

Dr Grace Roberts Virologist



Hi there! I am Dr Grace Roberts - a virologist



Where do I work?

I work in a laboratory at Queen's University Belfast where I research viruses and how they might cause asthma.

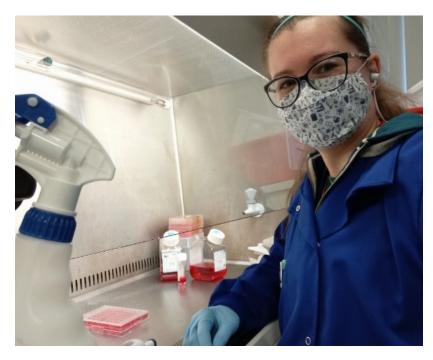
What did I like doing when I was at school?

I liked most subjects at school, especially maths, music, history, and science. Because I liked everything it was hard to choose what to do!

What do I like doing in my spare time?

I play the guitar and ukele. I also do a lot of running. I am part of a running club and do lots of races – I've done triathlons too!

What do I do as a virologist?



Some scientists think that virus infections can affect lung development and cause things like asthma – we are trying to find out whether this is true. I use lung cells donated by children and develop them into mini-lungs in the lab. I then infect these cells with viruses and see how they respond differently.

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

If we are able to predict who will develop lung conditions like asthma, we can develop treatments to prevent it from happening.

What I like about my job

As a scientist, every experiment we do, is one that no one has done before, so everything we find out is brand new! I really like working in biology-based, medical research as I feel it will have a direct impact on people's lives. I also love working with microscopes!



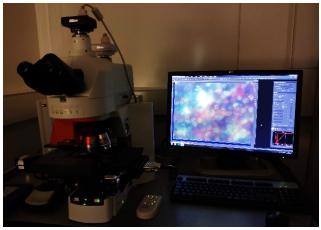
Challenges I have faced

I grew up in a working class family and my school didn't give me much information about jobs or university. I had to find out so much for myself! I'd never heard of virology until I visited a university when I was seventeen.

If you want to be a virologist, you need:

- to be interested in biology,chemistry or medicine
- **to be creative** designing experiments often requires thinking outside the box!
- to be willing to keep learning as science constantly progresses and new techniques are developed.
- * to work with others –biologists often work as parts of bigger teams e.g. other scientists, doctors and nurses, and technicians.





Discussion time

 Would you like to be a virologist like Dr Grace Roberts?
Why? Why not?



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

Free supporting resources for virology

<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:

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



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