

## CASE STUDIES



# Adam Penson,

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### Why did you decide to do an apprenticeship?

I chose to do an apprenticeship because I wanted to get straight into the labs to start working on real projects and helping patients as soon as possible. Doing an apprenticeship has given me the opportunity to not only complete my degree with a respected university, but also to work alongside experienced scientists and gain real world knowledge of how medicine discovery works. This makes me feel equipped, confident, and capable both in the lab and the business environment, whilst my degree studies give me the broad theoretical knowledge that helps me 'connect the dots' between the practical work I carry out and how it will help a patient.

### Can you describe a typical day?

A typical day will start off in the office, checking my calendar and liaising with colleagues about planned work. Next I will usually perform some lab work in the morning until lunch time, either some routine tissue culture or running a screening assay against compounds that have been requested by project leaders. The afternoon is when I analyse my data and write up my experiments in my electronic lab notebook. Occasionally I may have a meeting with colleagues about the outcome of experiments and planning future ones, or sometimes a departmental meeting.

### What's the most interesting project you work on?

Currently I am developing an assay to screen potential drug candidates for unwanted interactions with certain liver and kidney proteins which may impact their toxicological safety in patients. It is important that the assay is fit for purpose as it will help ensure that drugs that reach the clinic are safe and do not have undesired side effects. It is interesting to see as I change certain parameters and conditions how these affect the assay performance and outcome, and what this may tell us about the related pharmacology.

### What do most people not realize about apprenticeships?

I think it's a common misconception that maybe apprenticeships can only get you so far in science, and that to break through a perceived 'glass ceiling' and to progress your career, you need to go to university and enter as a graduate. However, the experience I've had in my apprenticeship in GSK has been very positive and I've felt included and supported at each step, even by highly qualified and senior scientists. There are many opportunities for further study and gaining further qualifications after your apprenticeship is over, and while I've been working at GSK I have felt treated like an equal member of the team, not simply a 'junior'. It is empowering and reassuring to know that my contributions and skills are equally as valued, whether I enter as a graduate or as an apprentice.

Apprenticeships offer the opportunity to train on the job, earning while developing new skills. As an apprentice, you will work alongside experienced staff, gain job-specific skills, earn a wage and get holiday pay, and get time for study related to your role (usually one day a week).

**Tissue culture:** growth of cells or tissues in a liquid, semi-solid or solid growth medium

**Screening assay:** a laboratory procedure to measure the effects of an agent

**Toxicology:** the study of the adverse effects of chemical substances on living organisms

### Further information

#### Career ideas (Prospects):

[www.prospects.ac.uk/options\\_biology.htm](http://www.prospects.ac.uk/options_biology.htm)

#### Biochemistry careers information:

[www.biochemistry.org/Education/Highereducation.aspx](http://www.biochemistry.org/Education/Highereducation.aspx)

#### General science careers information:

[www.futuremorph.org](http://www.futuremorph.org)

For more career information visit  
[bit.ly/biochemistry-careers](http://bit.ly/biochemistry-careers)