

FIND your FUTURE

Name: Colm O'Reilly

Job title: Research Scientist

Current employer: Intract Pharma

Course studied at UCL: MSc in Pharmaceutics

Tell us about your current role and organisation

I am a Research Scientist at Intract Pharma situated at the London Bioscience Innovation Centre. Intract Pharma is a start-up company spun out of UCL School of Pharmacy in 2015 and founded by Prof Abdul Basit based on over 20 years of research by the Basit Research Group. We have a core team of 6 scientists working towards a singular goal: transforming the care of inflammatory bowel disease by replacing injections with safer more effective oral biologic therapeutics. Currently, we are working towards a Phase 2a clinical trial where we will administer infliximab orally to ulcerative colitis patients, facilitated by our proprietary technologies, Phloral® and Soteria®.

My role focuses on the formulation aspects of our endeavours with a focus on our internal research programs, designing and developing prototypes of the company's proprietary technologies for use in animals and humans.

What sort of person would this role suit? (i.e. personal skills, qualities, and values)

Start-ups are fast paced, dynamic environments! The researcher would need to be both very organised to stay on top of timelines and flexible enough to adapt to changes in priorities or plans. As it is a science role, a great deal of perseverance and resilience is required as one would need to endure negative results and troubleshoot unforeseen problems. Due to the sheer number of activities, a person seeking to work in a start-up needs to take the initiative and drive their work independently towards the intended outcome. High level communication skills are key, both in writing and in person, to facilitate teamwork and to convey clear messages to external clients.

What does a normal working day look like for you?

A normal day starts with me turning on the office coffee machine! We are constantly reshuffling our workflow to balance resources between external research projects with partner/client companies and our internal research programs, so I tend to bounce between the laboratory and the office throughout the day. In the laboratory, I could be preparing and testing formulations for external research projects or experimenting with new formulations for internal research programs. In the office, I could be reading through the literature to solve a problem or generate a new idea, writing up experimental plans or designing internal research programs, meeting with colleagues and/or external clients to plan experiments and discuss results, organising shipments or simply updating our website with exciting news!

How did you get to where you are now? (i.e. are there typical ‘entry’ routes into your profession for new graduates?)

A series of failures and rejections! My clinically focused Pharmacy degrees had trained a confident and competent pharmacist but I felt I would need more in-depth technical and scientific expertise to practice as a formulation scientist, especially considering the stiff competition from science graduates for academic and industry places. I spent a couple of years working as a locum community pharmacist in Dublin, Ireland to raise money for the MSc in Pharmaceutics in UCL School of Pharmacy, applied with feedback from 20 friends and family members, and was accepted to the program! The lessons provided by world leading experts in pharmaceutics fostered a problem-solving mind-set, and, during the research component, Prof Abdul Basit gave me the opportunity to take a research idea from absolute zero to almost proof of concept in a mere 3 months - my first experience of generating novel and inventive ideas. My engagement with the MSc in Pharmaceutics program enabled me to excel in my current role in industry and formed a strong foundation for my upcoming PhD.

How should current students go about getting the necessary skills and practical experience to help them with their future applications to your sector (e.g. internships, training courses)?

Talk to people! Identify the roles that interest you and identify people who perform those roles by talking to your lecturers, friends, family, and then, politely, reach out through email and LinkedIn to request a chat. Ask them about the journey that lead them to that role, and, while everyone will have different stories, common trends will become apparent. For example, from my conversations with people in academia and industry, I realised that I would probably need to pursue either a Masters or PhD in Pharmaceutics to pursue a role as a formulation scientist which invariably lead to me pursuing the MSc in Pharmaceutics at UCL School of Pharmacy.

What are the best aspects of your work and what are the most challenging?

Before going to work every day, my father would tell my brother and I to do a job we would love waking up to in the morning – waking up to do science for a living is the best aspect of my work! I learn new things, tackle new challenges, and grow every day as a scientist. The most challenging aspect for me would be achieving a proper work-life balance as I am obsessed with the work, but I realise the importance of self-care to perform at my best.

What is the progression like/where do you see yourself going from here?

My next step in my journey as a scientist is starting a PhD studentship in the EPSRC & SFI Centre for Doctoral Training in Transformative Pharmaceutical Technologies at UCL School of Pharmacy on the 28th September 2020!

During the interview, I was asked “where do you see yourself in five years?”. My answer was that it was a similar answer to the often-asked question “academia or industry?” I may not know what the future holds (I never expected to work in such an amazing start-up like Intract straight after my MSc) but I do know that I would choose, what I perceived to be, the interesting project or the growth experience.

Do you have any final advice for current students?

Enthusiasm! My first application to the CDT at UCL School of Pharmacy was rejected. It was my enthusiasm and perseverance throughout the course of the MSc program and my research project that lead to me being offered my current role at Intract Pharma, and ultimately, lead to me being successful in my second application to the CDT two years later. You may not always have the qualifications or experiences required for a position but you may be surprised by how much conveying your genuine passion and enthusiasm for a position can open doors for you -whether it be the position you are applying for or the unexpected opportunity presented to you because someone was impressed by your passion.