

Taking structural biology into the classroom

A researcher's perspective



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Research Area: **Biosciences**
Institution: **University of Birmingham**
Placement School/
College: **King Edward VI School,
Lichfield**

About Researchers in Residence (RinR)

Researchers in Residence benefits researchers, young people and teachers via UK-wide school placements across social, physical, life and earth sciences and the humanities subjects.

Researchers:

- Work with some of the most challenging and inquisitive minds
- Renew your enthusiasm for research and develop communication and teaching skills

Schools:

- Access valuable classroom support
- Interact with researchers to motivate, inspire and maximise student learning
- Enhance learning experiences and realise improved grades

What was the aim of your placement?

"When I met with the school staff (at King Edward), they were keen for me to cover topics that were linked to the curriculum. Therefore, I focused on areas of my research that I felt would complement the work the students were already studying."

What did you hope to get out of the placement?

"The course I'm doing covers structural biology, which involves a lot of public speaking and demonstration to undergraduate students. I thought doing Researchers in Residence would be a good way of getting teaching experience and presenting to a wider audience."

How did you determine the structure of your placement, was it a joint effort with school or your own decision?

"I met with my placement teacher and discussed what we wanted out of the placement. We agreed I would teach part of the sixth form biology course as well as highlighting some of my own work and possible career choices in science. My placement was spread over a week, doing double periods in the morning and afternoon with different groups of upper and lower sixth form students."

Did you have any apprehensions prior to beginning the placement?

"Not really, as my research involved a lot of demonstrations and talks, I was used to presenting. For me, the placement was more about learning how to make my research resonate with a wider audience and present it in such a way that it would make sense to non-academics."

How was this different from the reality?

"I was quite surprised by how many of the students, especially those in the upper year, were interested in my life as a researcher. A lot of them were quite surprised that I had an active social life and knew many people of my age, male and female, studying science. Shattering stereotypes wasn't high on my agenda when I applied for the programme. However, it felt good to be able to provide a realistic representation of young scientists and I'd like to think it made a career in science look more attractive to the students."

Highlight of the project?

"I think the best thing was seeing the students becoming interested in science. It was heartening to see them enthused about basic concepts and have them respond to my questions with earnest, well-thought-out answers."

Best thing about being a researcher in residence?

"It was a rewarding experience; having students take an interest in the work you do and take on board what you say. It felt good to think that I had contributed to their learning and had been able to offer insights into what university life was really like."

What did you learn/get out of the experience?

"My confidence in public speaking definitely increased after completing my placement. It was useful to practise presenting to a non-technical audience and it forced me to really think about my own research and what messages I was trying to get across."

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Life after Researchers in Residence, what have you been up to since finishing your placement?

"I'm currently in my final year of research and although I am planning a career in clinical science, I would relish the opportunity to teach science to undergraduates after I have qualified. All in all, I think my communication and presentation skills definitely benefited from the Researchers in Residence experience."

Would you recommend Researchers in Residence to a fellow researcher?

"I'd definitely recommend Researchers in Residence to anyone who wants to get experience of presenting to different audiences or public speaking. It's great for confidence building and improving presentation skills. It's also great for people interested in teaching because it provides a good taster without being completely full on. It's a good way to explore, but within your comfort zone, in that you're communicating topics and concepts you're already familiar with."

Eligibility

RinR is open to all PhD and post doctoral researchers funded directly or indirectly by one of the seven UK Research Councils or the Wellcome Trust.

Training

Participating researchers attend a one-day training session covering effective communication and pupil engagement and the do's and don'ts in the classroom. Advice on activities past researchers have used to engage young people is given and you'll find out more about the kind of situations you may encounter during your placement.

How to apply

Complete the online application form at: researchersinresidence.ac.uk our RinR co-ordinators will then match you with a suitable school and contact you.

