

A love letter to science

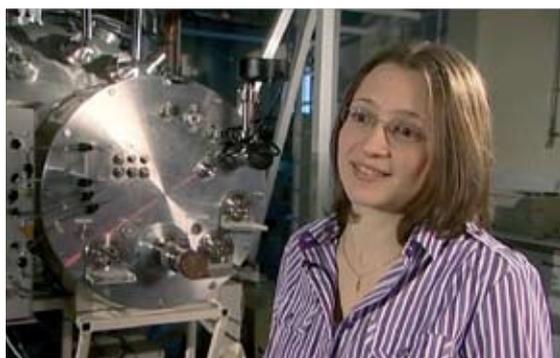
“science, like art, surprises,
delights and moves us”
— Michael de Podesta



Why study science? Why become a scientist? Alom Shaha, a science teacher and film maker, felt that his students needed an answer to these questions, so he set about making a film which would show many of the different answers people give to these questions.

For my film, I interviewed high profile scientists, writers and teachers. I also started up a blog, which very quickly took on a life of its own - people from all over the world were coming forward to contribute with their answers to the question “Why is science important?”

Over the course of about 6 months, I collected close to 100 responses in the form of essays, video clips and even a couple of comic strips.



Elaine Greaney, rocket scientist

The most bizarre answer had to be from Mark Miodownik, who argued in a video clip that “science is your mum” – you really have to go and watch his video if you want to understand this. I really loved the response from Maya Hawes, a 12 year old student of mine, who eloquently explains why science is “*not only about blowing up things and making potions*”, that it’s about finding cures for diseases, inventing new technology and ultimately, “*because we want to answer unanswered questions.*”

Science and technology

As the project developed, it was clear that most of the responses fell in to a few broad categories. The first category of response to stand out was one in which people explain how science has given us the technological world we live in. This response is typified by Jacob Aron who wrote: “*Without science, you would not be reading this. Without science, there would be no computers, no internet, and no blogging.*” Dr Chris Langley chose to respond to this type of argument with a video in which he asked us to consider whether it was the best use of science to be developing new mp3 players and jet planes when there were other, perhaps more pressing, needs to be met by technology.



Chris Langley, Scientists for Global Responsibility

Another type of response which emerged early on in the project, was the importance of science for the environment. Rosie Coates, a chemist at University College London (and a former student

of mine), made a video in which she showed her favourite chemistry demonstration, involving a 'giant technicolour test-tube' and used it to explain how science can provide us with useful knowledge about our environment. Dr Rhian Salmon wrote passionately about the role of science in tackling climate change and argued that *"without science, we wouldn't know where to start tackling this huge issue"*.

The importance of science in medicine was emphasized by a number of contributors. Robin Weiss, Professor of Viral Oncology at University College London, spoke eloquently about the role science has played in the history of medicine and how it must continue to pervade all medicine today. Kat Arney, Science Information Officer at Cancer Research UK, stated simply that *"Science tells us whether a treatment actually works or not."*



Robin Weiss, cancer scientist

A number of people emphasized the importance of science in a democracy – Martin Robbins, a science blogger, wrote, *"An understanding of science is vital to an understanding of politics"* and that *"Effective democracy depends on it"*.

Getting to the truth

The most common responses to the question "Why is science important?" related to science as a way of thinking, as a way of looking at the world or, to state it more strongly, as a way of "arriving at truths about the Universe". Dr Susan Blackmore, a psychologist, stated that *"Truth is better than illusion...other claims...prevent people from using their natural curiosity to find out how things really are."*



Susan Blackmore, psychologist



Gillian Dalglish, DNA researcher

Simon Singh, science writer and particle physicist, wrote: *"Being curious and addressing scientific questions is what makes us human."*

Finally, my favourite response was from Dr Michael de Podesta, a former teacher of mine and a physicist at the UK's National Physical Laboratory, who went out on a limb and declared that *"Science is humanity's greatest achievement."* I can't help but agree with him.

Working on this project was exhausting but it has been worth it. The website has become a kind of joint love letter to science and I hope it's one that is read by students all over the world.

Alom Shaha is a science teacher and film maker, based in London.



Adam Hart-Davis, inventor and film-maker



Look here!

You can watch Alom's film and read the blog at www.whyscience.co.uk

What do you think?

The people who responded to Alom's blog had a variety of ideas about the value of science. They didn't all agree with one another.

Today, many people blame science for problems such as climate change and over-use of resources. Where do you stand?