



STEM Ambassador profile

TALITHA SMITH CLINICAL SCIENTIST



? What do you do?

“ I am a medical physicist, currently working towards registration as a clinical scientist in radiotherapy. Radiotherapy involves treating patients, usually cancer patients, with radiation which is used to kill the tumour.

I do a lot of different things as part of my job, including performing tests and measurements on the treatment machines, creating and checking treatment plans, and working on research projects with colleagues from a range of disciplines. I also help to educate the department's radiographers and clinicians about the physical principles behind radiation, and radiation safety.



? How did you get to where you are today?

“ I studied Maths, Further Maths and Physics at A-level, and went on to do an undergraduate Masters in Maths and Physics at Durham University. Durham doesn't have any medical physics options, so I wasn't really aware of its existence until just before I graduated, when I saw an advert for the NHS medical physics training scheme. I took a year out between university and starting my job, which I used to find out about the options available. I was also able to visit or do work experience in three different hospitals in this time, which I found really useful in showing me the broad range of work available in medical physics. It also gave me something to talk about when I was applying for the training scheme.

? What advice would you give to someone studying STEM subjects?

“ Don't be put off by people telling you something is 'hard'! Everyone has this idea that maths is 'hard', and that some people are just 'no good at it'. While it's true that some people have more aptitude for certain subjects than others, just because you don't find something easy doesn't mean that you can't really shine at it. I certainly wouldn't say that either maths or physics were easy: it takes a lot of hard work to understand and apply the complex principles behind each. But it's always achievable, and for me, the hard work is definitely worth it, especially when applied to something as literally life-changing as cancer treatment.



? What activities would you like to support?

“ I helped to staff the Institute of Medical Physics and Engineering stand at the Society for Radiation Protection's school's event in Harrogate in earlier this year. This involved coming up with activities to show GCSE-age pupils what the career of a medical physicist involves, and why it's such an important and interesting career.

I've also helped out at one of the Institute of Physics' 'Physics in the Field' events, where I got primary school kids involved in some of the 'Marvin & Milo' experiments. I particularly enjoyed this, as participating in an organised series of events such as this means that you don't need to have all the ideas yourself, you can just turn up and concentrate on sharing your enthusiasm for science with younger children.

How your school can access STEM Ambassadors

We work with schools so that you can access our database of **FREE** STEM Ambassador volunteers, enabling you to incorporate exemplary links to the world of work within your teaching. Each STEM Ambassador has a STEM background – they are usually experts or professionals in their field.

All of our STEM Ambassadors have also undergone an enhanced Criminal Records Bureau (CRB) check to enable them to work with young people in school; and they have also attended an induction session with West Yorkshire STEM staff on how to approach classroom and school-based teaching sessions. To request a STEM Ambassador, email us: ambassadors@wystem.co.uk.

