Dr Sara Kyne, senior lecturer in chemistry at the University of Lincoln, was recently awarded two Short Term Scientific Missions grants from COST, the European Cooperation in Science and Technology. Funded through the EU, these grants give researchers a block amount that they can use to further their research, often by supporting travel to other institutions for collaboration. Sara’s research focuses on understanding the chemistry of catalytic reactions. Catalysts are used to accelerate chemical reactions, and are extremely important for transforming simple chemicals into more valuable products in industry, and for making complex molecules like antibiotics in pharmaceuticals.

The value of mentoring

Sara used her COST Action grants for several visits to a research group at the University of Groningen in the Netherlands, who work in a similar area to her, but in a much larger institution. As an early career researcher, access to their facilities and knowledge has been a huge boost to Sara’s research back here in the UK.

“I was able to use lab equipment that’s not available to me here in the UK,” explains Sara. “But as well as access to this equipment, they have people who know how to work with it in more specialist ways that allowed me to run more interesting studies than I would normally be able to do.”

The chemistry department at Lincoln is relatively small, so as well as access to equipment and expertise, Sara has also found it extremely valuable to see how a large research group operates within a research intensive institution.

“I’ve been in my position for three years and without PhD funding I’ve never had my own PhD student to supervise. To actually observe someone supervising a research group of up to 20 people and managing all of those projects has been really interesting. I’ve been able to work with one of their PhD students and co-supervise them on a joint project. The funding has allowed me to experience that level of close supervision even when I’m back in the UK, something I never thought would be possible.
“I think it’s this mentoring that is the most important take-away from my visits because I’ve learnt so much about going through the scientific process, dealing with high profile professors who have lots of researchers, and are doing high-quality research efficiently.”

Forge long-term partnerships

As well as furthering her own personal career development, Sara’s links with the research group in Groningen has opened up the opportunity for wider collaboration between the two universities. “We have informally been discussing the possibility of setting up a dual PhD degree, so that students can graduate from both Groningen and Lincoln. This would require the student to carry out part of their studies at each institution. This means I only needed to secure funding for half of a PhD studentship, plus I think the experience a student would get of working in a big research group in Groningen would be really beneficial.” While both institutions are keen to establish this partnership, there are obvious concerns about how Brexit could affect any future arrangements between the institutes.

“We need to get this in place before the UK leaves the EU. I am really concerned that if there were any restrictions in relation to the mobility of researchers or students then it could have a big impact on what we would be able to do.”

Through EU funding Sara has developed invaluable skills for her future career in research and forged what she hopes will be a lasting collaboration.

“The last time I visited the Netherlands we started talking about the next project and whether I would like to be involved with that, which is another good opportunity for me. Looking forward, if there is a way for researchers to retain seamless mobility between the UK and the EU after Brexit, then I think that’s a way we can set up some of these PhD programmes, which could link to more long-term collaborations.”

University of Groningen, Netherlands