



Healthcare Science Week

Day 1 - New Beginnings & Vision

Welcome to Day 1!

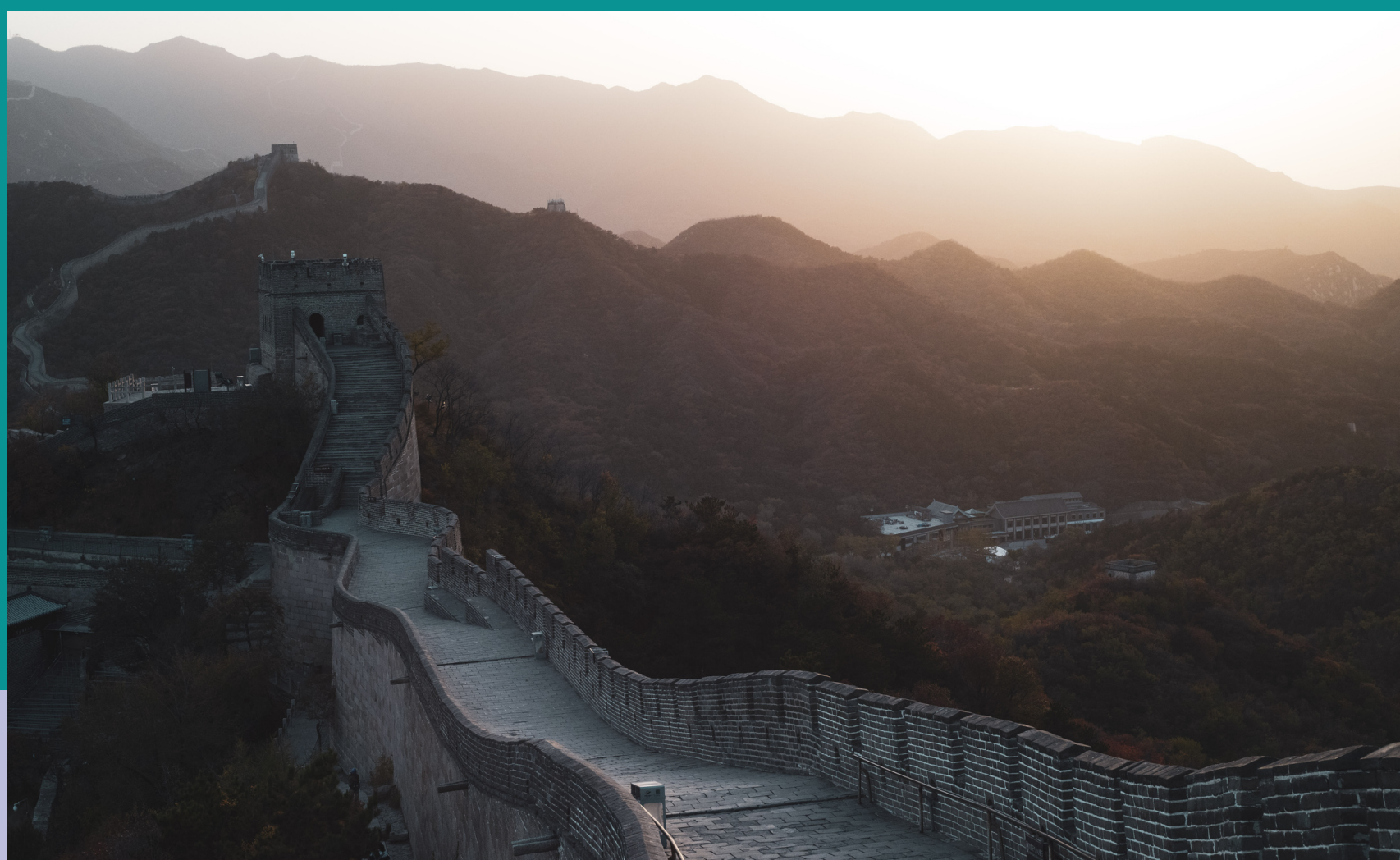
Today we will be focussing on new beginnings in Healthcare Science and vision. We're delighted to share an article from Emma Schierbaum. In her article, Emma talks about the importance of education, some of the amazing work that Bayer UK are doing to support the next generation and ongoing efforts to increase aspirations towards science careers.

Our Head of Standards, Dr. Elaine Jenkins closes the day with some words about Healthcare Science as a career and the vital impact you can make on patients' lives.

Today's inspirational quote

“You don't have to see the whole staircase, just take the first step.”

- Martin Luther King Jr.



Emma Schierbaum

Baylab Manager at Bayer UK |
Educational Outreach, Lab
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Engagement, STEM Ambassador



New beginnings and vision

Whose role is it to educate?

I'm Emma, a Biochemistry and Science teacher at Bayer. I have a passion for science and giving young people opportunities, from exposure to science in action and career choices. But as I think about new beginnings, I can't help but wonder what the future of our next generation will look like and the disparity between young people's education and access to opportunities.

Think back to your school years? Where did your interests and passions for science come from? Perhaps a teacher, parent, family friend? One thing is certain meaningful Science interactions from a young age are vital in creating future scientists and interests in STEM.

In fact, only 16% of young people aspire to be Scientists according to the ASPIRE 2 report (2020).

The reasons why this number is so low is complex, from existing social inequalities such as class, gender and ethnicity, educational factors such as schooling and whether a young person has had opportunities to experience and connect with STEM. Further findings from this report show evidence of this, with students with lower levels of science exposure being statistically less likely to aspire to continue with science.

So how can we help to increase aspiration towards science careers?

A varied approach is needed; from one-on-one interactions, improved careers services within schools and all round more exposure to extracurricular Science opportunities, not to mention reeducating parents on the opportunities that are now available.

The big question for me though is....

How much of a role should Industry play in education?

Ultimately industry drives the need for certain job types; as technology shifts, so do the needs of our skill sets as a nation, but is the curriculum keeping up? And should we be looking at Healthcare and Life Science companies to work more closely with their local schools in order to fulfill their needs for future talent?

In fact, from my own research and having surveyed over 500 teachers, my findings were that 77% agreed there is a significant role for companies working in STEM industries to encourage students to continue with STEM subjects.

A great example of this in the Life Science industry is Bayer, who have a network of educational labs around the world, and back in 2017, I was lucky enough to use my educational and industry background to help set up the UK Baylab, a free state of the art laboratory space designated for students aged 7-18.

Since opening this space, Bayer has engaged with 12,000 students and help to support schools, homeschools, charities and community groups by providing hands on science workshops and work experience opportunities, covering topics from plants, enzymes, genetics and formulation science. This interaction allows access to resources typically not available in schools and helps to increase Science capital in the younger generation.

Feedback from the Baylab's session show students' attitude towards science becoming more positive. For some simply putting on a lab coat is exciting enough but for others these interactions have resulted in them joining work experience, apprenticeships and graduates programmes at Bayer, but most pleasingly, feedback gathered has shown that students with low interest levels in science, go up on average of 5.1 on a 10 point scale. This shows the importance and impact that these interactions can have in helping to inspire and change mindsets, as well as contributing to a future pool of talent for the Life Science industry, and the power to help develop a science literate generation.

Of course, this begs the question, why do more companies not engage on such a level and what can we as individuals in Healthcare and Life Science Industries do to change that?

How can we contribute in supporting students and their “new beginnings”?

As individuals we can all choose to donate some of our time to help support young people, for example, if you haven't considered it before, why not become a STEM Ambassador? STEM Learning UK have a national programme of volunteers up and down the country, working with employers and schools to help support employers to engage with the next generation.

Or perhaps becoming a mentor? Many companies will run mentoring programmes which you can sign up to, all training is provided, and they will match you with a designated young person.

As a company, doing an initiative similar to Bayer's may not be feasible, but there is always more we could do. And quite ironically, this week is British Science Week, so why not use this an opportunity to open a conversation on what you are already doing and what you could do better when it comes to supporting your local schools. For example why not explore offering a Nuffield Placement? Giving the next generation exposure to research experience or look at how you could go into schools at fixed times of the year.

Together we can all add value, if we can part a little bit of wisdom and share our passion for Science, the impact and potential to help create “new beginnings” through exposure to STEM could be life changing.

Want to know more about the Baylab, or becoming a STEM Ambassador or offering a Nuffield placement, check out the following links. [Employers \(stem.org.uk\)](https://www.stem.org.uk)
[Apply as an organisation that could provide a placement | Nuffield Research Placements](https://www.nuffield.ac.uk/research-placements)
www.bayer.co.uk/en/baylab

If you and your children would be interested in attending the Baylab, they frequently hold holiday workshops, further info found here: [Holiday Sessions | Bayer United Kingdom](https://www.bayer.co.uk/en/baylab/holiday-sessions)

“Healthcare Science is a truly remarkable profession which offers such a variety of areas and specialities to go into that cover all aspects of science. If you like science there’s a healthcare science speciality for you! Even more importantly, all of healthcare scientists make a positive impact on patient care. Healthcare scientists **make a difference!** Setting this in a context of rapidly developing technologies, healthcare science is a leading-edge profession which needs the next generation to carry on the mantle of innovation and improving patient care.”



Dr Elaine Jenkins

Head of Standards, AHCS

Stay tuned to read more articles from some of our amazing Healthcare Scientist.

Tomorrow, we focus on trainees, the importance of training and motivation!

