them, planning for them is an important part of business strategy.



How can public engagement experience enhance your career prospects in (and out of) academia?

Lynette Hodges
Public Engagement Team

Getting involved in public engagement during your PhD can be a great way of enriching your research and improving your academic career prospects, but it can also be a career path in and of itself.

The fields of public engagement, science communication and outreach have grown considerably in recent years, and this trend shows no signs of slowing down any time soon. There are now public engagement jobs in public and third sector organisations all over the world, offering a viable alternative career path for those who want a non-academic role in the world of research.

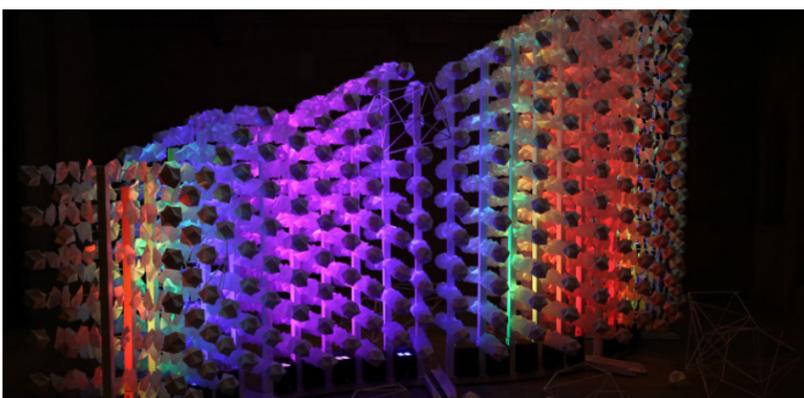
I work in the Public Engagement team at the University, where we support our researchers in sharing their work with the wider world and engaging the public with their exciting research. We do this primarily through the provision of festival platforms, so a lot of our day-to-day work revolves around planning and delivering engagement activities and events. It's a varied, rewarding and often demanding job that I absolutely adore, but my path into this career was not planned and actually began rather serendipitously.



Some years ago, while working at the University library, I began helping the National Fairground Archive with some administration and event work. This grew into getting involved in some of their outreach activities, and then to working on the first Festival of the Mind.

I provided administrative support during the planning phase, then during the festival I set up installations and helped to run activities. Seeing members of the public interact with research was a real thrill – I had caught the public engagement bug and I haven't looked back.

This shows how important it is to seize opportunities to try new things whenever you can – it could end up being the start of a whole new career!



The benefits of public engagement experience

Whether or not you want to pursue a career in the field, working on a public engagement project or festival can be hugely beneficial, as it offers a range of professional and personal development opportunities. Event management experience in particular can significantly broaden your skillset by exercising the competencies and skills that don't get as much use in the lab or the library.

Organisational skills

Coordinating multiple events, activities and people is a challenge, so you'll quickly develop strategies for planning, organising and scheduling tasks. If you've got the opportunity to work with someone experienced in event management, learn as much as you can from them and ask for tips and advice.

Communication and interpersonal skills

A day of working at a festival, for example, will give you plenty of practice talking to a wide-variety of people and will develop your ability to communicate research at many different levels. Any initial shyness will quickly disappear.

Problem solving

Event management can be unpredictable and will always feature elements (and people) beyond your control. So, more often than not, working at an event will require you to think on your feet and find a quick solution to an urgent problem. The more you do this, the more confident you'll feel in tackling future problems and challenges.

Ability to navigate organisational structures and bureaucracy

If you have spent your entire professional life in a research environment you may not have had much experience with the bureaucratic ways in which large organisations work. Familiarising yourself with how to navigate this bureaucracy and gaining an accurate idea of how long things take in a large organisation is invaluable for anyone who will have to deal with these systems in a job.

The opportunity to build a network of contacts

Being involved in a public engagement project will present you with numerous opportunities to make contacts, including other academics, professional services colleagues, industrial partners, artists and community organisations. These opportunities appear throughout the life of a project, from the initial development stage through to the event or activity itself, so be poised to make the most of them.

“ At the **University of Sheffield** there are a number of ways to get involved in public engagement. In the **Public Engagement team**, we offer the following regular volunteering opportunities to PhD students. ”

How to get public engagement experience

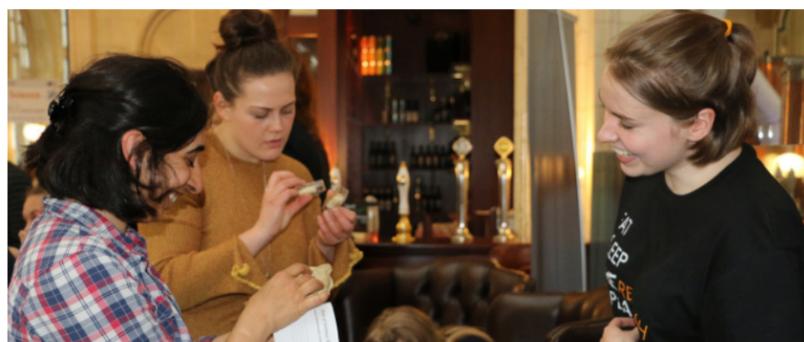
At the University of Sheffield there are a number of ways to get involved in public engagement. In the Public Engagement team, we offer the following regular volunteering opportunities to PhD students.



Festival of the Mind

The University's flagship public engagement festival, featuring collaborations between academics and artists that showcase research. In the run up to this biennial festival, we recruit student volunteers to help supervise and run some of the many events, installations and projects. The next Festival of the Mind is in September 2018, and the call for volunteers will go out in summer.

https://www.youtube.com/watch?v=_0lmEb24aqw



Pint of Science

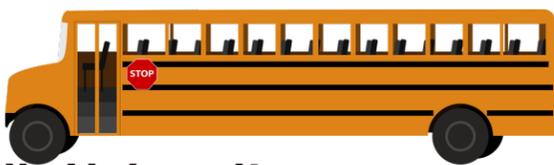
A festival that presents fun, interesting and relevant talks on the latest research, to a public audience in a pub. Pint of Science offers the most extensive and involved public engagement experience of all our volunteer opportunities, as the festival is very much student-led. Volunteers get heavily involved in the planning and delivery of the festival, so we offer several different volunteer positions:

- **Event Manager** – responsible for programming, organising and running the events for one of the festival themes.
- **Activities Manager** – responsible for organising activities for one of the festival themes.
- **Publicity Manager** – responsible for promoting the festival to the public and attracting media coverage.
- **Social Media Manager** – responsible for promoting the festival via social media and for co-ordinating social media communications.
- **Event Support** – responsible for providing on the day support, helping setup the venue, meeting and greeting guests and running activities.
- **Science Busker** – responsible for on the day entertainment, running science demonstrations for the audience and helping run activities.

Managers are recruited every October in preparation for the festival in May. Event Support and Science Busker volunteers are recruited in March.

24 Hour Inspire

A 24-hour lecture marathon in aid of charity organised by former colleagues of Tim Richardson, and held in his memory. 24 Hour Inspire is organised and delivered entirely by volunteers and relies heavily on the generous support of many students. There are a variety of volunteer roles available, from the organisational to the performative. The event takes place in April every year so a call for volunteers will be sent out soon.



Mobile University

A weekend festival of mini-lectures and demonstrations presented on a double-decker bus in Sheffield city centre. We recruit student volunteers to help promote and supervise the talks and activities during the festival. Mobile University takes place every two years, the next one will be in September 2019, and the call for volunteers will go out a couple of months before.

Off the Shelf

One of the country's largest literary festivals, Off the Shelf takes place in Sheffield every October. Similar to Festival of the Mind, we recruit student volunteers to support the festival's talks and workshops. The call for volunteers goes out every summer.

Other opportunities

We are also open to arranging individual placements and internships for PhD students to work on specific projects within the team. These are considered on a case-by-case basis. If you are interested in any of these opportunities, please get in touch with us at engage@sheffield.ac.uk.



Top tips for finding jobs and work experience in public engagement

1. Contact the Public Engagement team (engage@sheffield.ac.uk) for advice and to find out about current opportunities at the University.
2. Consider volunteering for (or even setting up) a local community-led engagement group – for example *Café Scientifique*, *PubhD*, *PubSci*, *SciBar*.
3. Subscribe to the NCCPE mailing list to get updates on public engagement activity and job vacancies.
4. Regularly check the websites of universities, research councils, charities, science festivals and museums for vacancies.
5. Sign-up for relevant vacancy alerts on job sites (e.g. Guardian Jobs, Jobs.ac.uk, Indeed).
6. Maintain a network of professional contacts and keep your ears to the ground for any opportunities.

An academic, a PhD student and a layman walked into a bar... And PubhD was born!

Devon Smith and Emily Fisk
PubhD Co-founders



What is PubhD?

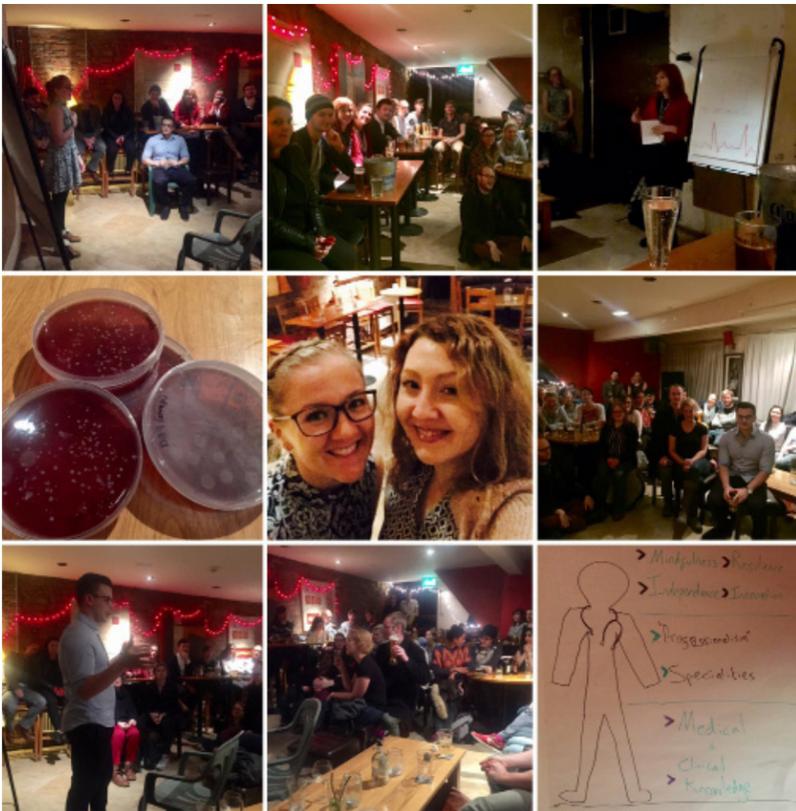
PubhD (from Pub + PhD) is an event series that is currently hosted in cities across the [UK and Europe](#). At each event, three PhD students or early career researchers descend on a local pub to explain their work to a public audience. They have just 10 minutes to talk about their research, with no aids except for a whiteboard/flip chart, some pens and a drink of their choice. This is then usually followed by up to 20 minutes of friendly, and often inquisitive, Q&A with the audience. The events are really relaxed (they are in a pub after all!) and encourage all subject disciplines to get involved.



How did you start it and why?

We were both involved in the inaugural Pint of Science Festival for Sheffield, in May 2016, and we experienced a wealth of feedback from the public, asking for more activities like this festival but more frequent and accessible throughout the year. Later that summer, Devon attended a PubhD Leeds event. This event format inspired us to set up a similar branch in Sheffield, after consulting the original co-founders, [Kash](#) and [Regan](#), for some advice. We both feel that dissemination and communication of research is really important, as well as making it approachable, relatable and engaging.

Whilst we work in science, it's also great to hear about the vast range of research currently in progress here in Sheffield. There is also a Facebook group for all the co-ordinators of PubhD cities, so we didn't feel too lost with getting things going. We could always ask questions and check out the set-up of other cities for inspiration – particularly when planning our own website! These events are a great way for researchers to test their public engagement and communications skills, and for the public to know what research is happening at their local universities.



What do you get out of it?

We have had the chance to hear about some really diverse research areas, from both the University of Sheffield and Sheffield Hallam University. It has truly opened our eyes. It has also been a great way to test our organisation and management skills, from event publicity, social media and blogging, through to venue co-ordination and website development.

It doesn't take up much of our time, but the efforts we have made have been really rewarding – particularly when we get lovely feedback from previous researchers and attendees. We also get a buzz when we can see a researcher grow in confidence during their talk, and then generate a fantastic discussion and air of questioning with members of the audience.

How can I get involved?

We are always looking out for people who would like to share their research – even if you have no prior public engagement experience, we are here to support you.

If you would like to get involved, feel free to email us at:

sheffield@pubhd.org

Or come chat to us and experience an event for yourself – event details are listed on [Facebook](#) and [Eventbrite](#).

Want to know more about the events and read the blogs from our previous events?

Then check out our website:

<http://pubhdsheffield.strikingly.com>



Can you explain your PhD in the pub?

Public Engagement: Get Involved!

Affra S. Al Shamsi, PhD Student

I am a PhD Researcher at the School of Health and Related Research (ScHARR) and a public engagement champion.

Over the past few years I have been involved with public engagement events organised by the University of Sheffield Public Engagement Team and Ignite Academy. Outside of the university, I am one of the organisers for Sheffield's Café Scientifique, and one of the founder members of the British Science Association Sheffield branch, where I am currently Events Manager. I am passionate about finding innovative and creative ways to bring research and learning closer to the public.

What is public engagement?

The National Co-ordinating Centre for Public Engagement (NCCPE) defines public engagement as:

“Public engagement describes the myriad of ways in which the activity and benefits of higher education and research can be shared with the public. Engagement is by definition a two-way process, involving interaction and listening, with the goal of generating mutual benefit.”

Public engagement can overlap with public involvement, creating collaborative research, or co-created research, but here I will be concentrating on events as public engagement platforms. For me, public engagement is any event used to share and engage the public with our research, events developed and executed with and for the public.

The scope is almost endless and can be used in all branches of academia. Using creative formats we can bring to life the research done in our universities, we can inform and collaborate with the public, and they, in turn, can challenge and inform our research. There is no single format for a public engagement event; it could be a lecture, presentation or film screening, a panel debate, a dramatic performance, interactive exhibition, or ‘participatory dialogue’ event (such as focus groups and workshops).



Why do public engagement?

Public Engagement offers an opportunity for researchers, staff and students to engage the public, allowing for change in both directions. It enables researchers to share and receive feedback on their work, and for the public to understand, and maybe potentially get involved in research, particularly with the opportunity to engage in real life applications and implementations of research.

Public engagement thus generates a mutual benefit through interaction between the public and academia for the creation and sharing of knowledge across diverse groups. It is immensely rewarding both professionally and personally. Getting involved in public engagement is not only great fun, but also a good way to assess your research impact and to raise your research profile. It can also be a requirement for some funding opportunities.

Many careers require the ability to present complex ideas and projects in easily understandable ways, so the skills you learn in public engagement can help you in different areas of your work.

Getting started in public engagement

There are different ways to get involved with public engagement, but one of the best ways to start is by understanding the public engagement opportunities around the University and the city, and choose what you think will suit you. You can initially attend or volunteer at one of these events to familiarise yourself with the atmosphere and the style of delivery, then volunteer to plan, organise or deliver some of these events as part of them or even on your own. There is always support through the University and other bodies for this, and there is no point in re-inventing the wheel.

Public engagement requires a different delivery style, as sometimes complex ideas and research needs to be conveyed in creative ways that avoid academic jargon. There is a balance in presenting to, and working with, non-specialists, without condescending or belittling. You will have to consider what audience you are aiming for, and creative and engaging methods of sharing your research. We need to be clear about why we are engaging with the public, and not create unrealistic expectations amongst our participants.

Questions to keep in mind include:
Why do I want to do public engagement?
Whom am I aiming to engage?
How can I reach my audience?
Where would be a suitable venue?

We can also think about what we intend to do with the feedback, are we willing to listen to what people say? How we can use the feedback to adapt or improve our research? As noted above, public engagement should be mutually beneficial.

Ways to get involved

1. Attend some of the different public engagement events (I've listed some on the next page).
2. Volunteer on the event day, there is always a need for extra hands.
3. Offer to write a blog.
4. Volunteer to be part of the organisation and planning of events, including publicity.
5. Get involved with University events or public engagement groups within the city. Make the most of the opportunities available in Sheffield.
6. Organise your own events.



What are the challenges to public engagement?

Making research interesting to the public is a skill, how can we bring them in? If we have a specific aim, such as public feedback for the application of our research, how can we draw that out of our audience? Are we aiming for a specific demographic?

We may consider how we can present our research to children in creative ways, but what about other communities that may be overlooked when considering public engagement opportunities, such as those with disabilities, dementia or English as a second language. Engaging these diverse communities can enrich our ideas and research. Can we be inclusive in reaching out to those beyond academia?



I had the experience of presenting a public engagement event linking mental health and art, but had not prepared for attendees with sight problems. Suddenly I was being asked difficult questions by a partially sighted participant, and I realised that I had not been fully inclusive in my preparation. I now consider how I can include diverse groups in my events and activities. It was a difficult lesson.

Where can I find more information?

More generally, the National Co-ordinating Centre for Public Engagement and the Research Councils UK websites both include much information on successful public engagement. At the University of Sheffield, public engagement is promoted in every department and the website of the [University Public Engagement Team](#) provides a range of information and support, including public engagement Masterclasses.

They are also involved in a broad range of events in Sheffield throughout the year, so there is so much opportunity to get involved! Pint of Science, Ignite Academy, Festival of the Mind, FameLab, Doc/Fest, Festival of Medical Research, Off the Shelf, Festival of Social Science, The Mobile University...

Finally, as my area is the sciences, here are a few of my favourite Sheffield public engagement opportunities:

Cafe Scientifique hold a presentation on a different scientific topic on the first Monday of the month at [The Showroom](#).

The British Science Association hold [regular meetings](#) to plan and organise events.

Skeptics in the Pub hold a presentation [every fourth Monday](#) of the month at Farm Road Sports & Social Club.



Preparing for job applications and interviews

Helen Moore
Library Services

The information you have available to you at University isn't solely for writing your thesis, it can also help you when you're completing job application forms and preparing for interviews.

Very often you will want to find out more about a particular company, organisation or industry. The Library has a useful [guide](#) listing sources to help you locate company and business information, enabling you to demonstrate you've done some homework and you're up-to-date...

Business Source Premier

Use this to find company profiles



Nexis, the Economist and the Financial Times

Search these to find out whether the company or industry has been in the news recently

Mintel and Euromonitor

These market research sources provide information about the current state of the market, its value, future trends, the major players and their market share. You'll find a whole range of topics covered, from pasta sauces to the defence industry!



Take a look at our [employability guide](#) for more tips and speak to the [librarian](#) for your subject area if you're struggling.

What you need to know: CV Application Tips

Dr Candice Majewski

First impressions count



Our first glance at your CV tells us an awful lot about you as a person, your motivation, and your attention to detail. Take care with formatting, layout and consistency, and make time to proof-read before submitting. This won't get you the job if you're not qualified, but it will show us that you're serious about the position and that you can be trusted to produce a professional standard of work.

Target your application

Most positions we advertise receive a high number of applications, and we quickly get good at recognising the ones which have been duplicated and submitted to multiple positions. Sometimes it's as obvious as forgetting to change the name of the job you're applying for, but in other cases you simply haven't said anything that highlights your suitability for this specific job. Your application should show us why you personally would be good at fulfilling the specific role we're advertising, rather than why you're good in general.



Make it easy on us



You may well be the most perfect person in the world for this position, but if you don't articulate that clearly and concisely it's difficult for us to know! Most jobs will have a clearly-defined set of essential and desirable criteria, so structure your CV/application in such a way that we can instantly see how you meet each of these. If you don't, there's a good chance we miss some of those crucial things which might have put you on our shortlist...

Draw on a variety of experiences

When answering the '*describe a time when...*' type of question on an application, make sure you don't fall back on one specific example every time. We want to see that you have a range of experience from which to draw on, and that you can identify what you've learned from these. The STAR (situation, task, action and result) technique has been useful to me in the past in helping me structure answers to applications, so it's worth taking a minute to look this up. This is also your chance to be creative – your summer placement in the bike shop may not be directly relevant, but what did you learn in terms of transferrable skills that might give you an edge in this role?



Be enthusiastic

Of course your application must be professional and must contain the relevant detail, but that doesn't mean you have to sound dull. Most of us enjoy working with people who are excited and enthusiastic by what we're doing, so don't be afraid to let that shine through. Don't overdo it, but do let us know that you're passionate about this area and that you intend to make a career out of it.



Take a step back



The vast majority of us are much better at praising others than recognising our own achievements; learning to look at your application objectively is crucial. Several times when I've been asked to give feedback on someone's CV, a genuinely excellent person has managed to come across as 'mediocre', simply through not being comfortable shouting about how good he/she is. Try taking yourself out of the equation - instead of thinking of this as your CV or application imagine it was a close friend with the exact same experience. If that was the case, would you think this application did them justice?

Learn from the experience

Whatever stage you reach with your application, ask for feedback and then act on it in the future. Perhaps your application was too generic (see point 2 above!), in which case think about how you can improve this next time. Maybe you were missing specific skills that were needed for the job; if that's the case, and this is the career direction you want to go in, work out how you can obtain those skills. And don't forget to identify and maintain the good bits; if you made it through to the interview stage, what was it about your application that got the employer's attention?



And finally...



Take advantage of your friendly Careers Service team, who can offer guidance and support at all stages of your application. Ask to see example CVs and applications from friends or colleagues who have a strong good track record of success in your area of interest, and think critically about how yours would stand out if you went head to head. Ask a close friend or family member whether you've come across as well as you should have. You don't have to turn your application into something that isn't 'you', but if you take on board advice from a number of different people you can be sure you're giving yourself the best chance of success!

Failing Interviews: It Is Not Over Yet!

Dr Tareq Omairi

Getting rejection after an interview can be discouraging to anyone. However, for an experienced researcher, with a very narrow academic field, years of experience working in it, and (probably) an earned sense of pride in their skills; getting that dreadful “No” can feel like a devastating blow to one’s ego and drive to keep on the lookout for future opportunities. Amidst that delicate state of confidence being shattered, feeling fragile and broken, it is so easy to forget, that this was, all in all, an experience that moved us one step closer to getting the job.

In December last year, I held a workshop for early career researchers, on the topic of what should you feel, and how to act after rejection in interviews. Participants learned that, despite the complexities of the interviewing process, and the variety of how each is conducted, the decision employers have taken not to hire you ultimately comes down to two reasons. Either it is because of you, or it is something out of your control.

Most people will, especially at the beginning, become fixated on the “*it is my fault*”, and therefore undergo all the negative emotions that come with it.



However, the “*it is my fault*” only applies if you have made some of the most obvious interview mistakes (e.g. no preparation, being late, lack of passion, poor body language, etc.). Since we are dealing with professional researchers here, with many years of experience under their belt, it is highly unlikely that not being hired is their wrongdoing, as they would certainly be avoiding making such obvious mistakes!

That brings us to the other reason why you were not hired: **factors beyond your control**. This is particularly relevant in stellar interviews, that are then followed by a mysterious rejection email with the typical canned text of how they received many applications and how it was highly competitive. This type of rejection can feel the most brutal, and for a good reason: if I showed up late for an interview, then I know what it was something I did wrong, and would not dwell too much about it.

However, if I did everything right and I was still denied the job it would probably mean I will fail every similar future endeavour, right?

Not necessarily.



Let us not forget the interviewers sitting on the opposite side of the table. Their reasoning for not hiring you can be attributed to several factors, and not all are always logical or fair.

Such factors include, to name a few, you being overqualified, them going with the decision to hire internally, changing the job specification after announcing the job, or simply for biased reasons. Discrimination is an ongoing problem in many workplaces, after all.

Rejection is not feedback on your qualifications, but getting to the interview stage is, according to [Glassdoor](#) "On average, each corporate job opening attracts 250 resumes. Of these candidates, four to six will be called for an interview and only one will be offered the job."

The silver lining of a failed interview comes down to several gains. It was the best type of interview exercise, unmatched by any mock-interview training you ever took. You got the chance to detail your experience to someone relevant to your career pathway for more than half an hour, while having their full attention on you (**how often can you do that?**).

You have now gained a new valuable contact, and are currently on the "reserve-list" for any future openings within the same company, and the real possibility of them calling you again if anything becomes available. Reaching the interview stage also makes you realise what roles are really suited for you, whether you should keep applying in the same sector or look elsewhere.

So what can you do after rejection?

When it comes to following up with the employer, there are some basic steps that should be adhered to. A reply should not be delayed too much, always send a professional thank you email, and gracefully ask for feedback.

Employers tread with care when it comes to giving feedback, in fear of a legal case, therefore it might be best if you suggest receiving feedback over the phone instead of an email, which also means you can probably get a more sincere feedback than one that has been scrutinised several times before sending over an email. Connecting on LinkedIn with them afterwards and following the company's account on twitter is not a bad idea too, provided that you keep such interactions to a reasonable level.

Finally, resuming job-hunting after rejection never means starting all over again. Being more experienced with interviews, with more contacts, and having a better insight on what career works for you, you are now in a stronger position than ever and closer to finding the perfect opportunity!





Top CV Tips

Things you should be doing...

“ “ For a science-based CV, make sure you write more text describing your project/lab work than outside interests. ” ”
Professor Shelia Francis, Head of IICD



“ “ I like to see the candidate's main attributes and skills presented early on in the CV as a summary. Sell yourself from the get go. The reality is some companies may not read much passed the first section of your resume, so get their attention straight away! ” ”
Colin Bonnington, Engineering Consultant and Children's Book Writer

“ “ Write to show how undertaking this position is the obvious next step in your dynamic career. ” ”
Dr Clare Rishbeth, Department of Landscape



“ “ Tell me who you are - not just what you have done - and what you enjoyed most in each job. ” ”
Dr Zoya Zuvcenko, Teaching Mentor

“ “ Don't forget to include a specific, short and engaging cover letter to accompany your CV. ” ”
Professor Shelia Francis, Head of IICD

Top CV Tips

Things you should be doing...



Make sure your CV is clear and concise; use bullet numbered lists instead of paragraphs and make good use of different font sizes, bold and italic, to accentuate headings etc.

Dr Peter Heins, Trainee Patent Attorney



Put all the important information in the first page. For an academic position, this will involve education and research experience. Employers will often make a judgement based on the first page, and only dig deeper in the CV if they are potentially interested.

Dr Julien Bergeon, Lecturer in Electron Microscopy



Make sure that your current position and highest achieved qualification level stand out and from the beginning, so recruitment panels quickly figure out who you are.

Dr Aneta Piekut, Sheffield Methods Institute



Make it clear what YOUR role and contribution was.

Dr Sarah Barber, CEO Windspire





Top CV No No's

Things you shouldn't
be doing...

“ “ Not tailoring your CV to the job you are applying for.
Professor Shelia Francis, Head of IICD ” ”

“ “ There's nothing more off-putting for me than seeing a
CV in which the opening personal summary/statement
has clearly been put together for a previous job
application. It takes a matter of minutes to tailor this
part accordingly to suit the job being applied for.
Dr Philip Elks, Sir Henry Dale Fellow ” ”

“ “ I would say one of the main don'ts on a CV is having it
starting with your school education grades. CVs can be
too long as well, so make sure its concise. A long resume,
way over 2 pages, suggests a waffler which is not a good
sign for the candidate's ability to communicate effectively.
Colin Bonnington,
Engineering Consultant and Children's Book Writer ” ”



“ “ The single most important thing about a CV is that it
should be honest - don't pretend to be more than you
are. Getting a job by pretending to be more than you are
is a really dumb idea: it hurts the company because they
don't get what they expect and it hurts you because the
job is not going to be suited to who you are, instead it is
suited to who you are pretending to be.
Phil Harper, CEO Tribosonics ” ”

“ “ Sending a completely generic CV, not at all tailored for
the position you are applying to. If you are applying for a
lab-based research position, for example, the employer
will not care if you have a valid driver's license.
Dr Julien Bergeon, Lecturer in Electron Microscopy ” ”

Top CV No No's



“ “ A bugbear I have with CVs is when candidates state that have a particular skill but there is no evidence of how they have acquired or applied it. So, for example, if someone says they have good project management skills, how do I as an employer know that's true?”

I would much rather they say, 'I project managed a small team to deliver x', that way they are not making subjective and un-evidenced assumptions about whether they are good or not, but I can see that they have appropriate experience.”

Sara Pates, Head of Enterprise

“ “ Make sure if someone has edited your CV then their alterations have been deleted in Track Changes in Word (academics often have this feature switched on all the time as they edit lots of documents).”

Dr Philip Elks, Sir Henry Dale Fellow



“ “ A CV which is too long; a CV should be no longer than 2 pages, especially when you are applying for your first proper job.”

Dr Peter Heins, Trainee Patent Attorney

“ “ Do not make your academic CV too long. Some people provide very long CV's where the length comes from listing activities, which might not be important from the perspective of the academic application.”

They list all kinds of training courses they attended or internal seminars they presented at. These details can be introduced in the motivational/cover letter, if learnt skills are relevant for the post.”

Dr Aneta Piekut, Sheffield Methods Institute



“ “ What I don't like to see: poor formatting, typos and grammatical errors are a complete no-go.”

Dr Sarah Barber, CEO Windspire

Three practical tips to maximise the value of your PhD

Dr Billy Bryan and Dr Kay Guccione

We're interested in what your PhD can do for you, how to harness its benefits, and what enables those who have done a PhD to say: **it was worth it**. To achieve this, we conducted research asking students and graduates a simple question: *How valuable is your PhD?*

We found that the doctoral experience could give every graduate value: e.g. career benefits, social networks, skills and attributes, and a sense of personal achievement. The amount a PhD is valued is influenced by other factors:

- supervision relationships
- social circle
- employment environment
- time since graduation.

Based on this work, and on our own experiences of talking to 100s of students and graduates, we offer you these three tips to maximise the benefit of your time as a PhD student.



Tip 1 – Get extra-curricular!

Yes, we can already hear that voice in the back of your head:

“But my supervisor would never let me.”
or
“I’ll never have time to fit it in, my project comes first.”

Yet our research showed that extra-curricular activities were valued extremely highly, affording graduates excellent experience that supplemented their PhD learning, and impressed their subsequent employers – in some cases securing the job!

These activities were vast and various:

- setting up and managing a science education group with a friend
- going on placements abroad
- organising a conference
- becoming a student leader at their Students’ Union

These activities brought variety and a sense of achievement that also helped to alleviate the stress that comes with a PhD, **it was a win-win for many!**

Tip 2 – Make friends, connections, and collaborators

The value gained through building a social support network was a big theme in our data. Not only did most graduates make lasting friendships during their PhDs, some made connections that led to unforeseen collaborative projects in the future - EVEN JOB OFFERS.

The tip here is simple: join in!

Go to seminars, events for researchers, organise those events, and volunteer to speak at them too. The more people you know, the more people will think of you for exciting new opportunities, so get chatting with everyone and anyone.

No need to 'schmooze' or 'work the room', just get out of the lab or your (home) office and meet new people. You can always make yourself ultra useful by connecting up others too – being a conduit for others to connect is always appreciated.



Tip 3 – Look outside!

Whether your tower is ivory or concrete – look outside it!

We realised as we read around our topic that PhDs aren't just for academics. In fact, around 60% of PhD holders graduate and immediately leave academia where they enter organisations at higher levels and with project management, and leadership expertise.

We heard from graduates in a wide range of roles post-PhD: Charity CEO, Senior Science Officer, Policy Advisor. The graduates we spoke to felt valued at work, and told us they could use the skills gained from their PhDs to progress up the career ladder quicker than those without a doctorate. Roles outside of academia are within your grasp, some will even pay a premium for your unique PhD knowledge.

Many of these tips relate to each other and that's no accident. The common thread is that they all require you pull back a little from your PhD and see the opportunities that are all around you.

The rest of this issue is crammed with ideas you can follow up – you don't have to do it all, but do something and see your PhD value skyrocket!

Click to enlarge image

Career paths of Doctoral Graduates from past 5 years

Alumni from the University of Sheffield have entered a wide range of professional fields across the world. The following charts show the career paths some of our alumni have taken since they graduated.

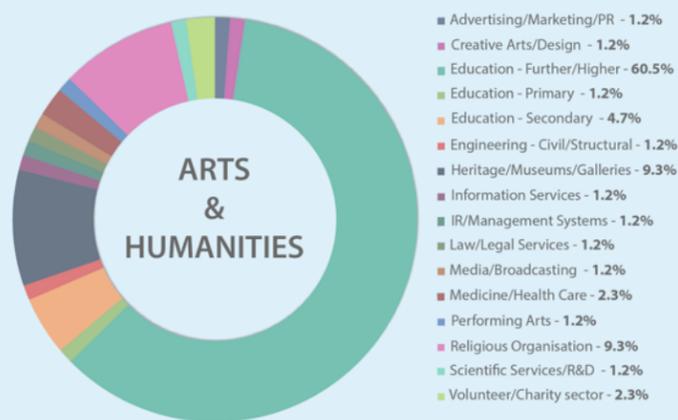


Fig 1. Career destinations by sector, of Arts & Humanities doctoral graduates (n=86)

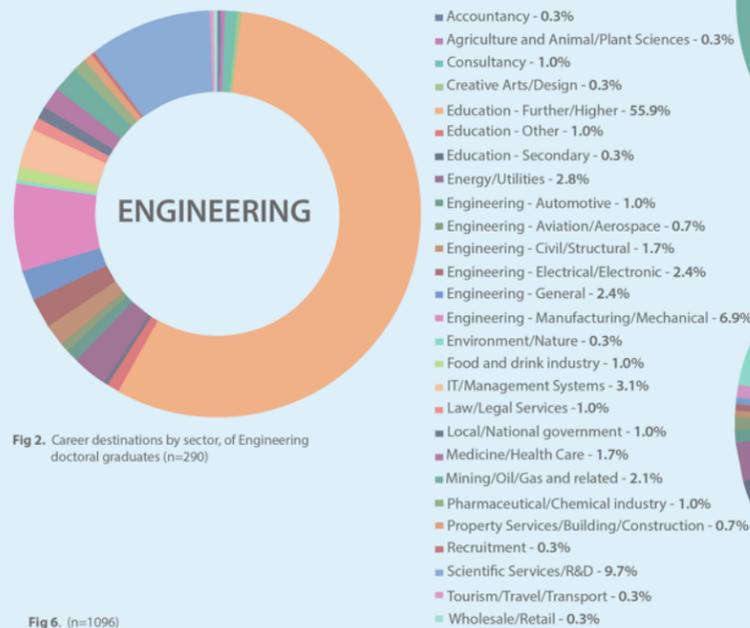


Fig 2. Career destinations by sector, of Engineering doctoral graduates (n=290)

Fig 6. (n=1096)

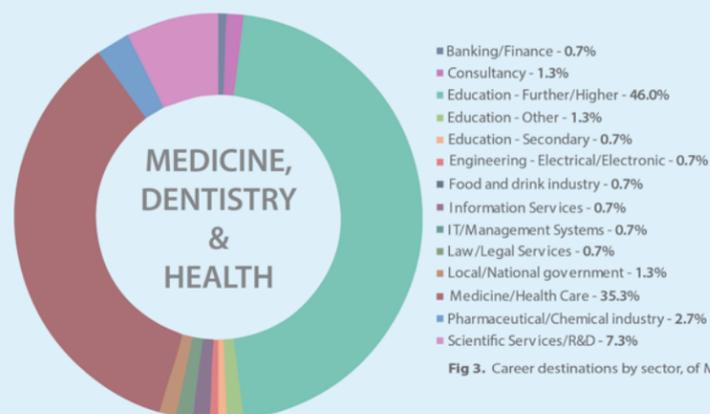


Fig 3. Career destinations by sector, of MDH doctoral graduates (n=150)

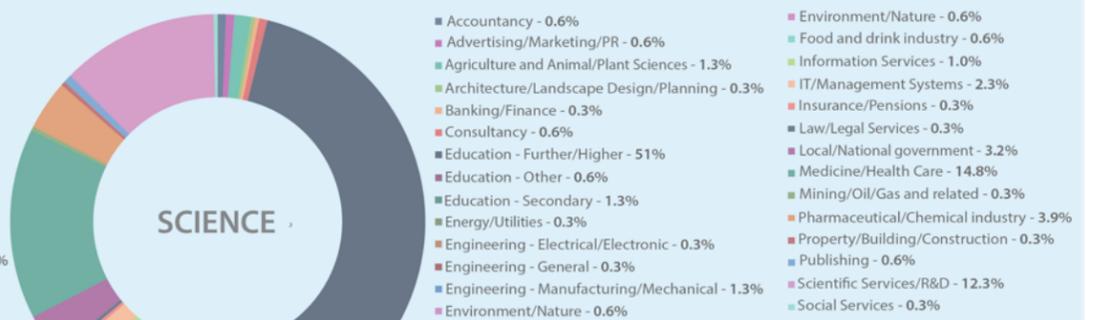


Fig 4. Career destinations by sector, of Science doctoral graduates (n=310)

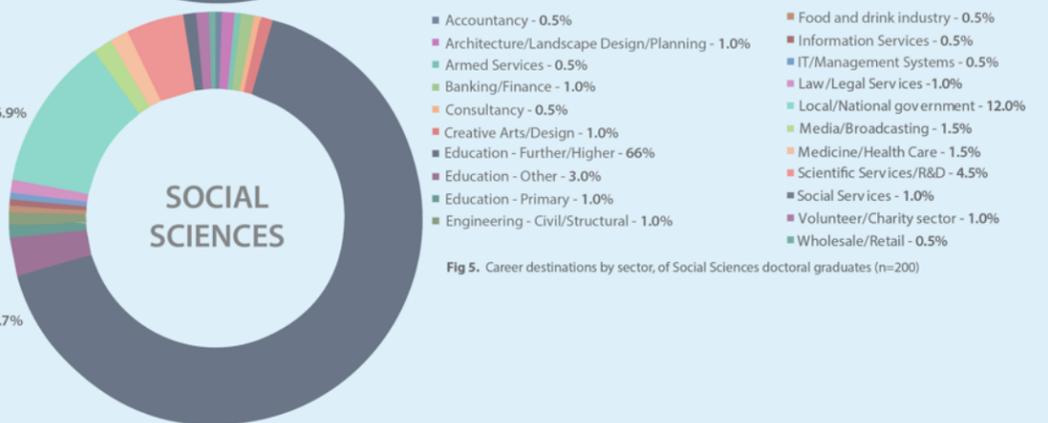
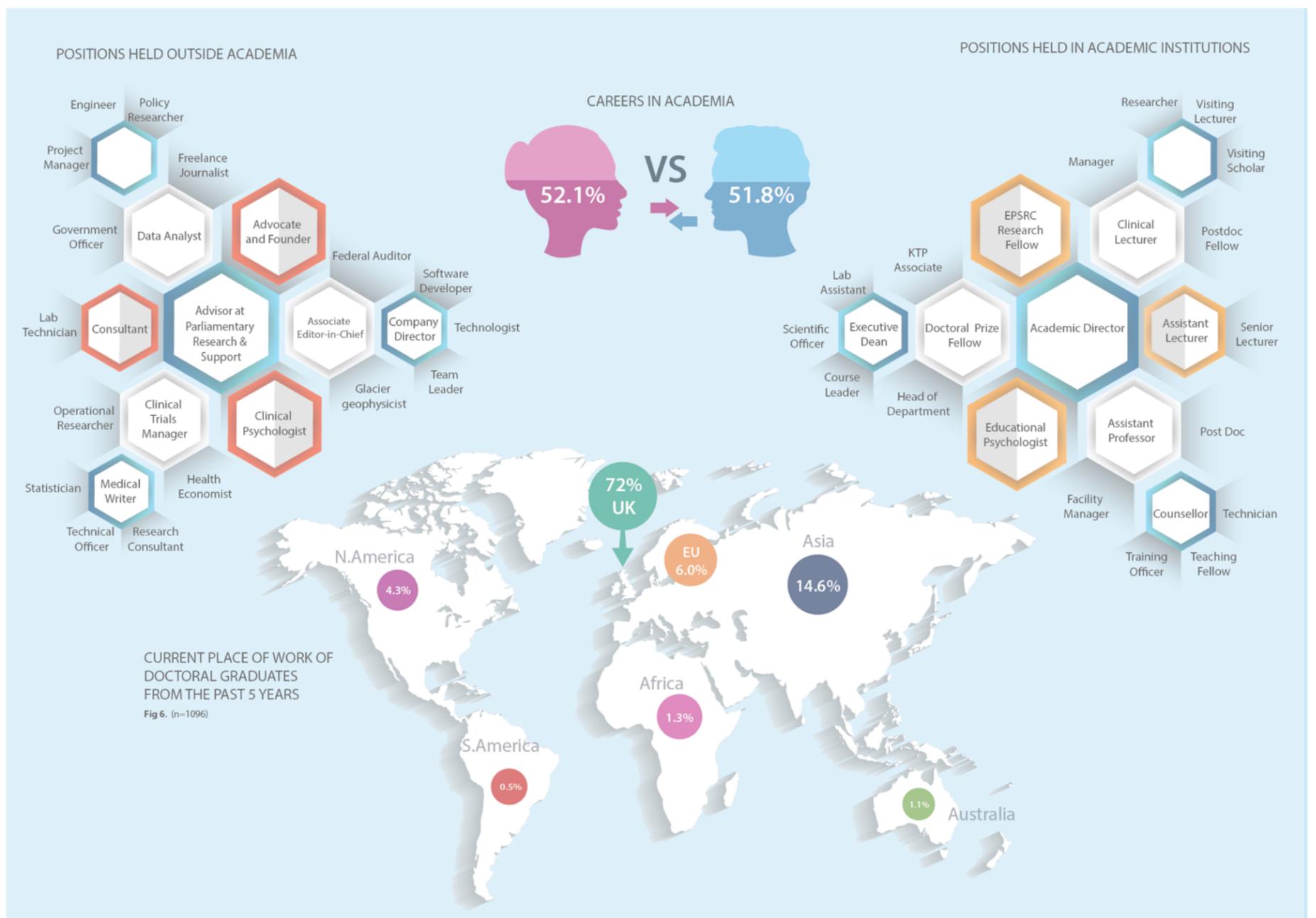


Fig 5. Career destinations by sector, of Social Sciences doctoral graduates (n=200)

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