

## **Why take an intercalated BSc.**

Recently I spent a year working in an underfunded, high-pressure surgical unit in South Africa and dealt with many trauma cases. I learnt how to manage trauma as well as varied and often advanced surgical pathologies. It was here that I began to realise that a good surgeon is one who keeps track of surgical outcomes and, of course, that practice keeps skills high. However, above all, I realised that a good surgeon is one who understands the fundamentals of medicine and applies medical knowledge to their clinical practice.

It is without doubt that my intercalated BSc has helped my knowledge and understanding of the fundamentals of medicine. After two years of study at Edinburgh Medical School I took a year out to study Physiology for my BSc. This year gave me time to stop and to reflect on the knowledge I had had to learn and ingest (often at high speed and at times in limited detail) over the previous years.

It was during my BSc that I developed the skills to analyse and appraise scientific literature and began to realise the intimate and symbiotic relationship between medical research and clinical medicine. I also spent three months undertaking a laboratory based project where I examined the control and regulation of potassium channels whose activities underlie many physiological processes. Whilst working in the laboratory I learnt about experimental methods and design, statistical analysis, and the meticulous and at times obsessive attitude required to carry out meaningful experiments. I also had a fantastic time because I enjoyed (and still do) working in an environment that strives to understand how and why the body works and how best to fix things when it goes wrong.

There are other, less obvious, advantages to reading for a BSc. Surgical training is currently extremely competitive and obtaining a training post requires that trainees have at least some involvement in academic activities. By undertaking a BSc you will develop some of the skills required to do this. Some surgeons may ultimately work in non-academic posts, however they will still need the ability to interpret scientific work and apply findings to their clinical practice. Furthermore you may discover a fascination for experimental work, in which case a BSc is an ideal stepping-stone to post-graduate research and an academic career.

I cannot see any disadvantage in taking a BSc nor can I understand why some medical students even hesitate to read for one. Perhaps it is because there is a fear about taking a 'year out' from medicine while others continue on a more prescribed path. While undertaking a BSc is not an easy option and my intercalated year was my most challenging year at Medical School it was also the most rewarding. Anatomy is where physiology takes place and spending a year studying physiology and medical research and having the time to reflect on the fundamentals of medicine was a privilege - after all I am sure that a "good surgeon is one who understands the fundamentals of medicine and applies medical knowledge to clinical practice".

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