Intern stories

Case studies from former interns at the Academy of Medical Sciences



Introduction

The Academy of Medical Sciences offers three month fully funded internship schemes for PhD students within our policy and careers teams.

Our approach

Our internship scheme, running for almost ten years, is designed to give PhD students first-hand experience of the medical science environment, from policy and reports and consultations to grant panels and career support. Interns gain insights into how research impacts the wider biomedical system, and build valuable networks with the UK's most eminent medical scientists and key science and health stakeholders. Interns are supported by a three-month extension to their PhD stipend.

Read on for stories and experiences of former interns, and their reflections on the scheme.

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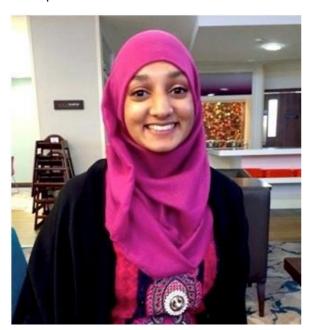
Policy intern in 2013 now working as a medical writer

What made you apply?

I was about mid-way through my PhD and I guess starting to think about post-PhD life, as you do... the advert for this was sent to our student list and I thought it would be a great opportunity to explore different careers around science. The application process involved writing a short piece on a science policy issue, so I had to do some research and be prepared to discuss it at my interview. I can't remember my interview much, but it can't have been too bad as I was offered a position!

What did you work on?

I managed to get involved in a whole lot of different projects during my time at the Academy. One of my highlights was preparing the Academy's response to House of Commons Science and Technology Select Committee inquiry into women in academic STEM careers. It involved a lot of research and writing, but a good sense of achievement having something submitted to Parliament! I also spent a week at the Wellcome Trust and



a couple of days at the Association of Medical Research Charities, which were valuable experiences.

How did you find the internship?

The experience was great. It was good to get some insight into 'hands-off' science careers, even though the change of scene took a bit of getting used to. Everyone at the Academy was really friendly and made my time there enjoyable.

Did the internship give you any skills or knowledge you used later?

I've gone on to write daily for a living, so the research and writing skills exercised at the Academy were really handy. It also gave me confidence in being able to work across a lot of unfamiliar topics and getting up to speed quickly – something that I have to do a lot in my current role.

Do you have any advice for someone who's thinking of applying?

I'd say to go for it – if it's an opportunity to be in a new environment and learn something new, it's great. You'll find out whether something is or isn't for you. Be confident in getting stuck in, asking questions and asking for something to do, no matter how small.

Do you have any other tips?

Get into something you're passionate about, because there are times that you'll be slogging away and if you don't enjoy it, you won't see the fun side. And again, don't be afraid to pitch in and get involved in all kinds of projects, it'll give you a better idea of the type of work you enjoy.

What's happened since you left?

Since completing the internship I went back to finish off my PhD, submitted my thesis, survived my viva (wahay!) and took up a career in medical communications!

Dr Ben Bleasdale

MRC Policy intern in 2014 now working in science policy

What made you apply?

I had just finished the lab-phase of my PhD and finally convinced my supervisor that I really couldn't do 'one more little experiment'. I saw the internship advertised through a student mailing list. I'd already been exploring potential career options, though without much understanding of the reality of such jobs I felt that a traditional route through academia might be better for me. The placement offered the perfect opportunity to 'try before you buy', and I jumped at the chance to apply. It was great timing, and gave me a chance to let my mind focus on something new after a hectic few months wrapping things up in the lab.

How was the application process?

It was actually rather enjoyable, it had been a long time since I'd been asked to write anything other than academic journal-style pieces, and I really got stuck into researching and writing the essay.

What did you work on?

I worked on a lot of different projects during the internship, and I remember being shocked by the level of engagement I had – it was a long way from making tea and photocopying. Instead I was working to deadlines, contributing towards projects and I felt genuinely like I was contributing. I remember working on the Academy's response to the NHS 5 year R&D strategy, and helping with a project focussing on health data. The team was great at getting me involved in a huge variety of projects, so I got a chance to experience many of the types of activities undertaken by the Academy. I also had two great external placements, firstly with the MRC and then with the House of Commons Science and Technology Committee, which gave me a fantastic chance to see the types of policy roles that exist across the sector.

How did you find the experience?

I had a fantastic time, and was delighted to be able to secure a full-time job at the Academy. The internship gave me a far better understanding of what a career in science policy meant, and a chance to experience the types of organisations where I might work.

"The sense of teamwork, the diversity of activities, and the continued link to academia meant that I was convinced that science policy was the right career choice for me. Without the internship, that career stage would have been much harder."



Did the internship give you any skills or knowledge that you used later?

It certainly gave me a head start when I returned to the policy team – although I was new, I already had three months experience under my belt and a good knowledge of how the job operated. Also, working closely with Fellows means that I can very much see the value of an understanding of policy, even for career academics. More and more, academics are expected to engage with the political system that supports research, and time

spent at the Academy would be valuable experience for anyone staying in science. **Do you have any advice for others?**My advice is fairly simple – give it a go. The number of opportunities to try things out rapidly shrinks after you finish a PhD, so if something comes up that you think sounds interesting, you should go for it. Even the process of applying itself can help you learn more about a career path, so you'll gain something useful regardless of the outcome.



Image above: Ben meeting guests at an Academy of Medical Sciences policy event.

Dr George Jervis

Careers intern in 2019 now a postgraduate

researcher

How did you come across the Academy's careers internship?

I'm studying plant molecular biology at Durham University, specifically looking at how plant root development is altered by drought stress. I was at almost half way through my second year as a PhD student at Durham University when I saw the application for an internship at the Academy. My internship lasted from January 2019 to March 2019 and I was the Academy's first intern through its new grants and programmes internship scheme, open to BBSRC students.

What made you apply?

I wanted to take up an internship in a field completely different from my PhD where I could get experience in a different line of work but also have the time spent help further my career in science. The internship at the Academy offered an insight into how the grant process operates, see how panels are put together and see how events are organised for grant holders. This was personally interesting but also could help me apply for grants in a future career in science.

How was the application process?

It was well run, my questions were quickly replied to and the interview was very friendly.

What did you work on?

A wide range of topics including helping the grants team in their peer review process and eligibility checking, to assisting the programmes team on their variety of events. I sat in on a lot of interesting meetings including the Academy Council meetings and a grants panel meeting. I also gained some experience in communications, helping out on a social media campaign and writing out a newsletter which was sent to thousands of readers.



How did you find the experience?

Great. Everyone at the office was really friendly and happy to explain their role at the Academy and what they were working on. My managers ensured I always had something that I could work on.

What will you take away?

I learnt a great deal about the Academy and the funding landscape in the UK. I also picked up lots of soft skills that I'm already finding useful in my PhD. I think sitting in on a grants panel and seeing how the whole process works was really helpful if I decide to carry out a future career in research as I might end up applying for a grant.

Do you have any advice for others?

If you have a chance to apply for the internship, go for it. Everyone working at the Academy is really helpful and friendly. The experience has already helped me structure my work better for my PhD, and helped me determine what I want to do for a future career.

Dr Zoe Stephenson

MRC policy intern in 2017 now a healthcare consultant



Why a science policy internship makes you a better academic:

1.Networking

The Academy has over 1200 Fellows who represent the absolute best of the UK biomedical research community. During time as an Academy intern, it is inevitable that you will bump into some of them. One of my projects was to write the Academy's response to the Government's investigation into the problem of research integrity in scientific research, and as part of it I sought the opinion of some of the Academy's fellows - their wealth of experience and expert insight is inspiring. I also helped out with meetings where I mingled with researchers from many different fields of clinical research. Even simple lunches with staff mean every day is a networking opportunity.

2. Insight into grants

As an intern, you can get involved with some of the Academy's work outside of your immediate team. I gained a fantastic insight into the grant awards process and what grant review panels look out for. I

also spent a day at the MRC head office where I was able to observe the MRC Neurosciences & Mental Health Board Meeting, the final step in deciding which excellent research projects will be funded.

3. Understanding cross-sector links

The bottom line is that government decisions affect the research landscape. Therefore researchers with a good understanding of science policy can better position their science to increase their funding and benefit society. I have realised how important it is for academics to engage in policy – their input does make a difference and their expertise is vital. I have now seen the policy process from conception of new policies to their implementation and academics are central every step of the way!

4. Writing

Whilst science policy writing is different in style to academic writing, what you learn about the writing succinctly and clearly serves any PhD student. My time at the Academy has meant my thesis is now far less daunting.

5. The other little opportunities

The Academy team held workshops on presentation and networking skills for some of the researchers they fund, which I was lucky enough to attend. I also helped set up events and saw how a conference runs behind the scenes.

6. Taking time out of lab work

The thought of three months away from the lab can make you feel anxious, but there is no reason to fear because those three months give you the opportunity to gain clarity. I returned to the lab with a clear idea of what I needed to do next. Any PhD student should seize this opportunity develop that bigger picture view!

Following page: Zoe at an Academy event



Dr Andy Stone

BBSRC careers intern in 2019 now a post-doctoral researcher on blood and bone cells



Tell us about your research and what made you apply to the internship.

I was in the third year of my PhD at the University of York, studying the different functions of heterogeneous bone marrow stromal cell populations. The internship looked like it would allow me to experience the world outside academia while also still strengthening my CV if I wanted to stay in research. I was particularly looking forward to learning about how grant processes operate, and to expanding my professional network across a variety of sectors.

How was the application process?

It was enjoyable and made me really think about the job I would be doing. The interview was relaxed and friendly and I heard back from the Academy very quickly.

What did you work on?

One of the great features of the Grants and Programmes internship was the diversity of projects I was able to get involved in. From the start, I felt like a valued member of the team and I was even trusted to drive my own projects.

The most enjoyable and rewarding project I worked on was a networking event at the

Springboard awardee meeting. I consulted with the team and developed a system where awardees were able to meet representatives from publishing, industry and funders, as well as each other. I selected and invited the representatives, which meant I got to know high-level stakeholders from across the biomedical research sector. The session went smoothly and it was really satisfying to see the awardees engage in lively discussions with the invited representatives. My project management skills and confidence in engaging with high-level stakeholders have definitely improved as a result. I was also lucky enough to get involved with three grant panels during my

with three grant panels during my internship. Being able to sit in on the panels of senior researchers as they discussed applications gave me an amazing insight into what makes a good grant application. When some of the reviewers I identified were complimented by the panel, it felt like a great achievement

How did you find the experience?

I loved my time at the Academy. It has helped me think about the sort of career I would like to pursue in the future and made me more aware of careers in research-supporting organisations. I also made some amazing friends in my time there and everyone was extremely welcoming from the very beginning.

What do you think you learned?

The internship gave me the opportunity to develop a variety of skills. These include project management, which I learned through working in the programmes team. I also developed a much better understanding of the funding landscape in the UK, and what makes a good grant application. Another great feature of the work I did with the Academy was that I got

to meet a variety of professionals from a number of sectors surrounding research, as well as meeting Academy Fellows and getting advice on how to progress my academic career. I made lots of new professional contacts which will hopefully prove useful.

Do you have any advice for others? I can't recommend working for the Academy on this internship enough. If you're interested in staying in research, then it gives you a fascinating insight into how research is funded. I learned so much

from the peer review process and being able to sit in on grant panel discussions. This experience has given me much greater confidence in developing my own academic career. The internship is equally beneficial if you are looking outside of research; you get to work as part of a great team in a lively organisation and develop vital skills such as project management.

Pictured below: Andy (far left) with the Careers Team



Helena Teague

Wellcome policy intern in 2020 now finishing off her PhD

I completed my internship at the Academy during the final year of my PhD at the University of Cambridge, as a way to explore a possible future career option.

An internship at the Academy appealed to me because, having attended talks given by people working in science policy, I knew it was an area that really interested me. I was looking to get some experience outside of academia an and thought the internship at the Academy perfectly amalgamated my interests of policy and medical science. Researching for the policy essay that formed part of the application process really whet my appetite and prepared me for some of what the internship would be like.

"Despite conducting my internship entirely remotely, I was made to feel incredibly welcome."

I really felt like part of the team, which is a testament to how kind and supportive everyone was. Despite the obvious downsides (I would love to have been inside the House of Lords and try the highly revered Academy food!), remote working gave me the opportunity to attend many more events than I otherwise would have been able to, as well as allowing me to meet with people from many other organisations to hear about their work.

At the Academy I worked on a broad range of tasks: organising a virtual workshop on Universal Health Coverage in the Middle East and North Africa, attending parliament committee evidence sessions, and researching and working on project briefs and inquiry responses. I especially enjoyed scoping for and writing up my findings for



projects such as climate change and health, and equality and diversity in the STEM workforce. Alongside a better understanding of the huge scope and importance of science policy, the greatest skill I learned was the concept of shaping my writing for a specific audience or function. This is a skill that will help me through the final part of my PhD, writing up both a paper and my thesis. The most unexpected thing about my time at the Academy is that I really didn't expect to be able to feel comfortable working independently on something I had never done 12 weeks earlier!

The biggest bit of advice I would give to a future intern is to throw yourself into absolutely everything and ask questions! Try and work with as many teams as possible, both within policy and the other teams in the Academy; do as many varied tasks as possible; and take all of the opportunities to sit in on meetings or workshops.

I now have a much better idea of how policy influences the way in which science is done and how science (and scientists themselves!) can influence policy, as well as the importance of both of these. Moving back into academia I am finding it much easier to view my work in the context of a bigger picture

Dr Jamie Thakrar

Policy intern in 2019 now a postdoctoral research fellow in HIV

What made you apply to the scheme?

I first became interested in the scheme during an event for first year PhD students at Wellcome, as I had always planned to get career experience outside of academia during my doctoral training. As much of work is clinical and working with human participants, I became interested in medical research policy during the course of my PhD, as I went through the rigorous research ethics approval processes and learnt more about research governance. In the following years, two other students from my programme took part in the internship scheme at the Academy and had told me it was a great place to work, so if I had needed more convincing to apply by then, then this was the final encouragement!

What was the application process like?

The application process was very clear, and I found writing the application essay to be a really interesting exercise. This was my first proper dive into the world of policy and although it took some time and research to decide on my essay topic, once I had settled on one, I became really engrossed in researching and writing it up. The interviews were not very long after the application submission, and the whole process was very positive and good career experience in itself.

What did you work on?

During my three months I had the opportunity to hop around the various projects ongoing at the Academy. Most of my work was to do with the UK science base. I attended meetings with the other national academies, attended a House of Lords Science and Technology Select Committee meeting, and helped my supervisor organise regional meetings on investment in Liverpool and Birmingham. I also worked on events at the Academy



including 'Clinical academia for the future' which took place within my very first week and 'Achieving Universal Health Coverage in low and middle-income countries' where I was able to assist the International team in pre-event preparation, participation on the day and also with the report from the meeting. I really enjoyed the diversity of work and the opportunity to join in with so many different things, while also contributing to important work at the Academy.

What the biggest thing you've learnt?

The fast pace of policy work at the Academy is in stark contrast to the long-term projects many of us work on in academia, so it was really important to understand the depth of knowledge required for a particular task in order to turn it over for a short deadline. My supervisor and I both identified the fact that I found it very difficult to be brief when writing summaries of larger reports. It was great to be able to work on this together and with his feedback, I definitely believe that I improved my ability to be

concise and grasp a better understanding of what information was most relevant.

Tell us something that surprised you... I didn't expect it to go so quickly! My three months at the Academy were a whirlwind, and I definitely believe this was because of how exciting and fast-paced the work was. They do say that time flies when you're having fun!

You're going back into academia for a post-doc. How can people who are planning careers in research benefit from an internship like this?

I gained a lot of insight into the world of policy through my internship, and I believe that it is very important for us as medical research scientists to engage with, and advocate for, the policies that impact our work and the people we hope will benefit from it. I learnt of many ways in which organisations like the Academy and Wellcome turn to scientists to directly inform their policy work and I plan to involve myself in opportunities to engage

with them throughout my own academic career. Although my immediate plan is to apply for postdoctoral positions following completion of my PhD, I will be going into an academic career knowing there is another career I would also really love to do! It is a great feeling knowing that you have an alternative plan, and already have some experience to help you further down the line, if you need or want to make a career change.

What's your advice to future interns?

Don't be afraid to ask anybody at the Academy about their work and always ask to get involved with things you might be interested in. People are very happy to give you the experience, and also grateful for the helping hand. Also, feel confident to talk to lots of people at events and make new contacts, but most of all, really enjoy the time you have there!

Pictured below: Jamie at the meeting on Universal Health Coverage

"My three months at the Academy were a whirlwind, and I definitely believe this was due to how exciting and fast-paced the work was."



Dr Elly Tyler

MRC policy intern in 2016 now a postdoctoral research fellow in cancer and immunotherapy

What do you think of when you hear the words 'science policy'?

As a PhD student in my PhD bubble, I'd always thought that science policy was relatively straightforward. You identify a topic – like the use of animals in research – do some research, write a report, and then send it to government. Job done – influence made. But, what I didn't really get was ...how? How do you identify the topics to shine your spotlight on? How do you get government to listen? How are changes in policy made?

Before I began my internship at the Academy of Medical Sciences, my understanding of science policy topics was limited to the big ones that I knew might affect my future career in research: the potential of cuts to science funding and the impact of Brexit on UK science. These are undoubtedly important topics, but the nitty-gritty day-to-day of science policy is made up of so much more.

To inform policy, the government calls for evidence on a mindboggling breadth of topics. As an intern, I experienced first-hand the drafting of the Academy's response to the House of Commons Science and Technology Committee's inquiry on intellectual property and technology transfer.

By day two of the internship, I was already making my way through the awe-inspiring Westminster Hall to my first House of Lords Science and Technology Committee evidence hearing. In between taking



camera-phone photos of everything from my visitor's pass to the carpet, I found myself candidly chatting with the Chief Scientific Advisor to the Department for International Development, Professor Charlotte Watts, before she gave evidence later in the session. Observing the Lords' insightful questioning of Professor Watts and the other witnesses – I truly felt like I was watching policy being formed and I loved it. By the way, this is free and open

to anyone, for any reason. Don't wait to be offered a policy internship to take the opportunity!

In addition to select committee inquiries, bills passing through Westminster or the EU Parliament are scrutinised by policy staff; occasionally identifying a potential area for concern and sparking cross-Academy discussions, letter writing, and meetings with politicians. Personally, during my time as an intern, I've combed the Higher Education and Research Bill 2016-2017 as it passes through parliament looking to identify areas of particular interest to the Academy.

Outside of parliament, the Academy works to identify and answer important questions through its President, Committees, Fellows and staff, such as how to give credit to researchers who work within large consortia and collaborations and are unlikely to get a first author paper, and how to tackle the issue of research reproducibility.

These big questions will be answered through major working group reports which draw on evidence from public consultations, roundtables with key stakeholders, or workshops. It can take years but I've been able to get involved with one such report – the Health of the Public in 2040 – as it nears completion, giving me the chance to see the final stages of proof-reading and formatting.

As for how you get government to listen, in reality, the world of science policy is a network of government departments, non-departmental public bodies like The MRC, academies, charities, societies and others with information continually flowing between all of them. Larger organisations might have a dedicated department – public affairs. This is the mouthpiece to Policy's thinking brain, and building relationships within government is essential for effectively communicating the policy message.

For anyone out there considering a policy internship, I say – do it! Take the opportunity to peek behind the veil, broaden your mind, and understand how government policy shapes science in the UK – ultimately, it can only make you a better researcher.

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