LIS PICKLES
DPhil candidate

Why are female engineers needed?
I was working at the hospital whilst doing my Maths and Physics degree and became interested in medical imaging, which is one of the areas within Biomedical Engineering.

I realised I could apply my love of Maths and Physics to something that is a key part in helping with the care of patients and that inspired me to follow a career in this area.

What is your research area?
I specialise in MRI: I’m looking at developing new imaging techniques to improve the early detection of primary liver cancer.

How did you get started in engineering?
When I finished my degree I started a job at Perspectum, a liver imaging company with a focus on research and development. I began to chat to various colleagues there, including Sir Michael Brady, who encouraged me to apply for an 1851 Industrial Fellowship, with the Department of Engineering Science and Perspectum.

What is an average day on the job like?
I might start the day with replying to emails on various topics such as plans for a new research study. I often spend some of my day doing programming to analyse imaging of patients from a primary liver cancer trial in Singapore.

I might have a meeting with my supervisor to discuss how things are going. Sometimes there are seminars to attend. There is always reading to do to keep up to date on what other researchers have been doing in my field.

What attributes and skills help you in your role?
I think you have to be able to look at the bigger picture. It is no use developing something really clever that no-one wants to use. In medical imaging we have to make sure we always have the clinical purpose in our mind when developing something new.

Another key skill is perseverance, things often don’t work the first time so it’s important to keep going and not give up at the first hurdle.

What is the best thing about your job?
Using maths and physics to make a difference to people’s lives.

Have you faced any gender-related challenges?
No, thankfully I haven’t experienced many, if any, challenges.

Why should young women choose engineering?
It’s an amazing way to put science and maths skills (which lots of girls have) to good use.

What has been your highest achievement to date?
Getting my Royal Commission of 1851 Industrial Fellowship. It was a challenging application and interview process.

It’s enabled me to do a DPhil with Oxford University and Perspectum which is a really great combination.

What top tip would you give girls or women considering a career in Engineering?
Try and go to as many public events on engineering as possible. Often people don’t realise how many different areas of engineering there are, and discount it as an option for them.

Going to events enables you to explore the field further and get more of a feel for it, and hopefully will lead you to pursue a career in engineering!

I sometimes wish I’d found more about it at school and then I might have done a degree in Engineering instead of Maths and Physics.

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