



SNAPSHOTS

Sarah & Valerie

Biomedical Scientist and Trainee Biomedical Scientist (Haematology) Job described by Rebecca (Secondary School)

What this person does for a job

They study blood and work out what's wrong with the person. They also look at bugs. They monitor the people that they give Warfarin to, to help them break up their blood clot.

Key skills needed

Biology/Physics qualification.
Able to talk to patients and keep them relaxed.
Good organisational skills.
Problem solving.
Communication skills.
Computer skills.

What this job is like day to day

They start at 8.45am and prepare the lab, i.e. clean everything, empty the bins and dispose of old samples. They then set the lab up and they start getting hospital samples and then G.P. samples. Most of the work will be cleared if it is normal, however, any un-normal samples are then looked at by them to see if they can decide what the problem is. If they can't then they send the samples to the doctors.

Geoff

Biomedical Scientist (Microbiologist) Job described by Alison, Karen and Jamie (5th Year at Secondary School)

What this person does for a job

Identifies the types of bacteria which can cause infections and see which antibiotics can be used to treat the infection.

What this job is like day to day

The job is mainly practical with not a lot of paperwork. It is enjoyable and busy.
Schedule – reading plates in the morning. It can be repetitive (as is every job though!).

Key skills needed

Eye for detail.
Research skills.
Time management.
Communication.

Career Pathway

He left school with an interest in Biology and went on to study Biology at University. He left with a Degree in Microbiology.

Opportunities:

Breweries and Food/Water Biology.
Medical Physics – Radiology.
Biomedical Science, obviously!
There are many grades as a Biomedical Scientist (1-4), however, the higher grades are mostly paperwork.

Diane **Biomedical Scientist/Training Manager**

Job described by Adam, Tim and Robert (Lower 6th at Secondary School)

What this person does for a job

Trainer in Biomedical Science.
Tests food, pool water and other possibly infected substances, for micro organisms.
Maintaining levels of antibiotics in patients.
Diagnosing blood samples (Haematology) for diseases like Diabetes and Haemophilia.
Testing for drug abuse.
Testing for tumours (size and where it is).
Looking at viruses and testing for them.

What this job is like day to day

Works at different locations and makes sure that other Microbiologists keep the same quality for equal results.

Key skills needed

Problem solving.
Knowledge of viruses and disease.
Organisation and communication skills.
IT skills.
Disciplined.

Career Pathway

School leaver.
Studied at day release and worked in lab.
Worked in Microbiology (covered Microbiology, Public Health and Immunology).
Moved into training role.

Interesting Aspects

Helping others, working in a team and working in a lab.

Patrick **Director of Company/Senior Scientist**

Job described by Kate and Charis (4th Year at Secondary School)
Laura and Kim (5th Year at Secondary School)

What this person does for a job

He develops glow-in-the-dark proteins, looks after a company and ensures the customers are happy.

What this job is like day to day

9-5pm, Mon-Fri.
E-mails, paperwork and phone calls.
Planning.
Business management.
Work in lab doing experiments.
Presentations.
Travelling – to conferences.

Interesting Aspects

Travelling, researching new chemicals, mixture of lab research and business management, teamwork and opportunities and prospects.

Key skills needed

Teaching.
People management.
Good communication skills.
Opportunity spotting.
People skills – outgoing.
Teamwork.
Market assessment.

Career Pathway

Highers – Art, Chemistry and Maths.
University – Chemistry (1 year).
Went on to do Biology (specialised in plants).
PhD in Cell Biology.
Formed company.

Yan Formulation Scientist

Job described by Fraser (aged 16), Craig (aged 12)
and Jenn (5th Year at Secondary School)

What this person does for a job

Yan works in the Pharmaceutical industry. He works with drug designers and takes the computer structure of molecules and analyses these structures. They are analysing to see if they are safe, economical, how to make them and the equipment involved.

What this job is like day to day

Setting up.
Doing the lab work.
Completing paperwork for the day.
Clean up.

Key skills needed

Being able to work to tight deadlines.
Able to work to very exact concentrations.
Keep within Good Laboratory Practice (GLP).
Time management.
Cleanliness to prevent contamination.
Good background in Chemistry and Biology.

Career Pathway

A Levels – Chemistry, Biology, Maths and Philosophy and Ethics.
College – Art and Design.
BSc in Biochemistry.
Contacted temping agency and got an interview for current job.

Sue International Business Manager

Job described by Hanna and Rowan (5th Year at Secondary School)

What this person does for a job

She works for a company who provide equipment and techniques to laboratories and hospitals. She sells these products which also involves demonstrating the product, training people to use it and sorting out any problems that occur. She is in charge of the company's dealings in Europe, Australia and New Zealand.

What this job is like day to day

Day to day she visits hospitals, labs and other companies in Europe, Australia and New Zealand. She demonstrates techniques and equipment and sees around their labs.

Career Pathway

She left school with O Grades and Highers and went on to train in Biomedical Sciences, specialising in Microbiology, on day release while she worked in a hospital learning a lot of practical techniques. Once qualified she worked in a hospital for 4 years, then left to go into sales.

Key skills needed

Good communication.
Problem solving.
Trouble shooting.
Interest and ability to listen and learn.
Good sense of humour.

Jemma **PhD Student (Chemistry)**

Job described by Michaela and Danielle (5th Year at Secondary School)

What this person does for a job

Jemma looks at different substrates and enzymes to see which substrates work with which enzymes and uses genetic modification to try and improve the substrate specificity.

What the job is like day to day

Goes into the lab in the morning, thinks about what she is going to do that day and writes down what to do. She does lab work. Sometimes she has to do presentations and talk to people.

Key skills needed

Time management.
Organised.
Good people and communication skills.
Computer skills.
Patience and perseverance.

Career Pathway

School – A Levels.
University, Chemistry Degree for 3 years.
Masters in Biology.
PHD in Chemistry.

Interesting Aspects

Doing experiments and practical work.
Not sitting in an office all day.

James **Territory Sales Representative**

Job described by Bobby (5th Year at Secondary School)

What this person does for a job

Travels around hospitals and to big cities selling products to companies and thinks up new ideas for selling products. You have to be able to understand the manufacturing of products. He works with a variety of people. He is the middle man between the consumer and the company, and offers technical support as well.

What this job is like day to day

Monday: 1 day of office work at home – organisation, meetings, exhibitions and computer work.
Tues – Fri: 6-8 meetings a day – travel to meeting place and discuss their work and which of the products would help them in their work.
Travelling abroad, playing golf to engage with the customers and training in Germany to learn about the products you are selling.

Key skills needed

Being able to drive.
Business mind.
Ability to work on your own and in a group.
Sociable – good communication skills.
Scientific.
Ambitious.

Career Pathway

A Levels – Maths, Biology and Psychology.
BSc in Biology.
Played golf professionally for 3 years.
Technician in a lab.
PhD in Prostate Development.
Sales Rep.

Morna

Technical Sales Representative

Job described by Helen and friends (4th and 6th Year at Secondary School)

What this person does for a job

She travels around the UK promoting her company and trying to sell their diagnostic supplies.

What this job is like day to day

Morna travels from city to city to the various hospitals and universities. She covers the whole of Scotland and North England. She does a lot of driving. She has meetings with the heads of the departments and arranges what they should buy. She also speaks to people if they need her help.

Key skills needed

Ability to drive and navigate.
Work out what they need.
Communicating.
Negotiating.
Problem solving.

Career Pathway

Highers – English, Biology, Chemistry, Geography and Maths.
University – Immunology (mature student)
Sales job.
Technical Sales Specialist.

Interesting Aspects

Travel and driving.



Work experience tips

For details of some work experience projects see the useful website section at the end of Part 1.

Do's and Don'ts - approaching someone about work experience

When you are trying to arrange a work placement there are things you can do or avoid to help make a good first impression. Here are some tips from an employer who runs work placements every year for 5th and 6th year secondary school students.

DO arrange the work placement either by liaison with a class teacher or guidance teacher or through Careers Scotland. DON'T ask a company/organisation to contact you at home by phone or e-mail.

DO write an appropriately worded letter (see example below). Remember this is a WORK placement so be professional.

DO check your letter for spelling mistakes and grammatical errors.
DO try to find out the name of the person you are writing to i.e. don't just write "Dear Sir or Madam".

Once the work placement has been agreed, DO ensure that all the safety and security checks have been carried out. By arranging the work placement

through school or Careers Scotland, the safety, insurance and security checks should be carried out either by the Local Authority or by Careers Scotland and appropriate forms will be supplied to the company/organisation with whom the work placement has been arranged.

DO remember that a work placement results in a considerable amount of additional work for the company/institution so be polite and appreciative.

An example of a good application letter

Dean High School
Weatherby Road
Edinburgh EH7 2OU

[Use the school address rather than your home address]
21 June, 2006.

Scotech Biochemicals
Western Highway
Edinburgh EH8 5HG

[Business letters include the address of the company/organisation you are writing to]

Dear Mr Brown, *[Find out the name of the person you are writing to]*

I am a fifth year pupil at Dean High School and would be very interested in participating in the work experience scheme in your company *[Explain why you're writing]*. I obtained information about the work placement scheme from my friend's mother who works in your company (Mrs Smith). Amongst the subjects which I am studying at school are Biology, Chemistry and Maths and I am very interested in pursuing a career in science. *[Explain why you're interested in the work experience and why you are an appropriate candidate]*. I would really appreciate the opportunity to gain some work experience in your company and would be able to do this anytime between 2 and 21 of September *[Let them know when you are available for work experience - try to be flexible]*. I enclose a letter of introduction from my guidance teacher. *[Include a letter of introduction from your school from the teacher who would help you arrange the placement]*

Yours sincerely,
John Black