Researchers In Residence

Engaging tomorrow's talent today

Atom splitting at school

A reseacher's perspective

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Research Area:	**Physics**
Institution:	**Imperial College, London**
Placement School/ College:	**Cardinal Vaughan School**

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?

"To introduce sixth formers at Cardinal Vaughan School in Kensington to particle physics. I also provided a brief overview of my research at CERN, the particle physics lab in Geneva, where I am currently working on the CMS[1] experiment - one of the huge 'digital cameras' which hopes to see new physics by reconstructing the remnants of particle collisions at extreme energies."

What did you hope to get out of the placement?

"For me, it was about improving my presentation skills and 'tuning' my materials, learning what works with a non-technical audience and what doesn't."

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

"As I'm based in Geneva, Switzerland, it wasn't practicable to do a week-long or fortnightly placement. I agreed with the school that I would do two, half-day group assemblies, consisting of a presentation and follow-up question and answer sessions."

Did you have any apprehensions prior to beginning the placement?

"My main worry was that the students would find my talks boring and would not engage during the question and answer sessions."

1. Compact Muon Solenoid experiment

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How was this different from the reality?

"The students were a lot more responsive than I'd thought they'd be. It was obvious that they had been listening during the talk and found aspects of it interesting. I got a particularly good response after showing them some of the images I had brought with me of the giant particle detectors, it really seemed to spark their interest. I think being able to view images related to what I was talking about helped them to better understand the concepts I was trying to get across."

Highlight of the project?

"I mostly enjoyed the question and answer sessions because that's when you got to interact with students and field their questions. They often asked questions I wasn't expecting, but I did my best to give a suitable response! At times, they seemed more interested in my life as a researcher than the work I was actually doing."

Best thing about being a researcher in residence?

"Feeling like I made a difference in some small way. Though it sounds a bit cheesy, I did want to inspire the students into pursuing further education and, ultimately, a career in science. I'd like to think the time I spent with them helped, in some way, to rouse their interest in science."

What did you learn/get out of the experience?

"Children are the harshest critics, so it was helpful for me to test what worked well in the talks and what needed adjusting. Presenting my research in layman's terms for the students to understand is not widely different from how I would need to present it to the general public. Therefore, the placement was really helpful in that it gave me the opportunity to practise public speaking."

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

"I'm in the final year of my research, completing my doctorate in particle physics. I haven't yet decided what I'd like to do career wise when I finish my course, but am open to taking part in more outreach activities with schools in the future."

Would you recommend Researchers in Residence to a fellow researcher?

"Most definitely, I feel science and scientists themselves are often portrayed poorly in the media, giving the general public an inaccurate impression of who we are and what we do. As such, students don't view a career in science as an exciting prospect. I think taking part in Researchers in Residence is a good way of helping to address this misconception and change attitudes."

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.

RESEARCH COUNCILS UK

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Apply online today at **www.researchersinresidence.ac.uk** or call **0845 365 7470**