

Emily Charlton Immunologist



Hi there! I am Emily Charlton – An immunologist



Where do I work?

I work at the Roslin Institute where they do a lot of animal science. It is just south of Edinburgh and is surrounded by beautiful countryside.

What did I like doing when I was at school?

I really enjoyed creative writing and making up stories. I liked drawing pictures to go with my stories and acting in school plays.

What do I like doing in my spare time?

I enjoy crafts, especially scrapbooking, sewing, and making cards. I like reading books, going on walks in the country, and playing games with my brother and sister.

What do I do as an immunologist?

I am interested in a germ that makes cows sick. I am trying to find out how a cow's immune cells fight this germ. Immunologists also make vaccines to stop you getting ill and they find ways to treat allergies.



How does what I do make the world a better place?

My work may help us to learn why some cows get ill and others do not. It may help us to find new ways to prevent or treat the disease. This is important for humans as well as cows because it is currently very expensive to control this disease.

What I like about my job



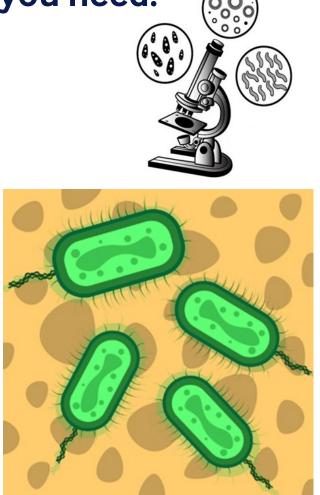
Germs and immune cells are too small to see with your eyes alone, and I love using a microscope to see them. It is very exciting to watch germs and immune cells 'fighting' under the microscope! I take photos of them to show other scientists.

Challenges I have faced

I did not always enjoy science. I had an uninspiring science teacher at school and I never thought that I would become a scientist! But then we had a different teacher who was very enthusiastic, and I grew to love science.

If you want to be an immunologist, you need:

- * to be good at observing closely.
 When you look under the microscope you must notice little details (it is a bit like playing spot the difference!)
- to be good at taking photos so that other people can see what you have found under the microscope
- to be interested in how immune cells protect us from getting ill
- to be imaginative so that when experiments go wrong, you can think of other ways of doing things



Discussion time

 Would you like to be an immunologist like Emily Charlton?
 Why? Why not?



- What skills and interests do you already have that would help you become an immunologist?
- What new skills and knowledge would you need to develop?

Free supporting resources for immunology

<u>Science at Work</u> – see 'Meet two doctors', a chance to meet a viral immunologist and a hospital doctor.

<u>I bet you didn't know...</u> articles use cutting-edge science research as a context for learning. Teacher Guides describing the research and activities and investigations for children can be used as classroom presentations. These articles explain more about microbes:

- Dragons could save us from bad bacteria
- Catching flu might depend on the type of place in which you live
- Bacteria get viral infections as well

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