

# Henry – Medical Researcher

- I research small machines that can be put into your body to help you. These are called 'implants'. I work on implants which connect with the muscles and nerves and can be used to help people with movement problems to move more easily.
- I have found a new, quicker, way to make implants with small computers inside.
- For my job I have to wear protective clothing to make sure my hair or flakes of skin don't get into the implants and break them.
- I design science experiments to test the implants and I use maths too.
- I enjoy cycling and going camping with friends



## Maitrei – Computer Researcher

- Although I am not a medical doctor, I use computers, science and maths to help doctors so that they can treat people who are ill and help them get better.
- I use computers to find out if someone's brain is unwell and to decide how to treat it.
- Computers can look at lots of information about people and can spot patterns which help doctors to decide how to treat people when they are ill.
- I use science skills like communication, problem solving and teamwork.
- I loved computers, science & history when I was at school.
- I love to read and take photographs when I am not researching.



#### Girish – Medicines Researcher

- Cells are small parts of all living things, including humans, animals and plants. I research how to grow cells in a lab.
- When a person is ill, chemicals made by the cells in their body help fight off the illness. We can use cells made in the lab to produce the same chemicals that a healthy body makes and these can be used to treat people when they are ill.
- Some of the methods I used have helped to discover new Covid-19 vaccines
- I have been a researcher for 40 years
- I liked doing science at school, especially biology which is about studying plants and animals



#### Paul – Medicines Researcher

- I work in research to develop new medicines.
- At the moment, I'm working on an experiment to test a vaccine to treat Crohn's Disease which affects the digestive system.
- Doing tests for vaccines is important to find out how well they help people stay healthy.
- I need to read lots as part of my research and have good focus and attention to detail.
- My favourite subjects at school were biology and English.
- My hobbies include writing and making up stories! I'm also a published author and my books have been translated into Chinese, Korean and Dutch!



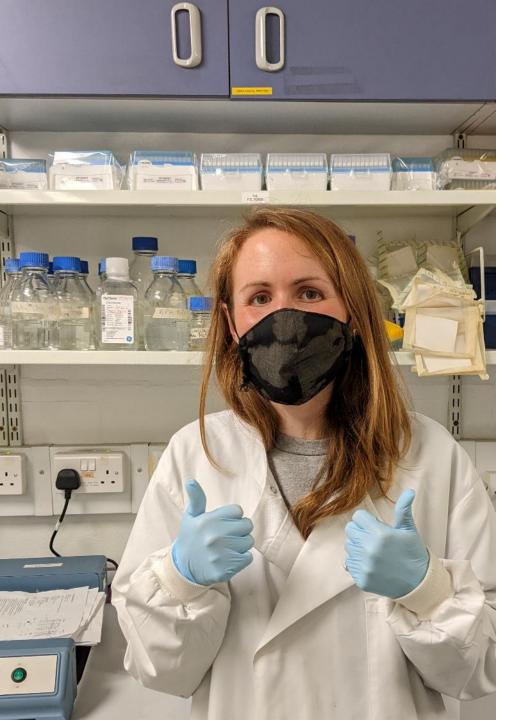
#### Kate – Medical Researcher

- I work in London doing medical research. I do experiments to try
  to find the best treatments for patients with cells in their body
  which aren't growing normally (these are called tumours). We are
  trying to find out if patients can have treatments for their tumours
  without having surgery.
- I was a doctor for many years and then became a researcher.
- I talk to lots of patients and use my medical knowledge to treat them. Doing trials involves lots of maths, for example using percentages, tables and graphs.
- My favourite subject at school was science especially two parts which were biology (finding out about living things) and physics (finding out how the world works).
- I like to hang out with my kids. My favourite sport is skiing.



## Luca – Space Researcher

- I research the space between the Sun and the Earth in particular the solar wind, a flow of tiny particles blowing away from the Sun that can travel 3000 times faster than a plane.
- These particles can reach the Earth and cause spectacular light shows in the sky (called auroras or northern lights) but also damage to our technology (for example, airplanes and satellites) and our health. This is why understanding how these particles behave is extremely important!
- I look at how these particles travel in Space by using advanced supercomputers located all around the world. These have the same power as millions of desktop computers connected together! I also use observations and measurements made by the latest space missions.
- I work with scientists from all around the world and I travel a lot to present the results of my research at international meetings.
- In my spare time, I love cooking, travelling, and watching cartoons, Japanese anime, and superhero movies.



#### Hannah – Medical Researcher

- I research the team of tiny cells inside our bodies, called the "immune system", which work together to fight off germs like Coronavirus, and bacteria that make us sick.
- Some children become sick because their immune system gets confused, and instead of fighting just the nasty germs, it start fighting healthy parts of the body. I want to find out why this happens so we can stop it in the future.
- I also compare immune systems from girls and boys, to help us understand why
  girls might be more likely to develop some types of diseases, and boys more
  likely to develop others.
- I work in the lab on experiments using a microscope and other machines to look closely at the tiny immune system teams in our blood. I record my results so that other scientists can help me to work out what they might mean. I also do presentations about my results to scientists in other countries, so that we can share our ideas.
- I didn't actually like science in school! I much preferred art and English. This was because I didn't think I was very good at science, and I didn't know yet about all the cool types of science there are.
- In my spare time, I like drawing and painting- I think being able to closely observe things is a good skill as a scientist!



### Mackenzie – Computer Researcher

- I do research with computers and coding. I research how computers can spot patterns and make decisions in the way humans do. This is called 'Artificial Intelligence'.
- When people make decisions, sometimes without knowing it, they make unfair decisions. I'm trying to work out how computers can make decisions that are fair – even if it is humans that are programming them.
- I use lots of science skills in my research, like reading, writing, coding and communication skills.
- I run, swim, listen to music and walk dogs in my spare time.
- I'm American, but I live and work in London now. My research has taken me all over the world so I've been to Germany, Austria and Cyprus too.



## Robert – Brain Researcher

- I do research to find out how connections form in the brain. I look at the brains of fish to try to find out how brains grow and this could help people understand conditions such as Autism or Epilepsy better in the future. There are still lots of things we want to find out about how brains work.
- I do my research with a group of other people and we all have to use science skills like using equipment (we look through big microscopes), making observations, communicating with each other and writing down what we've found out.
- I liked sports when I was at school and still enjoy running, cycling and playing volleyball. When used to work in California in America I went surfing before going to work in the morning.



### Liz – Science Researcher

- I work at a Government Research Centre in London where we try to make sure that people in the UK are kept safe and healthy.
- I research a form of energy called radiation. Light, heat and X-rays are all types of radiation
  which you might have heard of. Radiation can also be used to treat people when they are ill
  but some types of radiation can be dangerous so we need to research it so we can know
  more about it and keep people safe.
- I work with other scientists from all over the world to use the things we find out to make laws so that people don't get hurt by radiation and we also give advice to people so that they know how to use radiation in the safest possible way. I am proud that I helped to change the law to protect people working with radiation.
- I use all sorts of different skills but communication skills is really important as I talk to lots of different people including other scientists and the general public.
- My favourite subjects at school were... all of them! I loved learning new things, so I chose science because I wanted to keep learning through my whole life.
- I love camping, cooking (and eating) and spending time with my children and lovely dog.



#### Lisa – Police Researcher

- I work for the Metropolitan Police in London, and I research how we can use science to help solve crime.
- I find out the best ways to work out who was at a crime scene from the clues. The clues could be fingerprints, footprints, clothes or hair left behind. When we collect all the clues, we then have to find out from them who they belong to. I research new ways to do this as quickly as possible and without making any mistakes.
- Communication is really important. I have to give information to other people who work in the Police and people outside the Police who are science experts. I also have to ask questions to make sure I have the right information.
- I like painting and drawing, and I have a dog a cocker spaniel called Nessa.
- Did you know that all people have different fingerprints, but also so do all monkeys!



#### Folake – Medicines Researcher

- I do research to discover new medicines to treat cancer and help people who get cancer to live happier and healthier lives. (Cancer is a disease that some people get which can make them very sick).
- We have found some new medicines that, when we test them in a laboratory, look like they could help those with cancer but we still need to do lots more work to see if they work for humans and are safe to use.
- In my job I have to design experiments to test these medicines. I
  make predictions about what might happen when we treat people
  with the medicines and I have to observe and measure what does
  actually happen.
- When I'm not working, I like travelling to different countries, taking photos and running as well.



#### Camilla – Materials Researcher

- I research special materials that are a bit like jelly. This jelly has some similarities to the human body so is a good place to study what happens when cells (tiny parts of every human) grow.
- I use machines called microscopes (like in the picture) which help me see very tiny details of cells growing in the jelly material. We can also test different medicines on the cells. To see if the medicines work, we take pictures with the microscope.
- I use lots of observation skills in my research and it is very important for me to record the information that I observe.
- I also speak 5 different languages Italian, English, French, German and Spanish!



## Ru – Plastics Researcher

- I research how tiny bacteria can break down plastics. This could help to protect our environment.
- I have found some bacteria that can break down the most commonly used plastic in food packaging.
- I work at a university in London. love working there as I get to work in a team of people from all over the world. Everyone has different experiences and skills and so there is always something new to learn.
- I enjoyed drama and music at school and I didn't like science but when
   I started working in a laboratory I started to really enjoy it.
- I play the violin and other instruments and I support Leyton Orient Football Club.



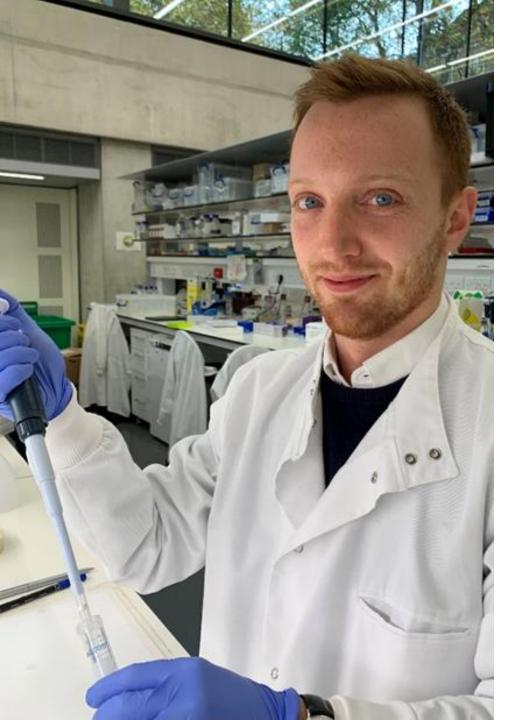
#### Gabriella – Medicines Researcher

- I work doing research for a company who make medicines called AstraZeneca. Before this I have also worked at a hospital and a university.
- I research disease of the liver. Your liver is important to keep your blood healthy but sometimes fat can build up in your liver stopping it work properly. There are no medicines to treat this at the moment so I'm setting up some tests to find some medicines that might help.
- I have to work with lots of different people to share information about this disease. It is really important to use my communication skills, both talking and listening. I also find observing carefully is a useful skill.
- I really liked science at school, but I wasn't very good at it. I think that being curious and asking questions is very important.
- I like spending time with my friends and family exploring different places around the world. I also like reading and going for long walks.



#### Alice – Medical Researcher

- I work in a laboratory which is a special room for science experiments, in White City in West London. My research is to help people who have lost their leg or both legs and have had new legs made for them out of metals and plastics (these are called prosthetic legs).
- I try to help these people walk further without getting tired or hurt and I hope it will help them to be able to do all the activities they want to.
- I study how their bones and muscles are working when they walk by using lots of cameras, in a lab, to track their movement. I also use a computer to work out the pushes and pulls that their muscles are doing.
- At school I loved science and art so my research combines my science knowledge with design too.
- In my spare time I love to swim in my local lido, go to restaurants with my friends and go to see live music.



## Lore – Medical Researcher

- I work for both a hospital and a university (where people can study after they finish school), and I research new ways to help people get better if a part inside their body isn't working properly, for example their lungs or kidneys.
- I enjoy working with lots of people who have different jobs and different skills to me, like doctors and engineers (people who design or build things).
- Communication is an important skill I have to use. Also I have learnt to look at things very close up, using a microscope.
- My favourite subjects at school were maths and science
- In my spare time I enjoy swimming and also listening to music and editing photos.