



Young Gifted and STEM Profile – Who Am I?

Dr Anjana Khatwa – UK

1. Who are you and what is your STEM Superpower?

I am Dr Anjana Khatwa and I am an Earth Scientist. My STEM superpower is the ability to turn a piece of rock or a fossil into a handheld time machine and take you back hundreds of millions of years to discover what the Earth used to be like!

2. When did you first realise you were passionate about your STEM subject or field?

I was about 8 years old when I really started to take an interest in Science. It was a topic on Space that I was learning in Primary school that really let my imagination take flight. Later when I was about 13 years old, I was on holiday in Kenya visiting an ancient lava field where I totally became inspired by the rocks I was walking over. In that moment I wanted to spend my life studying and understanding the Earth and its landscapes.

3. Describe the route you took, which lead from finishing your GCSEs until now.

I passed 8 GCSE's and then studied 3 A-Levels; Geography, Art and Psychology. I then went onto gain a BSc. in Earth Science and a PhD in Geography. My PhD focused on whether soft, squishy sediments under large glaciers and ice sheets deformed, causing them to flow faster and thus contribute towards rising sea levels.

After completing my Ph.D., I spent 4 years in the USA working on several postdoctoral research projects ranging from working on the West Antarctic Ice Sheet to modelling nuclear waste flow through earthquake zones! I also spent 2 years working for the US National Park Service where I learnt all about science communication and conservation. Inspired by this experience, I then moved back to the UK where I spent 15 years developing and managing an education programme for the *Jurassic Coast World Heritage Site*.

I am now moving onto a new public engagement and learning role working for Carey's Secret Garden, an environmental education space which is a subsidiary project of *LUSH Cosmetics*. I will be developing social, environmental and cultural regeneration learning programmes that will help audiences of all ages prepare for an uncertain future in the face of the Climate Change Emergency.

4. If you had to study/focus on ONE STEM area for the rest of your career what would it be and why?

Geomorphology, the formation and evolution of landforms. From the formation of sand dunes to the migration of rivers, I am utterly fascinated by how nature finds a way to manage itself without the need for human intervention.

5. What do you enjoy most about your day to day role?

I am most passionate about engaging people of all ages with stories that reveal the hidden mysteries of the Earth and its landscapes. I enjoy creating activities and learning content that enables audiences to feel a connection with nature. I also work as a writer and TV presenter, so it is always a challenge to make Earth Sciences relevant, fun and accessible!



Dr Anjana creating Indian henna from embedded fossilised rock!

6. Who would name as your main STEMspiration and why?

Mary Anning! She was a woman who struggled to overcome so many obstacles and barriers in order to be recognised for her expertise and knowledge in palaeontology. Only 200 years later are we now realising her incredible contribution to science. I am a Patron of the Mary Anning Rocks campaign to build a statue in her honour where she lived and worked in Lyme Regis.

7. Outside of STEM, what are your other hobbies?

I am a very busy mum to three children so much of my time is spent making sure they have lunch, clean clothes and get to their clubs on time! I love to run and have completed 4 half marathons which I am very proud of. I also went to some sewing classes recently where I learnt dressmaking skills and I am a very keen baker of delicious cakes! I have a soft spot for fashion magazines and my latest crush is binge watching 'Next in Fashion' on Netflix!!

8. Lastly, if you could give our Young Gifted and STEM readers one piece of advice, what would it be?

A career in science is an adventure you will never forget or regret. At times it will be tough, you might feel out of place or a bit of an imposter – but never forget what brought you there in the first place. Remember your passion for the subject, your self-belief and your own power – take ownership of all those things and you will go far!

