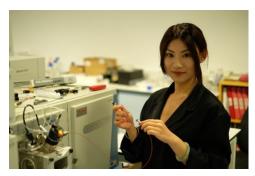


Candy Jiang
Analytical chemist



Hi there! I am Candy Jiang – An analytical chemist



Where do I work?

I work in the chemistry department at the University of Bristol.

What did I like doing when I was at school?

I loved many things including creative writing and participating in science projects. My passion for promoting a sustainable environment motivated me to do a chemistry degree.

What do I like doing in my spare time?

I volunteer for a women's charity in Bristol, helping people with issues like mental health and domestic violence. I also enjoy long walks with my dogs, playing games and reading.

What do I do as an analytical chemist?



My research is about natural products. I study what makes up chemicals like antibiotics or proteins, and I try to identify other related substances. Analytical chemists work in areas such as drug discovery, food safety, and environmental monitoring.

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

The antibiotic that I am studying has been shown to kill breast cancer cells. Other chemicals in my research help to prevent common heart diseases and dementia. By understanding more about these, we contribute to better healthcare for everyone.

What I like about my job

The best thing about my job is working with a team. Being surrounded by other inspiring scientists, we often come up with ideas and design new experiments together. There is a lot of problem solving involved and working as a group helps with this.



Challenges I have faced

Where I come from, the assumption and culture is that girls should be expected to achieve less than boys. By working hard towards my goal, I overcame a lot of stereotypes and showed that you could achieve anything as long as you work for it.

If you want to be an analytical chemist, you need:

- * to **be curious.** It all starts with asking questions
- * to **be interested in nature**.

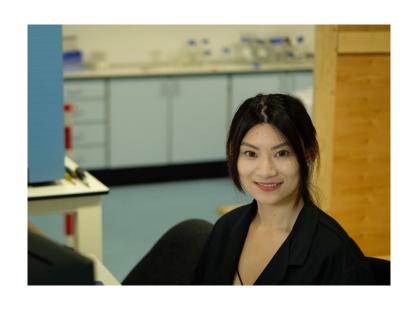
 Surprisingly, a lot of the drugs
 discovered originate from nature
- * to **love to read.** Reading is very important so you learn about what others have done so far
- * to care about the world. Many of the things we do are driven by making the world a better place



Discussion time

* Would you like to be an analytical chemist like Candy Jiang?

Why? Why not?



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

Free supporting resources for analytical chemistry

<u>Starters for science</u> – see 'Paper flowers' and 'Colourful ink'

<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
- Slug slime might be the answer for medical adhesives
- The disastrous effects of historical ink



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