

Transcripts for Video Case Studies of Life Sciences Graduates

(case studies produced by Opportunity North East and Skills Development Scotland)

Antony Christou

"Hello, my name is Antony Christou. I work as the Airborne Hazard Emergency Response Coordinator at the Scottish Environment Protection Agency.

"I graduated from the Robert Gordon University in 2012 in forensic and analytical Chemistry. After I graduated from the Robert Gordon University, I continued my education at the University of Central Lancashire where I did my PhD in Fire chemistry and Toxicity.

"So, after my PhD I was looking for a new opportunity and this is where I discovered the AHER Coordinator position at SEPA. This was done by checking online and different webpages. When I came across the position I applied straight away and that's how I got into working for SEPA.

"Although you finish your undergraduate degree and aren't sure where to go next, when I went to do my PhD that gave me a lot of experience, even people skills, and I believe that this is how I managed to get this position at SEPA.

"My day-to-day tasks are to do with coordinating an incident response service for the whole of Scotland so that means that I have to maintain the equipment to have high resilience but also dealing with a lot of different people according to our rota which runs all year round. Although day-to-day you have a lot of emails and things to deal with, which could be mundane, I get a lot of opportunities for example I have to be involved in big incidents where I collaborate with different partners through SEPA.

"In my current job it is important to have really strong communication skills because you have to speak with a lot of people on a day-to-day basis. I also have to have really strong problem solving skills because there are so many problems that I can be involved in throughout the day, dealing with equipment or any other issue, you have to be able to think on your feet. You have to have really strong organisational skills because the I coordinate the emergency response service for the whole of Scotland.

"I do enjoy living in Aberdeen and on occasion I go out and do activities. One activity that I can find is actually going surfing out in the North Sea."

Rebecca Graham

"I graduated with a degree in Forensic and Analytical Science in 2015 from Robert Gordon University. After graduation I tutored in Aberdeen and Aberdeenshire from National 5 to Advanced Higher Chemistry, Biology and Maths and I feel in love with it and applied for teaching. I got into Edinburgh University so moved down there for 2 years to do my training.

"Well no day is the same as a teacher. On an average day I could teach up to four classes because they are 80 minutes long but within those classes there could be a variety of different needs and teaching styles. Because I'm a science teacher I teach biology, chemistry and physics so I teach quite a range of subjects, there is also a bit of environmental science in there too. On an average day you

can interact with between 50 and 100 pupils within a day teaching them a variety of different things, so it is always a challenge.

“The skills required for teaching, you definitely need to be patient, you need to have a good sense of humour, you need to be able to interact with a wide variety of personalities whether they are presenting in a positive or a negative way. You need to be organised, definitely, you need to be able to explain the science concepts in a variety of different ways because something which might seem obvious to you won’t always seem obvious to the people you are trying to teach, so you need to be able to think on your feet and be able to change your lesson plans when you need to.

“I came back to Aberdeen because I have family here, my sister is at university here, so I can spend more time with her. I love the scenery around here, it’s a nice environment to live in, Edinburgh is quite a busy city whereas here in Aberdeenshire it’s a lot quieter.”

Laura Reid, Health & Safety and Environmental Adviser for CNOOC

Hello, I’m Laura, I’m originally from Westhill. I went to Aberdeen University and I studied Zoology. I had considered other universities however staying in Aberdeen made a lot of financial sense and it meant I got to go travelling.

The decision to do the degree in Zoology came from a love of nature and I hadn’t really put much thought into what that would mean career wise. I currently work as a Health, safety and Environment Officer at an oil and gas company, so a long way from a zoology graduate. After graduating from zoology, I went to the SEPA where I was an admin assistant. From there I decided I liked the look of the environment protection officer role, so I did a traineeship and became an environment protection officer. From there I took perhaps the obvious route, being in Aberdeen and moved into oil and gas industry. I was an environmental adviser at first, then went offshore for a couple of years as an HSE supervisor., then came back on shore to do the HSE advisory position for an oil and gas production platform, which is what I’m doing now.

So, you might think there is quite a big leap from zoology graduate to HSE advisor to the oil and gas industry but there are some other things on my CV which have got me to where I am today. The degree qualification does help and is essential for most of the jobs I have applied for. I do have some life experience and some work-based qualifications that have also helped me along the way. Particular to the oil and gas industry I have a NEBOSH in technical oil and gas safety, that I something that employers look out for, particularly now, following the downturn in oil and gas, employers are looking for that NEBOSH qualification. They’re also looking for resourcefulness, the ability to prioritise and they are also looking for someone who will go the extra mile.

In my opinion Aberdeen has masses to offer young professionals, particularly in the oil and gas industry that’s where I’ve ended up, so I have the most knowledge of. The company I work for, for example is taking on several graduates this year. The graduate program runs over a number of years and graduates get the opportunity to work in a variety of departments. Generally we’ll have an offshore department which is an excellent opportunity for career development.

Ryan Manson

“Hi, I’m Ryan Manson, I’m the General Manager at Union Square in Aberdeen. I left school in Elgin and went to Dundee, to what is now Abertay University to study an HND in Biological Sciences. That

involved a period in industry, in my case industry was distilling. Ultimately, having spent 2 period in industry when I graduated there weren't the opportunities in distilling at the time. I therefore found myself taking an opportunity at Aberdeen airport, looking at the opportunities that in the long term would be available.

"My career took me from airports into shopping centre arena and the facilities management of large properties where huge numbers of the public will visit are very similar in a shopping centre as they are in an airport; procurement decisions are similar, contract management, delivery of excellence, health and safety.

"Even in these arenas that would feel some distance from my studies in Dundee you draw down on the subjects you learned at the time for example, human physiology, many of the businesses around here have a focus on food hygiene, understanding the microbiology story and the management of legionella.

"When you have a role that is like running a small town it is important to have a way to switch off and for me, living in this part of the world, being able to go out cycling in my spare time on quiet roads, go out hill walking every month if possible, I go sailing in the summer time and there are not many corners of the world where you can tick all those boxes. So, for what I like to do in my spare time I love the North East of Scotland and what it gives me access to, and I love what I do for a living."

Elspeth Gordon

"Hello, my name is Elspeth Gordon and I am an Audit Manger at Ernst & Young. I graduated from the University of Bradford with a fist-class honours degree in Chemistry with Pharmaceutical and Forensic Science.

"As part of my degree I did a year in industry where worked with GSK in Harlow as an analytical chemist. After graduation I went to work with GSK again, in Stevenage this time doing the same role as I had during my degree. About 5 years into that I moved from Stevenage to Tunbridge, still doing the same role – I moved for personal reasons. 2 years later they decided they were going to close the site and so I found a new job at Novartis, moving from research and development to manufacturing environment. I didn't last long in that role due to my partner, now husband getting a job with GSK in Montrose where he still works, and I had always wanted a job as an accountant. I had in fact applied to EY before I got my job at GSK and they didn't give me one look – not to out anyone off but I do belie that that is because I applied to the Bristol office which was a very small office at that time. So 7 years later I went through the process – I was quite greedy as EY was my second graduate job - and now, 8 years later and two children later, I have worked my way up to manager.

"So everyone looks at me a bit strangely, 'surely science and accounting are totally different?' but it's really not it's the same logical thinking and in some way rules based. As a chemist you know that certain things will react and give you this, it's the same with accounting, certain things when put together will give you certain outcomes. I was an analytical chemist, so I used to use spreadsheets and numbers all the time and I still use spreadsheets and numbers. It's very similar, apart from getting up and putting a lab coat on, its very much the same. And that putting a lab coat on has been replaced with going out and talking to the client and having really insightful conversations with clients rather than trying and drag insightful information out of white powders, as my previous job did.

"I really enjoy working in Aberdeen, and it sounds really strange, I grew up in Perth went to Bradford University, moved to the south of England, stayed there for 7 years and the joke was that the next move would be France, however brought it all the way back up here and it has been a great move. I have loved it. I love the outdoor life that Aberdeen and Scotland bring. It is completely different to down south and it's something I hadn't realised I missed. You know the beach is on your door, the mountains are on your door its brilliant. But also you could do this job anywhere, but I actually really enjoy doing it in Aberdeen."

Fionnuala Cousins

"Hi, my name is Fionnuala Cousins. I'm a lecturer at Robert Gordon University in our Information Management subject group, specifically I specialise in Technical Data and Information Management.

"I did a bachelor's degree in microbiology and Infection at the university of Edinburgh. I recognised the I was a STEM person but didn't want to work in a lab. I was quite interested in stem information and the economy around that, so I went to do an information and library studies master's at the university of Strathclyde.

"Because I was interested in stem information and that economy, I was looking at a lot of private sector information management roles to technical and regulated industries. I came across a job, probably advertised on something like 'myjobscotland', with Robert Gordon university and a local company in the north east. It was knowledge transfer partnership project which is a government programme to bring academia in better contact with industry for specific strategic projects and that was in oil and gas information management. That project lasted a couple of years and I was employed by RGU as part of that project and so I got some experience at developing short courses in that project. When that finished, I stayed on in industry so I got more experience but then a role became available at RGU for developing a petroleum data management online course and it actually required a very specific skill set of knowing oil and gas information and data and knowing academia and there were very few people who could tick those boxes so it looked like a really interesting challenge for me and I got the job.

"For that work I need a mix of what I would consider to be the transferable skills that you get in stem, such as outcomes focused, problem solving, efficient use of resource, stage by stage project management as well as the softer skills that you develop when you realise that whatever hard stem project you're working on you still need to influence people and as soon as people are introduced suddenly you're a social scientist and you need to be more careful about your communication, influencing and engagement so I think it's quite suited to people who are interested in that space between technical and non-technical and how to achieve outcomes with different types of people. I think it suits that kind of hybrid mentality.

"I also think that Aberdeen is a really good prospect for people who are interested in growing industries. If you enter a massive established industry you can feel like a small cog in a massive machine where you wonder what has my specific contribution been here. Whereas Aberdeen has some growing industries like life science, renewables, subsea engineering which are at quite an interesting point in their development and I think that you can really get more job satisfaction as an individual if you feel like you've contributed to those industries."

James McIlroy

"My name is James McIlroy, I'm a medical doctor and the founder of Enterobiotix. Enterobiotix is an international biotechnology company developing novel medicinal products for patients suffering from diseases and infections associated with imbalances of bacteria in the intestinal tract.

"I started the company as a medical student in my mum and dad's garden shed after identifying with doctors who wished to perform a particular type of medical procedure but were unable to do so because there was no product available for them to use. So I decide if no one else was going to do anything about it then I would, and I formed the company when I was studying at the university of Edinburgh doing a degree in physiology.

"I built the company alongside my studies, graduated from Edinburgh, returned to medical school in Aberdeen and continued to grow it over my fourth and fifth year at university, I raised two rounds of investment – one was a 7 figure investment - built the team from one person to where we are today with 12 people and in this facility, right now, everyday we are manufacturing potentially lifesaving medication for patients in hospitals all across Europe, we are distributing products on a regular basis and over the course of 2019 we are taking the company global – I hope – raising more investment, creating new products and hopefully treating much more patients.

"I'm also working as a doctor at NHS Grampian across the road on a part-time basis so there is no average day for me. Some days I'm in the hospital, like yesterday I was working a 12 hour shift on a Sunday taking all the patients who have potential surgical problems in the north east of Scotland into our ward 208 at Aberdeen Royal Infirmary. The week before that I was in Paris presenting our company at an international microbiome conference, so everyday is different, it's incredibly fulfilling and most importantly every Sunday I'm excited about going to work on Monday and that is because I'm doing things that are benefitting patients both in the hospital and in this laboratory. So if you're a student who has an idea at university, I would encourage you to go for it because you never know where you might end up.

"It can be a daunting prospect coming to the end of your degree and not being quite sure what you want to be doing with the rest of your life and that's absolutely okay. In this day and age I think it's much more important to find something that you are passionate about.

"So in summary, almost by a bit of an accident I've now landed a job that I could only have dreamed of doing; part-time as a doctor, part-time founder of a very fast growing company developing lifesaving medicine and it all started with one idea in a library. Now if you're a student watching this video and you've had an idea, in a library or anywhere and you're not quite sure whether to pursue it, my advice is you should 100% go for it because you've got nothing to lose and university is the ideal time to think about starting a business; you're well supported with funding and external advice from mentors and most of you will have more free time than you will when you enter the working world so I would advise you to go for it because you never know what will happen next and if you find something you're passionate about then that is going to get you up in the morning every day for the rest of your life."

Obinna Ubah - Senior Scientist at Elasmogen Ltd.

Hello, I am Dr Obinna Ubah, a lead senior scientist at Elasmogen Ltd. Elasmogen Ltd is a leading drug discovery biologics company based in Aberdeen. Elasmogen develops next generation biotherapeutics in highly specialised areas, including chronic or autoimmune inflammatory diseases to oncology and also PK enhancing technology.

I trained as a pharmacist in Nigeria before moving to Scotland where I obtained an MSc degree in clinical pharmacology and a PhD in medical sciences.

My PhD was focused on developing novel therapy for chronic autoimmune, inflammatory disease and I have continued this work at Elasmogen and am currently leading the anti-inflammatory drug development programme.

On a typical day I do a-silico protein engineering projects, DNA cloning, protein expression, invitro cell-based asset development and validation, design experiments, identify and interact with potential collaborators and hold meetings with external preclinical and clinical development consultants and also other key opinion leaders. Also, as an honorary teaching fellow I contribute to the higher education teaching at the university of Aberdeen.

The qualifications and skills required to do my job are first a suitable academic degree. The skills would include DNA cloning, gene reformatting, protein expression and downstream purification and characterisation, tissue culture handling, some experience in invitro cell-based asset development.

I would describe myself as modest, hardworking, purpose driven and a team player with an inclusive mentality. I work hard daily to improve myself, enhance my knowledge base and help my team achieve new milestones.

While my colleagues would describe me as very technical, I think I am more analytical and naturally curious.

I chose to study at the university of Aberdeen because of the widely recognised research excellence and over the years I have come to appreciate the importance of the multicultural diversity evident in the city of Aberdeen and I love it here. Aberdeen prides itself on research, healthcare and teaching excellence and it remains the hub for science innovation and commercialisation in Europe.