

How higher education institutions engage with the STEM Ambassadors programme



Background: Dr Clara Cieza-Borrella
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The STEM Ambassador relationship

I am a Senior Lecturer in Molecular Biology and Principal Investigator in our Prostate Cancer Biology lab, but I am also quite involved in our STEM outreach work. I became a STEM Ambassador myself in 2017 when I was postdoctoral researcher at the



Dr Clara Cieza-Borrella

Institute of Cancer Research. When I joined St George's University in 2019, I realised that there was nothing formally established at St George's in terms of outreach, so I set up a network here for STEM Ambassadors. I discovered that there were many more than we thought, and we work hard to reach all of them. Our network is well-established now and it consists of students, academics, researchers and staff from professional services.

I became a STEM Ambassador for a range of reasons. I wanted to inspire young people to become researchers in the future, and I wanted to remove all the misconceptions that young people have about how scientists work. I am especially interested in careers advice and in inspiring girls to become scientists themselves – there is such an imbalance in our profession in terms of gender. But mostly, I enjoy it! It is so rewarding. Every time I do an activity, it's like a boost – it cheers me up!

When I started as a STEM Ambassador, I was just a participant – I was getting involved in activities that were taking place. Then I worked with two fellow STEM Ambassadors to organise activities ourselves, and now I co-ordinate our whole network here. That might mean setting up activities, connecting STEM Ambassadors with each other or running online STEM Ambassador network meetings. **We get together once a month to share feedback and experiences on outreach activities that we've run, we plan future sessions and we help each other out.** Sometimes people will request help for programmes that they're running, such as reaching students in disadvantaged areas or increasing the diversity of students on our academic programmes, so they come to me to get ideas about how we can use outreach to deliver these goals.



My journey to becoming a STEM Ambassador – Srishti Balamurugan

I am in my final year of my biomedical science degree at St George's. I remember during careers week someone from the STEM outreach team was talking to us about the STEM Ambassador programme. I thought that it would be nice to volunteer and to try and improve awareness of STEM. **I liked the fact that the programme promotes STEM subjects to younger students and shows them what happens in those subjects and the options that exist beyond medicine and engineering.**

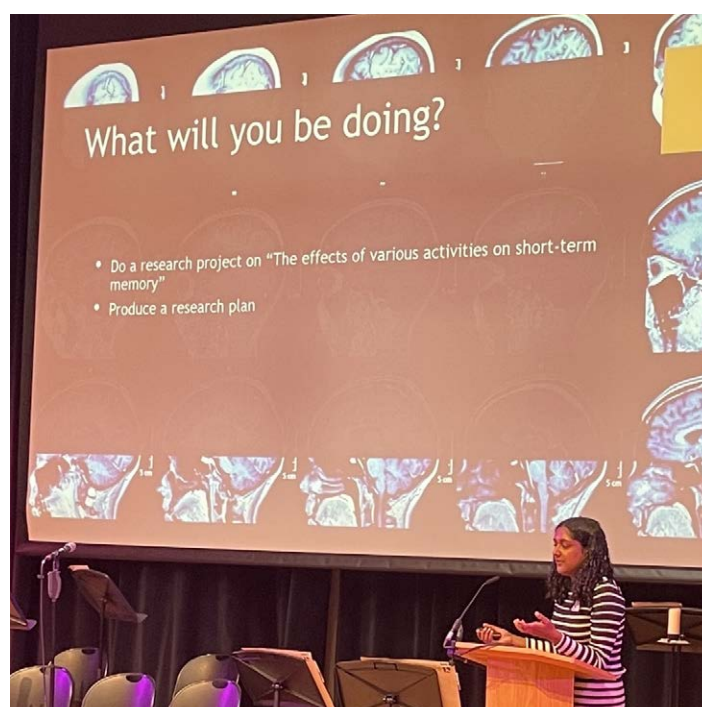
I initially applied to the STEM Ambassador programme by myself as I didn't realise that my university was so involved, but then I saw an advert about their network, so I joined in with them too. We have regular meetings as St George's STEM Ambassadors which are led by some of my lecturers. We take it in turns to share our experiences and the activities that we have run. If we need any help from each other, it's also an opportunity to ask for that. **The best thing that I've done so far with the programme is working with a local school on a STEM project about blood pressure. They were looking for a scientist to work with their Year 7 and 8 students, so it was a great fit for me.**

I had to give a launch talk at the start, which was an opportunity for me to promote biomedical science and my personal journey on my degree, as well as demystifying what it really means to study my subject. Then I went on to introduce the research project, and the lead teacher in the school selected some students who would work on it over the next few months. I have been back on multiple occasions now to help them write a research plan, do various activities about blood pressure and carry out their project. We've done lots of different experiments to see how blood pressure is affected.

At the end of the project, the students had to put together a presentation and a poster showing what they had found out and they came to St George's to present it to some of our lecturers. They also got a tour of our faculty.

The impact of the project was very visible. So many more students, even in just one school, are more aware of what biomedical science is now. The project had a huge impact on their understanding, gave them a chance to put their learning into a practical context and they got a good understanding of research. **It was nice to see young students so enthused about what I love. I didn't know that much about these subjects at their age – I loved seeing their positive attitudes.** We also had lots of feedback from the teacher leading the project. They were happy with how it went and that so many students had the opportunity to participate. They were all so excited to come into the university!

And there have been benefits for me too – I've reached out to new people and I have extended my network. I've made the connection with the school I worked with which was also useful. I've had the chance to talk in front of a huge audience, developing my presentation skills and backing up my scientific knowledge. I'm now doing another similar project!



What is the impact of STEM Ambassadors?

We offer a wide range of degrees here at St George's, so we work hard with our outreach to showcase the institution, to reach our local communities and to go beyond that to schools that are not close to us. As a university we are very diverse and multicultural, and we are the only university in the UK that is based inside a hospital, which gives us amazing connections and opportunities to share.

Our goal is to recruit young people to study here and to inspire them. We do that by sharing our own experiences as much as we can.

It is so beneficial for our students to do STEM outreach. It helps them to develop other skills – the softer skills like communication – which we need when we do public engagement work.

They find that they perform better in their assignments, especially when they do oral presentations – talking to young people and making connections with them helps a lot. They also have the opportunity to make new connections with people within and outside of our institution.

The feedback from our STEM Ambassadors is really good. They enjoy being involved, it is easy to work with schools through the STEM Ambassador platform, and we love hosting teachers here too.

I would like to promote the programme more. The students may not be aware of the UK STEM Ambassador network and being involved is such a great opportunity for their own professional development and their careers. We are working on it!

About STEM Ambassadors

STEM Ambassadors is a fantastic volunteer programme that has been running for over 20 years.

Our volunteers offer their time, passion and energy to visit schools, colleges and youth group organisations to deliver requests from teachers and youth group leaders who want to link STEM subjects to the real world of work.

Find out more at our [information session](#).



Become a partner

Our STEM Ambassadors programme inspires the next generation and helps young people to develop the skills, confidence and mindset to build successful futures in STEM.

By running a STEM volunteer cohort we provide even more opportunities to connect young people to real-life STEM careers, prioritising support for those who need it most.

Find out more at our [information session](#).



How to get involved

If you have been inspired by how STEM Ambassadors support the learning and development of young people across the UK and you'd like to know more, please contact us at employersupport@stem.org.uk or visit stem.org.uk/stem-ambassadors/partner-info

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