

# Where next?

*An odd mix of A-levels, a useful gap year and beyond – Bristol University Biology student Tom Denbigh talks about his step up to University.*

I never knew that bacteria could talk. I was in a lab (one of those big white ones, looking just like a CSI set) when my supervisor calmly told me this – old news to her. Days later, I saw it happen.

While my friends had gone straight to University, I'd done my best to avoid having to decide anything while studying for A-levels. Decisions, decisions. I can't remember a more stressful time. So out of indecision I delayed applying to uni and took a gap year. I worked in a research lab; lived in New York; and got a tan surveying by the sea.



*Tom examines snails in the lab.*

At first trying to get any work experience seemed pretty intimidating – all I had was a mixed bag of A-levels and still a fair bit of doubt over whether I wanted to do Physics, Biology or even English Literature, as my degree! Secondly, work experience isn't obvious, widely available, or advertised. But then since all that costs money, why would it be? I volunteered at my local aquarium (there are always conservation positions available somewhere – see Box 1) and then emailed the public relations

## Box 1 - Volunteering

If you would like to volunteer, but don't know where, here are a few ideas to get you started.

Have a look for any science institutes in your area, and email as many as possible (be willing to travel).

Whenever you meet anyone involved in science, be prepared to follow them up – even if they can't help, they may know someone who can.

Conservation organisations are always looking for help (try the BTCV).

Your school might be able to let you shadow/help a science teacher after you have left sixth-form. Your science teachers may also know old uni friends who now work in research.

Contact your local field centre! They do both research and conservation.

There is always voluntary stuff at your local hospital. This mainly involves talking to patients, and helping with little jobs, it's good for anyone interested in medicine, and shows you're willing to devote your time to the community, which looks good on the personal statement on your university application form.



*Tom surveys and records invertebrates on the beach.*



*A Portland screw*

department of my local science institute (Plymouth Marine Laboratories). My fingers were tightly crossed that I would even get the dignity of a rejection.

What they don't tell you at school is that sometimes all you need is enthusiasm. I got a reply, and that's when I got to work with bacteria that, yes, talked to each other! (Their method of communication is called quorum sensing, so you can look it up for yourself). Simply by asking around I got my next placement, in the same organisation where they first looked at nerve impulses – the Marine Biological Association (MBA).

A year on I was lucky enough to be offered my current summer job, surveying and data entry, but this time for a wage. Fantastic! And best of all, I might even be named on an academic paper.

I finished my trinity of experience at Rockefeller University in New York, all thanks to a chance meeting with a microbiology professor. Work experience doesn't have to mean being desk-bound, and I ran round the Big Apple, at the same time as pimping up my CV. Of course this cost a fair amount of money, but thanks to working weekends in a shop in the first part of my year, I could afford it.

I can count on one hand the number of people on my course who have lab experience, and when it comes down to navigating my way around unit choices, it can really help, and even give you an edge in practicals!

The best thing, my year out gave was that it bought me time enough to give my degree and my university choice a real think-over. I learnt that if you want to work in science, getting a good degree counts for a lot, and going to a good university (Box 2) counts too. A pretty serious consideration though is showing enthusiasm – science can go wrong, and if your drive runs out when your first experiment doesn't go to plan, you are no good whatsoever. Ultimately by volunteering and getting involved you can show off your energy and interest, and who knows, one thing may lead to another; you'll have contacts and a foundation in science before you even know it!

*Tom Denbigh is a 2nd-year Biology student at Bristol University.*



*Tom uses modelling clay to make replicas of fossils from the stonework of the Cabot Circus shopping centre in Bristol.*

## **Box 2 - Choosing a university for science**

*Tom Denbigh offers his own thoughts on choosing a university for science. He says it's good to look at both the institution, and where your own interests lie.*

Most of the universities with the best research, and commitment to science research belong to either the Russell Group or 1994 Group. Both groups are research intensive, though the universities in the 1994 group tend to be smaller institutions.

With 60% of the "world leading" research taking place in e.g. the Russell group, you can know that while you may not be involved in it at degree level, you **will** be taught by the top researchers!

When it comes to choosing your course, it is good to know whether you want to be general, or specialise, and choose an institution that supports that.

Often a general first year at university allows tasters of different areas, to help you choose where to focus. This is great for those undecided, but can be tedious for those lucky enough to know where they want to head!

One option at some universities also allows you to spend about a third of your first year taking units from other departments (from chemistry to French, or even law). This can be something to look out for as it can help you build on skills (such as a language) that could come in handy later in life, and can even just satisfy your interest in an arts subject before focusing on science.

Once you have a rough list of universities, it is also pretty important to decide if you like the location – you won't want to end up living somewhere you don't like. Remember; the happier you are, the more you enjoy your degree, and ultimately the better you will do!