



SPONSORED INTERVIEW: ANNA RAFFERTY

# Women In STEM

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Encouraging diversity in the workplace has the potential to “change the trajectory of health for humanity” says **Anna Rafferty**, Director of Strategy at Johnson & Johnson Campus, Ireland. Promoting such representation, particularly in the area of STEM, has been one of the key aims of Johnson & Johnson’s WiSTEM<sup>2</sup>D undergraduate programme since its creation in 2016.

As a leader of this programme, Anna started her career with Johnson & Johnson in 2003 after graduating with a BSc in Biotechnology from the National University of Ireland, Galway, and later a Graduateship in Marketing from the Technological University of Dublin. She is now a central figure in the undergraduate WiSTEM<sup>2</sup>D programme in Ireland.

We spoke to Anna about the about the WiSTEM<sup>2</sup>D programme, the difficulties and challenges faced by women in STEM careers, and what she believes universities can do about it.

### Can you tell us about the programme? How does it work and what is it trying to achieve?

The undergraduate programme is all about inspiring young women to pursue a career in STEM in order to encourage the growth of a workforce that more truthfully reflects and understands the communities and individuals that they are trying to benefit. In this way, we hope to enhance and expand the positive impact that STEM can have on healthcare and so positively alter the trajectory of health for humanity.

It's a high intensity programme run in various universities that provides multiple opportunities for those involved, such as site tours, mentoring, and research. It is quite a selective programme, but our aim is to take on young women with a spark in them rather than basing success on academic grades alone. We believe that it is so important to broaden the accessibility of the programme, and for this reason a bursary is also offered which attempts to reduce economic barriers and allow the participants to truly immerse themselves in the experience.

### What obstacles do you believe women currently face when pursuing a career in STEM?

Stereotypes are a large barrier that many women face, and the site visits that we arrange are incredibly important in tackling this as they allow the young women to challenge these stereotypes, especially the ones that they themselves may have created. Often exceptional women, such as Marie Curie, are promoted as role models for young girls which fosters beliefs and pressures that aren't reflective of what working in STEM is actually like. Many young women believe that if they cannot achieve such expectations, there is no place for them in STEM. We are therefore trying to break down these unrealistic beliefs and encourage self-value among young women.

On a more recent note, I think that women of all socioeconomic backgrounds, particularly those in lower classes, have been adversely affected by the COVID-19 pandemic. Given that approximately 70% of those employed in the Irish healthcare system are female, coupled with the added burden of home life brought about by the pandemic, the pressure of balancing both work and home duties has increased, with many women prioritising the latter. This makes the work that we do even more important to ensure that women feel empowered and valued within the area of STEM.

### What impacts has this programme had to date?

The impact that has meant the most to me by far is the change that I have seen in young women who have participated in the programme, especially concerning their own sense of purpose and potential. Many of them couldn't see a place for themselves within STEM because they believed that they didn't fulfil the requirements expected of a person entering the field. They also weren't attracted to these requirements as they believed that they would have to forfeit aspects of their personal life to achieve them. But when these young women start to meet others like them who are pursuing a career in STEM, they realise the potential that the field has to offer. Bolstering the confidence of the participants through celebrating

their achievements within the programme also has a great impact. The pride and energy you can see in these young women at the very end is incredibly special. It opens the road to them pursuing studies in STEM.

### What can universities do to promote women in STEM?

The network is everything. You know we're always saying make sure to continue to make those connections with your mentor and others in the group. Everyone thinks of networking as being this arduous thing, who wants to do it, but when you get to the point in your career where you realise that networking makes your life easier and you start to enjoy it, then networking becomes much more attractive. Like if you think, if I network here, the chances of me getting a job are much faster and I'll probably get the job I want as opposed to leaving it to chance on career websites of companies like ours where it's very hard to stand out from the crowd. I think the network is one of the most valuable things that you can take away from the program.

### What advice would you give to young women who are unsure of a career in STEM?

We're lucky here in Ireland, the opportunities are plentiful. You can follow whatever road you want to and just because you qualify in microbiology doesn't mean that you have to follow that. Skills are so transferable and it's not just about academic skills but also about on-the-job learning but careers in STEM are really certainly very rewarding.

Also, I think people underestimate how quickly they add value. Sometimes students come on placements to our sites from whatever STEM course they're doing and then at the end of August somebody says: "Oh no, so-and-so is leaving!" And everybody asks: "Where are they going?" Well, she's in third year, she has to go back and finish. So, we're always trying to tell people, you have no idea how quickly you add value.

### Do you have any final advice for women in general?

Those of us involved in the WiSTEM<sup>2</sup>D programme feel strongly that there is no point in just raising awareness about the lack of female representation in STEM because everyone already knows this. Instead, a piece of advice that I was given at the International Women's Forum a couple of years ago is to "be an actor, not an ally". That really struck home with me. I understood then that you have to get out and do something about the issues that you see: meet people, discuss ideas, get eyeball to eyeball with them. That's what women need to do. That's what will make the difference. That's the vision of the WiSTEM<sup>2</sup>D programme.

*To find out more about the WiSTEM<sup>2</sup>D initiative, visit the website at [www.jnj.com/wistem2d](http://www.jnj.com/wistem2d).*

### Declarations

This article is part of a collaboration between Johnson & Johnson and the TSMJ to promote the awareness of professional opportunities for women in STEM. Kristen Andersen and Ava Janes are staff writers on the editorial board of the TSMJ, and were asked to contribute an article to Volume 22. Johnson & Johnson is also a sponsor of the TSMJ Volume 22.