

"Neurosurgery is making the use of the latest technologies which makes it a very exciting field to work in."

Dr Damiano G. Barone is a specialist registrar in neurosurgery at The Walton Centre NHS Foundation Trust and PhD candidate at the University of Cambridge. He has recently been appointed as chair of the British Neurosurgical Trainees' Association.

Damiano Barone

Specialist registrar in neurosurgery

Employer or university

The Walton Centre NHS Foundation Trust



- **How I got into the role**

Expand / collapse

I chose a career in medicine as I was passionate about helping people. I knew that as a doctor I would not only treat people but have the opportunity to participate in research which also directly benefits

patients.

My medical degree in Italy involved a period of research, which led to the equivalent of a research degree known as an MD. I conducted research that explored new applications of endoscopic surgery, enabling neurosurgeons to operate on the brain through the nose.

I spent a considerable amount of my free time during medical school taking on projects in different departments, including general surgery, neurology and neurosurgery. This gave me the invaluable opportunity of spending time with patients in clinic or on the wards before and after their operations. I gained an insight into my future career which was more than I could ever get from the books. As a plus I also ended up having my name on a published research paper!

During the last year of my undergraduate medical training I applied and secured a foundation training [1] job in the UK. This consisted of six different rotations, including general practice, paediatrics, ENT and neurosurgery. Although some of them were particularly relevant to my future career, I benefited from them all.

As a foundation doctor, one of the most important aspects of your training is gaining experience on the wards, consolidating what you learnt in medical school. You learn much about how different patients are affected by their diseases and how to give them the best care possible. You particularly benefit from working on a daily basis with senior doctors as part of a team.

During these two years I continued improving my CV, by conducting extra projects during my rotations, attending courses in surgery and neurosurgery and completing my Membership of the Royal College of Surgeons (MRCS).

Having decided neurosurgery was definitely for me, I spent one year working in that department before applying for a training post. At times I was able to answer the neurosurgery registrar bleep, which could be daunting as it involved taking calls about patients from A&E departments across the region. This included being involved in the process of reviewing scans online and taking patient histories, before more senior doctors implemented a treatment plan. At this stage I mostly observed operations, although I was also able to play a minor part, such as drilling holes in the skull under supervision. This experience helped my successful application for the eight-year run-through training programme in Liverpool.

•

What I do

**Expand /
collapse**

I spent the first part of my specialist training gaining further experience in neurosurgery, and also in different specialties, such as emergency medicine [2], intensive care [3], neurology [4] and general surgery [5]. The latter was especially useful as neurosurgeons operate on several areas of the body other than the brain, such as the peripheral nerves and spine.

During the second year of specialist training I became a registrar and my training so far has involved rotations in the different areas of neurosurgery, including tumour and spinal surgery. As you progress you spent more time in the operating theatre and seeing referrals, whilst the more junior doctors look

after patients on the ward.

Teaching is an important part of neurosurgical training and here at Addenbrooke's hospital we are at the forefront of the latest developments in 3D technology. Neurosurgery is normally performed using microscopes, often with two surgeons able to see the operation. The use of this new technology and wearing of 3D glasses means everyone in the operating theatre has the same view as the surgeons. The recording of the operation can be also used for teaching people beyond the theatre.

I am currently taking time out of my training programme to undertake a three-year period of research which will lead to a PhD. I'm funded by the Wellcome Trust which means I receive my full salary during this research. It's important for me to keep up with my clinical skills during my research, and I do this by participating in an on-call rota for neurosurgical emergencies one weekend in eight and one night in eight.

My research is about neural interfaces – where electronic devices can be used to restore lost neurological function. The aim is to help patients with hearing or vision problems to hear or see again to some degree with the use of implants. Patients who have lost limbs or suffered spinal cord injury may also be helped to regain neurological function. I've been to Switzerland recently to learn more about the new technologies, such as nanotechnology [6], used in the manufacture of these devices.

- **The best bits
and challenges**

- **Expand /
collapse**

Neurosurgeons can make a massive difference to patients' lives. Someone may present with a life-threatening condition and after surgery they return to full health, which is very rewarding. The difference in their life is often immediate.

Neurosurgery is making the use of the latest technologies which makes it a very exciting field to work in. All the scientific and technological developments directly benefit the patients.

I also enjoy the extremely technically and intellectually challenging nature of the work. We work within tolerances of a fraction of a millimetre.

I also really enjoy working with my nursing colleagues and they have enabled me to achieve what I have done. I couldn't have got here without them!

The outcome in neurosurgery isn't always as positive as we would like and sometimes conditions such as traumatic brain injury, some brain cancers or spinal cord injury cannot be helped. But we can often improve people's quality of life, even in these very difficult circumstances.

- **Life outside
work**

Expand / collapse

I'm married to an academic haematologist and supporting one another in our jobs is very important. I'm attached to the University of Cambridge and I'm a member of Gonville and Caius College, so this means I can participate in college life and attend dinners and other social events. These are very enjoyable and also enable me to meet students and staff from different backgrounds.

I still find time for my hobbies which include pistol shooting, where I participate at national level and Judo, where I have achieved a black belt.

•

Career plans and top tips for others

Expand / collapse

After my PhD is completed in two years' time, I'll return to my training post. Then there will be another four years of my specialist training and the Fellowship of the Royal College of Surgeons (FRCS) exam to complete before I become a consultant. After that I'll be applying for posts to try to combine clinical work with research. There's usually lots of competition for these jobs!

Top tips

- demonstrate early commitment to your chosen specialty and be prepared to work unsocial hours
- make contacts in neurosurgery departments and offer to help with projects or research
- don't neglect other aspects of your life (family, friends and hobbies) as you need them to cope with the stress of an exciting but very demanding career!

Source URL:<https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/surgery/neurosurgery/real-life-story-dr-damiano-barone/real-life-story-dr-damiano-barone>

Links

- [1] https://www.healthcareers.nhs.uk/glossary#Foundation_training
- [2] <https://www.healthcareers.nhs.uk/explore-roles/emergency-medicine>
- [3] <https://www.healthcareers.nhs.uk/explore-roles/intensive-care-medicine>
- [4] <https://www.healthcareers.nhs.uk/explore-roles/medicine/neurology>
- [5] <https://www.healthcareers.nhs.uk/explore-roles/surgery/general-surgery>
- [6] <https://www.healthcareers.nhs.uk/glossary#Nanotechnology>