The global health landscape is changing. For the first time in history, you’re more likely to be killed by a surgically treatable condition than a communicable disease. But global surgery hasn’t kept pace, and in low-resource countries around the world, surgery can be a challenge to access – and desperately unsafe.

Anaesthetists have a crucial role to play, and trainees can make a difference. In January this year the Lifebox Foundation – a registered charity in the UK and USA, working to make surgery safer in low resource countries – appointed its first fellows. In collaboration with the Association of Anaesthetists of Great Britain and Ireland, the Difficult Airway Society, World Anaesthesia Society and the Royal College of Anaesthetists, two senior anaesthetic trainees have been chosen to make a significant contribution to quality improvement and anaesthesia care in Uganda and Ethiopia.

Dr Nicholas Owen, based at University College Hospital London, will be spending six months in Jimma, Ethiopia from August this year, while Dr Rachel Freedman, at the Imperial School of Anaesthesia, will spend six months in Mbarara, Uganda from January 2016. Half of their time will be spent on clinical duties, and the other half on a quality-improvement project tied to Lifebox’s area of work.

Lifebox is firmly grounded in the principle that safe surgery and anaesthesia is a fundamental right for all, regardless of where they are born. Since its inception in 2011, the charity has distributed more than 8,400 pulse oximeters, as well as training and educational materials, to operating theatres in 90 countries around the world.

Why? Today over 70,000 operating rooms don’t have access to a pulse oximeter, a mandatory device for safe anaesthesia, and the only piece of equipment on the WHO Surgical Safety Checklist. This checklist is the backbone of Lifebox’s work, shown to reduce surgical complications and death rates by more than a third. Advocating for, and facilitating the use of this checklist is a crucial part of Lifebox’s work.

Collaborating with medical professionals is an equally vital part of supporting colleagues in low-resource countries, and the Lifebox Fellowship offers an opportunity to gain valuable practical experience. So, when Lifebox sat down with Nick and Rachel there was a lot to discuss.

What were your motivations for applying for this Fellowship?

Nick: For me there’s two aspects – I lived in Africa and taught in a school there, and from a personal perspective I think it would be a really enjoyable experience to spend more time in that setting – a complete change of scene. From a professional perspective, the quality improvement and patient safety avenue had been one I’d been wanting to get into for a while. Lifebox is a good example of an active quality improvement that has delivered particularly in a developing-world setting. Going there and learning techniques like halothane and ketamine, which you rarely use in this setting, will be very useful from an educational perspective.

Rachel: I worked with [Lifebox trustee] Iain Wilson in Exeter, so I’ve known about the charity since I started out in anaesthetics. Like Nick, I thought it seemed like one of the only medical organisations that you could see making a difference. I had always wanted to do something with Lifebox, so when the chance to apply came up I was really excited. I attended a course last November – Anaesthesia in Developing Countries, started by Mike Dobson in Oxford – and a lot of that dwelled on whether you could actually do something sustainable. The input that Lifebox has with pulse oximeters and the WHO Checklist, and the emphasis on teaching programmes, seems really sustainable. It actually feels like something I want to do to – and which will stand me in good stead for my CV. The type of case-load that I think we’ll experience is also something I’m looking forward to. My interests are in paediatrics, obstetrics and trauma, the lion’s share of surgery in low-resource settings.
What are the barriers to trainees getting global anaesthesia experience?

Rachel: The difficulty is that you can’t go away too early on in your anaesthetic training, because you would potentially be a liability.

You may well be the ‘best’ provider in a low-resource setting hospital at that point, because nobody else is trained to do complex anaesthetics – but you’re putting yourself under a huge amount of pressure as the senior person, when you’re used to being surrounded by a team of consultants. So I suppose you have to do it later on in your training – and by that point people might be married, have houses and potentially children, and maybe it doesn’t fit so well into training programmes.

This fellowship is supported by the Royal College of Anaesthetists, DAS, WAS and the AAGBI, so you know that it’s a bona fide proper project. You’re going to arrive and it’s a safe and good experience.

Nick: Especially now that they are getting a lot stricter on reducing out-of-programme time. Generally speaking the availability has been lacking, and perhaps publicity as well. On the current curriculum for higher training there are modules in rural anaesthesia and developing-world anaesthesia. They’re optional, but they’re there.

What expectations do you have of this fellowship programme?

Nick: I am deliberately trying to be open-minded, because I don’t really know what to expect! I’ve met up with a group of people who’ve been out to Ethiopia – where I’m going, so I have an idea of the hospital set-up, and the kinds of projects that have begun.

Rachel: I’ve spoken to people who have been to where I’m going to be going – there are consultants there, and I think we will be blown away by how experienced they are, and how well they give anaesthesia with limited provisions.

Do you think this fellowship will have an impact on the way you work in the UK?

Rachel: I’m sure when we first get back we will find it hard to readjust – but I’m hopeful that it will have instilled in us the understanding that there isn’t just one way to do everything; there’s always opportunity to improve things.

I’m hoping that this is the springboard for the rest of my career, linking with developing-world anaesthesia.

What do you think are some of the biggest challenges to providing anaesthesia in low-resource settings?

Rachel: The major problem is that a lot of the new equipment that has been designed simply does not work in the developing world. Historically, anaesthetics hasn’t been a very popular speciality area – doctors have wanted to do surgery, then move out. So they really struggled to train up enough anaesthetists, there’s a huge manpower shortage of doctor anaesthetists.

They’ve done well to fill the gap in a lot of areas with non-doctor anaesthetists – but they have had very minimal training and are left doing their best with limited continuing professional development.

Nick: The biggest obstacle is lack of political will to do anything about it. Relatively recently there has been a general shift in a political view that safety in surgery is an issue. In particular the WHO and UN – they are actually talking about safe surgery – it’s unacceptable that availability of this is based purely on where you happen to be born.

What is your understanding of safe anaesthesia?

Rachel: Surgery is a really common occurrence in an awful lot of people’s lives – and without safe anaesthesia it immediately becomes very risky. In this country you wouldn’t think twice about somebody coming in for ‘minor’ surgery. But in some developing countries they are terrified when a friend or family member has to have surgery, because they’ve all known people who’ve not survived.

Surgery in this country has benefited so much from the development of safe anaesthetics, and other countries need to be given that same opportunity.

Nick: There are so many guidelines, protocols and checklists, that it’s easier to define what we mean by safe anaesthesia here. These kinds of evidence-based templates give you a driver for political will – they are saying: we know this works, this is what we need and this is how we can implement it.

Rachel: Safe anaesthesia needs a good team, the appropriate equipment and the right ethos.

What advice would you give to other anaesthetists in training looking to apply for this Fellowship programme?

Rachel: I’d say: “go for it, it’s a fantastic opportunity!” I really enjoyed the course (Oxford, Anaesthesia in Developing Countries) I did it in Uganda. It was relatively expensive, but the experience I gained medically – learning how to strip down a ventilator and how to use halothane – was something I never experienced in my training in the UK. But more importantly the people that I met; and the networking that I did, really helped me to know that I definitely want to do something sustainable. I really would recommend that course – the next one is coming up in September this year. There’s also a Bristol version (Developing World Anaesthesia), which is a lot more affordable, I’ve had good feedback from that.

I would say: “be brave and go for it!”.

Nick: There are lots of fellowships and projects you can do, which potentially could be seen as tick-box exercises to maximise our back page. Whereas with this, you genuinely feel there is a real structure, you really feel that there’s a solid template here to actually deliver something sustainable – so it’s a worthwhile-looking fellowship.

Absolutely, go for it, and do it - but also be realistic, because personal circumstances still need to fit into it.