Scientist in the Spotlight



Izuchika Nduka
Cancer PhD Researcher

Izuchika Nduka is a Nigerian cancer researcher currently pursuing a PhD at the University of Salford. She studied pharmacy at university for her undergraduate degree, followed by a masters in drug delivery. Pharmacy is the study of the preparation and dispensing of drugs and drug delivery is the study of how best to ensure that drugs target the right parts of the body. This is important for ensuring that drugs have the **desired** effect and are not harmful to the body. This brings together areas of chemistry and biology and chemical calculations in quantitative chemistry are crucial to ensure that dosages are correct. Her current research combines organic chemistry, **nanotechnology** and cell biology. She is passionate about developing new techniques to treat diseases, ever since she lost a loved one to cancer as a young girl.

According to Izuchika, a good scientist should be curious, patient, hard-working and willing to **persevere** through hard times with a "can do" attitude. She believes that the **formative** period of her life in Nigeria had equipped her with a mental **resilience** that is very useful to her in solving problems.

Izuchika is currently working on developing a new drug delivery carrier -- the material that is used to release the drug into a patient's system. This new carrier will be used to treat specific kinds of cancer in children. The development of such materials requires knowledge of many subject areas, which is why her PhD involves the study of so many branches of science. Much of her day is usually spent testing different substances and monitoring their effects, before presenting the results in research papers.

Izuchika is also passionate about diversity in science. She aspires to explore new ways to create opportunities for women from under-represented communities and backgrounds so that they can pursue careers in science too.

This researcher is a bit of a daredevil and the top-most item on her bucket list is skydiving. She also believes that it is very important for PhD researchers to maintain work-life balance.

Activity

Use the scientist's profile to answer the following questions:

1. What is the scientist's job?

2. Briefly describe what the scientist does in a typical day.

3. What skills do they need for this job?

4. What do you think is the most interesting part of their job?

5. Describe how this job links with the science you have learned in this unit

6. State the definition of any words in **bold** from the scientist's answers.

Science Mastery

Scientist Fact File

Skills Needed for this job: 1. 2. 3. 4. 5.	Describe this job in your own words:
Similarities between this scientist and you:	Your opinion of this job:
+ -	Additional notes: