

### Name:

Hilary Browne

### Job:

Research Scientist at the Wellcome Sanger Institute

### What do I do?

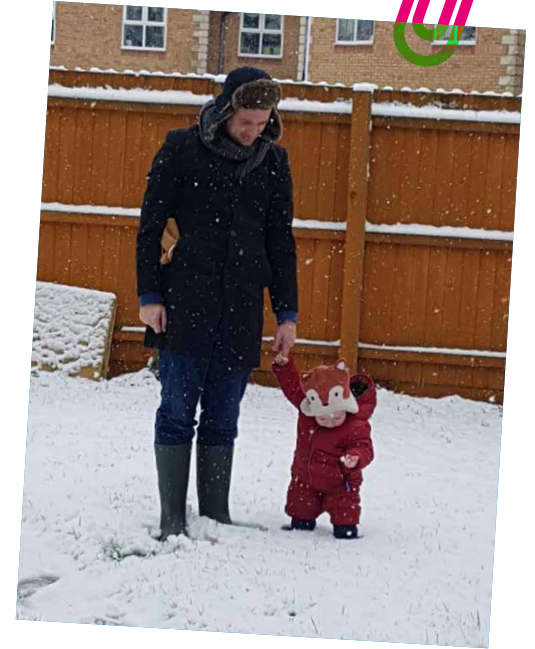
I study the bacteria that live in your gut. These bacteria help keep you healthy. All the food you cannot digest turns into poo and some of these bacteria end up in poo as well- so I use poo to study these bacteria!

### Me in 3 (three words to describe me)

- Friendly
- Open minded
- Determined

### Fascinating facts about me

I am Irish and left-handed. Apart from Ireland and England I have also lived in Japan and Australia. I used to play hurling (a popular sport in Ireland) and hockey.



## Skills I use in my job:



**Teamwork** – I do a lot of experiments in my work, which don't work a lot of the time! So I spend a lot of time working with other people in my team trying to make these experiments work



**Organisation** – Working in the lab you need to be organised and tidy otherwise your work space gets cluttered and that can affect your experiments

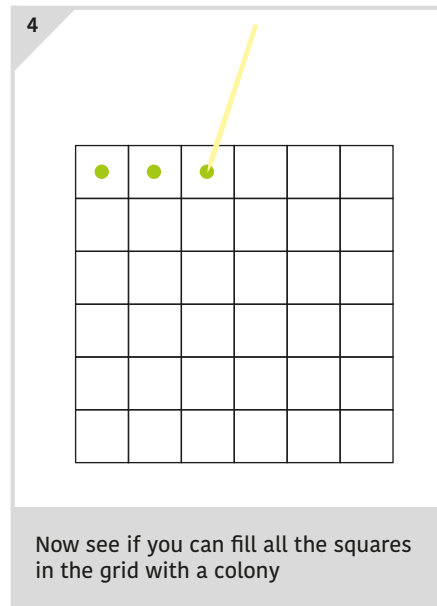
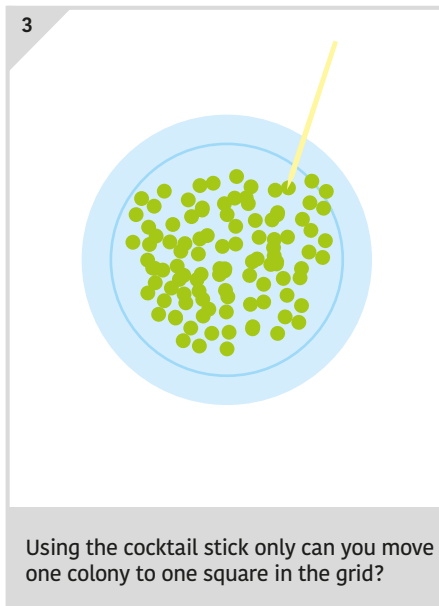
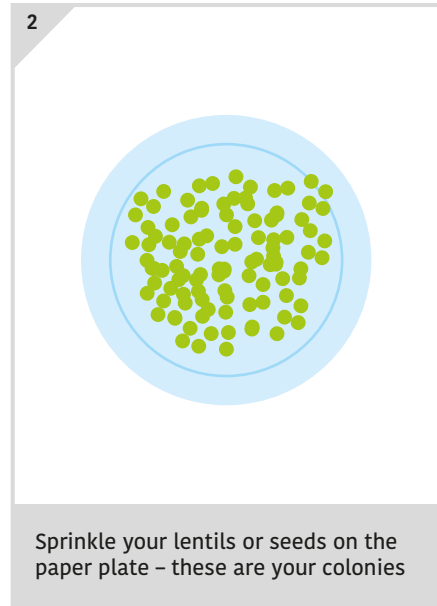
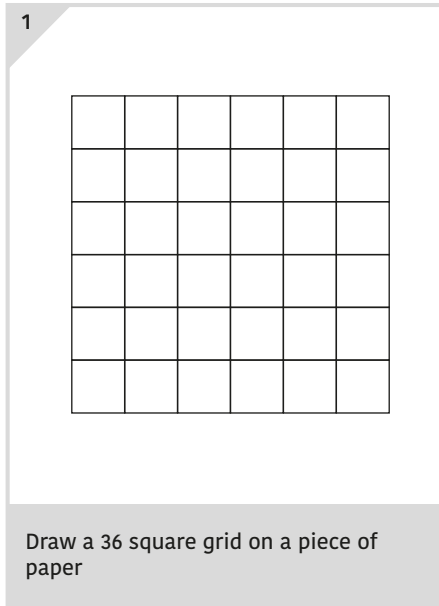


**Concentration** – I work with bacteria that die if they come into contact with oxygen, so I have to work in a special hood that pumps in special gases to keep them alive. I have to concentrate to make sure I am doing all the steps correctly and not letting any air in otherwise the bacteria will die



**Analytical** – Part of my job involves analysing data and seeing how related bacteria are to one another, some of the bacteria we find have never been studied before!





Remember you can't use your fingers to get the colony off the cocktail stick!

## Can you pick a colony?

We grow bacteria on agar plates, so that we can study them. The agar is a jelly-like substance that contains all the things needed to make the bacteria grow. Bacteria grow in colonies, which look like little bumps on the surface of the agar plate.

To study bacteria we need to pick the colonies one at a time and move them to a square dish with holes in. This can be tricky and you need good co-ordination and concentration.

Try yourself - all you need is:

- a paper plate
- a cocktail stick
- a sheet of paper with a grid of 36 squares (6x6) drawn on it
- some lentils (soaked in water beforehand) or sesame seeds