

## Research Group leader/Cell Biologist: **Bill**

### Job described by Máivéd aged 16

Bill leads and manages a team of scientists who research cell division. He writes and applies for further grants for his team so that they can continue with their work. He decides what experiments need to be done and delegates tasks to his team and also ensures that each member of his team knows how to do what is needed and that they have the correct equipment. Bill also monitors what other research groups studying the same field are doing. Another aspect of the job is to give lectures and write papers that are sent away to scientific journals. Skills required for this job are the ability to think independently and good leadership skills. Also, the ability to synthesise new ideas and put them together.

### Job described by Lynsey aged 16

The job of a Research Group Leader is a very interesting and varied job. Not only does it involve running, managing and training a team who aim to answer some very important medical questions which may lead to the development of new medicines and treatments, but as a Research Group Leader you are also able to publish your findings not only in medical journals, but also by lecturing to students and other medical professionals. This lecturing is very exciting as it also gives you a chance to travel the world, displaying your findings in many different countries and, as the language of science is English, you are able to lecture in almost any country in the world. As Group Leader you also have the responsibility to write for grants to companies etc, in order to raise the funds needed to carry out the medical research into questions which will hopefully lead to the development of a new drug.

### Job described by Mark, Ross and Susan, 5th year pupils at Secondary school

**Bill works as a Researcher/Cell Biologist at a university. He works as a supervisor and is kept very busy. The job varies hugely from day to day and includes travelling, lab work and training.**

#### **Key skills needed:**

- Good concentration.
- Good logical thinking.
- Fitting all the information together.
- Communication skills.
- Good with your hands.
- Good at sourcing information.

#### **Career Pathway:**

- High school.
- University in Maine.
- MIT (Massachusetts Institute of Technology).  
Cambridge.
- University of Geneva.
- John Hopkins.
- Researcher/Cell Biologist at current university.

#### **Differences in working for a company or university:**

- More money in companies.
- Company work tends to have more effect on the world, whereas university work has more effect on very specific fields.
- Working with companies means you are limited to work on certain processes.
- Stressful working for grants.

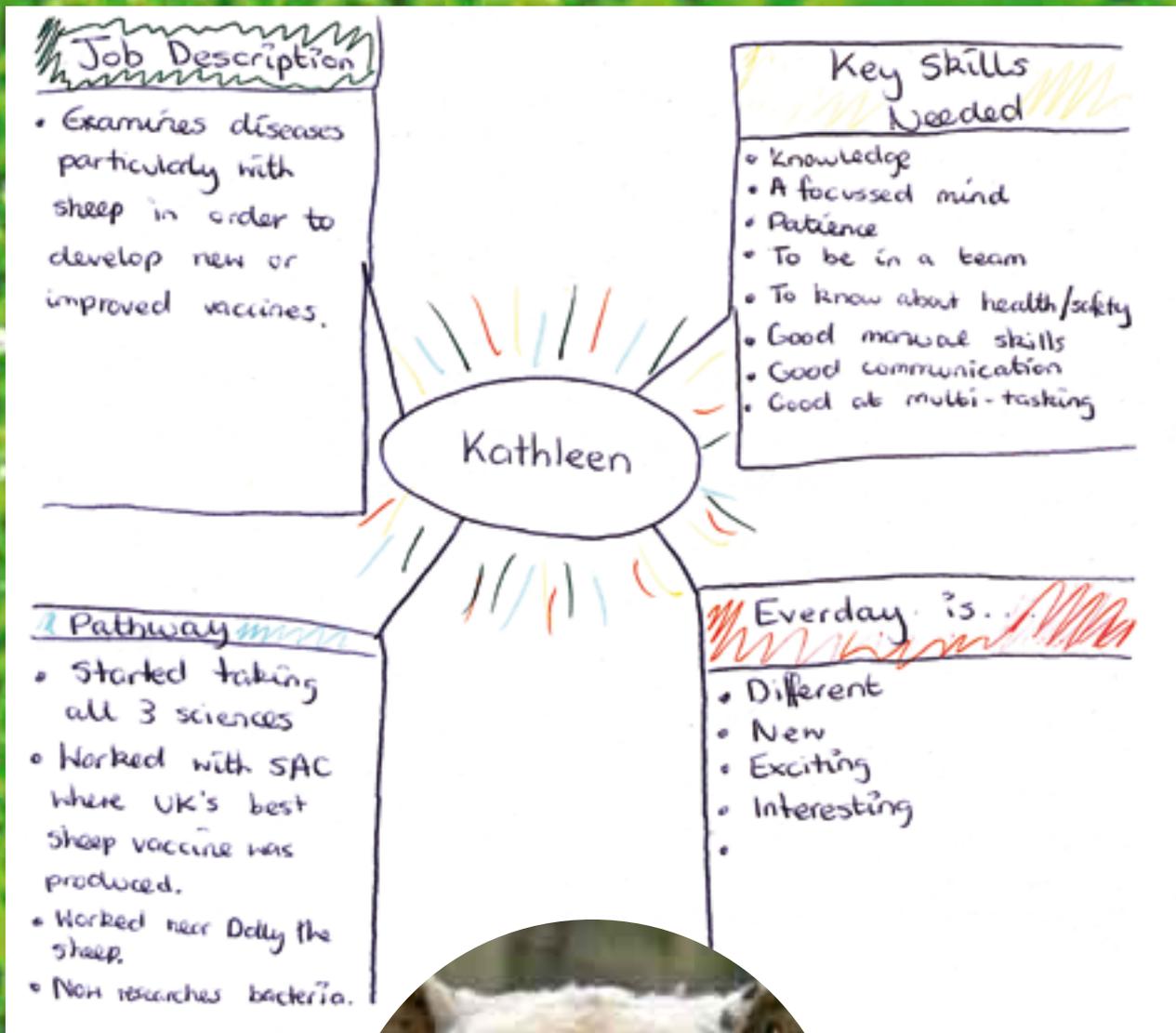
#### **Interesting Aspects:**

- Freedom, time to think, ability to see the world and meet people.

**“They can decide which areas to research but in order to do so they must have a certain amount of creativity allowing them to use knowledge to create new ideas.”**

# Research Scientist in Bacteriology: **Kathleen**

Job described by Rachel aged 14



## **\*\*WINNER\*\*** job described by Stephanie aged 14

### **Key skills needed:**

Knowledge.

Monitor and train staff.

Good communication.

Focused.

Good manual skills.

Patience.

She enjoys her job very much as she always does different things and never gets bored. She designs experiments and then analyses the results and researches other peoples' published work to keep up to date.

At High School she took Physics, Chemistry and Biology as she wanted to be a vet. First she worked in the Scottish Agricultural College and helped make the UK's top selling vaccine for sheep called Pasteurellosis, which stops pneumonia in sheep. She took time out of work to raise a family and then went to University. She now works in a laboratory examining disease models of animals, such as sheep, in order to develop new vaccines.

## **Job described by Stephanie at Secondary School**

### **What this person does for a job:**

Kathleen works in a research institute.

She researches animal health and specialises in sheep, cattle, etc. She mainly produces animal vaccines to keep the animals healthy and well.

What the job is like day to day:

She understands transmission (how the animal becomes infected), bad bacteria and good bacteria and what happens to the animal. She investigates how the disease works and how to stop it (vaccination only works on healthy animals).

### **Key skills needed:**

Observation skills.

Accuracy.

Applying knowledge.

Look at all the possibilities.

Good speaker/presentation skills.

Health and safety.

### **Career Pathway:**

High School – Physics, Chemistry and Biology.

Veterinary Investigation Lab.

Microbiology.

Career gap.

University.

Research Institute (15 years).

## **Job described by Morag aged 15**

Kathleen helps to create new vaccines for animals and helps in designing experiments which help find out how the disease works. She needed a good Degree to get a good job, preferably an Honours Degree, or Postgraduate Degree. There are a lot of skills needed for this job, including good communication and good patience as it can take a long time to develop new vaccines. You need to be accurate in your findings and be able to analyse your results well, also to be good with your hands to help in the experiments.

# Stroke Nurse: *Katie*

## Job described by James aged 16

Have you always wanted to be a Nurse?!?

A career as a charity nurse can offer great rewards and if possible working hours near that you can fit my life style would the job!

Do you have good people skills and want to help people recover from a stroke by educating them about their condition.

If you've had four or more years experience as a health nurse and wish to help others on a flexible basis that suits you and your partner then this job is for you.

## Job described by Stacey aged 15

\*She goes to people that have suffered strokes homes and spends about an hour with them. She makes sure their health is okay and also talks them about what has happened to them and how it will effect them. She discusses small ~~changes~~ changes if they are needed e.g (not smoking etc) \*To become a stroke nurse you need to have a few key



Skills eg Communication skills Listening skills and also a good medical knowledge.

### DAY TO DAY LIFE OF A STROKE NURSE:

- Going to the office/checking mails etc. ✓
- Going to about 3/4 patients a day, which means a lot of driving and time management.
- Working the set amount of daily hours before you can go home. 🏠



**\*\*WINNER\*\* job described by Danielle aged 17**

Katie works with a charity and helps people to deal with the traumas and implications that a stroke brings to their life. She visits each patient's house and talks to them about their difficulties, medicines and preventative measures. She gets the satisfaction of helping people who need a little support and in turn builds extremely strong bonds with her patients.

To get into her career Katie has worked hard, but the enjoyment she gets from the end product makes it all worth

while. She studied Biology and Chemistry at higher before going on to study for a BSc in Biological Sciences. From this she got herself a job in a chemist during holidays, where she was a Pharmacy Technician. This then helped her when she continued to study, but as a nurse. She has now climbed the career ladder and found her dream job that allows her to work with people but gives her the flexibility that comes with independent work.

**Job described by Carolyn aged 14**

Katie (Stroke Nurse) works five days a week visiting people just out of hospital and giving information, advice and support. Understanding medical terminology and translating it into words patients can actually understand, she helps and allows patients to adapt to changes in their life and helps get them back on track to normal life.

In her job she meets different types of people from different backgrounds and has to respect patients and their

lifestyles. Communication is a large part of Katie's job in the sense of getting to know each person as an individual, hopefully gaining trust so she can help them to the best of her power.

The type of qualifications Katie needed to become a Nurse were, good Highers, a BSc in Biological Sciences at University and finally, after a year's work at a chemist, a Nursing Diploma for two years.

**“Visits people who have had a stroke and helps them to adapt their lifestyle to their needs. Helps to explain to patients what is happening and gives them details about strokes.”**

# Tissue Donor Co-ordinator: **Chryst**

## Job described by Geraldine in 5th Year at Secondary School



Tissue Services is responsible for the Tissue Donation Service. Responsibility to teach and educate clinical staff and use this knowledge to work with bereaved families. She works with pathologists and in conjunction with Human Tissue Law. Heart valves, tendons and eyes are taken from the donor.

### What the job is like day to day:

Work and talk with bereaved families.  
Check tissue types – they are scanned for specific diseases (HIV and Hepatitis) and bacteria to ensure tissue is safe for recipient.  
Have to talk to donors' families to ensure correct organs/tissues are taken (has to have extremely good communication skills)

### The key skills needed are:

Nursing.  
Good communication skills.  
Empathetic, sympathetic and caring.  
Precise and responsible.  
Awareness of recipient's family – you have to be open to emotions.  
Keep family focussed.

### Her career pathway:

Science at school.  
Nursing.  
Tissue Bank – giving advice and education.

*It is a good job, doing good for humanity.*

## Job described by Georgina in 4th Year at Secondary School



Responsible for tissue transplants. Gives educated advice to doctors and talks to families. Once permission is given they go to the mortuary and retrieve tissues. They have to ensure the tissue is safe (against HIV). They try to do sterile procedures at the mortuary to monitor the body and it's tissue to make sure the tissue is safe and ready for the transplant.

### Day to day:

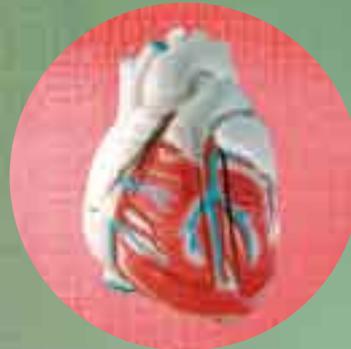
Inform families of what she will be doing to their loved ones.  
Retrieval of tissue.  
Biggest part of job is education and helping people understand.  
Four or five retrievals a month and each would take a full day to complete.  
Talking on the telephone with families.

### Key skills:

Sympathetic to deal with mourning families.  
Nursing background.  
Reassuring and empathetic.  
Calm yet quick with the job in hand.  
Focussed.  
Communication skills.

### Career Pathway:

Sciences at A Level.  
Nursing.  
Then into Tissue Services.



**"4-5 retrievals of tissue a month."**

**"Did not know what she wanted to do after leaving school but after Nursing she found this job in Tissue Services."**

## Vice president of Pre-Clinical Sciences: **Tim**

### Job described by Nabila aged 16

After having several science-based degrees and working for another company, Tim is now working as Vice President of Pre-Clinical Sciences in a pharmaceutical company. Here he manages several people and projects. Currently he is managing three projects involving; prostate cancer, growth retardation and testosterone replacement. Considering these projects are all on the go simultaneously, Tim has to communicate with a range of people, from the scientists developing the new drugs to the people wishing to buy them in the market. He's got to ensure deadlines are met, including financial budgets.

### Job described by Rezvi aged 16

Tim helps choose which scientist with a new idea to sponsor. He offers them grants and manages their finances. The project may progress for a few years and if successful carries on. New medicines are shown to G.P.s around the UK.

Tim also:

Carries out tests for new medicines.

Uses finance and communication skills.

Handles research scientists and sponsors.

Communicates with Europe and USA to check if new ideas have been used or invented before.



### Job described by Gavin aged 17

#### **You need:**

A-Levels in Science.

Degree in Chemistry.

Work experience in Industry.

PhD in a specialised field.

#### **The job involves:**

Managing people.

Research into drugs.

Experiments to see if drugs are safe.

Working with lawyers and medics.