

Dr Richa Sharma Bio-technologist



Hi there! I am Dr Richa Sharma – a bio-technologist



Where do I work?

I started my research work in India, where I worked on food biotechnology. Now I work at the University of Edinburgh, researching solutions for the treatment of diseases.

What did I like doing when I was at school?

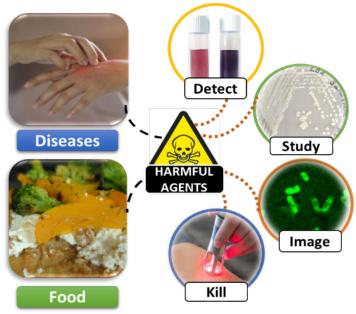
I enjoyed biology, maths, literature and science practical in school. With my friends, I had fun solving puzzles and playing outdoor games.

What do I like doing in my spare time?

I love sketching, painting and creating crafts from recycled materials. I also enjoy reading fiction and watching movies. I am trained in Indian Classical Dance forms and enjoy travelling.

What do I do as a bio-technologist?

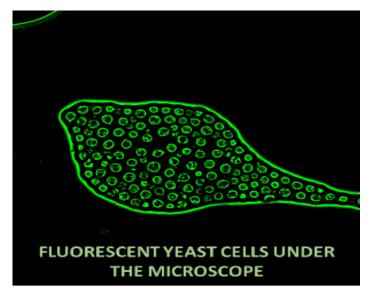
I work on biological ideas to treat diseases - to 'see' and kill germs that infect our bodies and cause disease. I have also developed some biological techniques to find out if there are poisonous materials in foods, so that we can be warned beforehand.



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

Quick ways to find harmful germs in the body can help the patient get early treatment and recover. I am hoping my research will help treat patients without them requiring lots of pills or surgery. If food materials are safer, many food-based diseases will be prevented.

What I like about my job



The best part of being a biology expert is that you can see and explain how living beings around us eat, grow, fight, reproduce and die. You can use this knowledge to control and study them in the lab. It is thrilling to see colourful chemistry and throbbing tiny bacteria!

Challenges I have faced

Coming from a highly populated country like India, I always faced huge competition for any position. But I am glad I got to where I am after all my struggles.

If you want to be a bio-technologist, you need:

- * a keen eye Look around you. Can you spot tiny grubs? How do they eat and move?
- * to question everyday things Why do glow worms glow? How do poplars pump water up so high?
- * to think of ideas about how nature can help us Fallen leaves and rubbish vanish into the soil! That's because of moulds and bacteria. Can we make plastic waste vanish too?





Discussion time

* Would you like to be a bio-technologist like Dr Richa Sharma?

Why? Why not?



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

Free supporting resources for bio-technology

<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. See:

- Blood tests could detect cancers
- Dragons could save us from bad bacteria
- Bacteria get viral infections as well
- How to grow a new skin

