

Please tell us about your research

My research focuses on the use of stem cells isolated from the enteric nervous system (ENS) – the innervation of the gastrointestinal tract – for spinal cord injury therapies. My lab and others have previously demonstrated that these stem cells can be harvested from human tissue collected through routine endoscopy, allowing for autologous transplantation. Previous work conducted in our lab has also shown that murine ENS stem cells transplanted back into the gut can integrate with the endogenous nervous system, and when transplanted into aganglionic gut begin to reform the ENS. Working with Dr Alan Burns and Dr Nikhil Thapar, my work aims to investigate the ability of these cells to promote recovery following spinal cord injury. I am examining their potential to survive, proliferate and differentiate into the appropriate cell types following transplantation into the damaged spinal cord, and of key importance, whether these transplanted cells confer any functional benefit in terms of recovery. I am now in the third year of my Ph.D, and have utilised both the embryonic chick and adult rat as model organisms to answer these questions.

What is the best part of being an Anatomical Society PhD Studentship holder?

The bi-annual conferences of the Anat Soc are a particular highlight. These bring together a wide range of researchers, allowing for free exchange of ideas with people outside of your immediate research area. They also offer the potential to present your findings, both in poster and presentation format, to a diverse audience, inviting valuable feedback and practice.

What key non-academic skills did you learn as part of your PhD?

Time- and self-management. During many Ph.Ds the student is given extensive independence, encouraging creative thinking and planning and forcing you to decide which experiments are most suitable and the best use of your time. In addition, my university, UCL, offers a wide range of courses (many free of charge) exploring non-academic skills such as presenting, grant applications and conference organisation.

Do you think you will continue to be an Anatomical Society member after your PhD and why?

Yes – The Anat Soc is interested in a wide range of varied projects under its broad scope, meaning diverse research areas still stand a good chance of receiving funding. Additionally, all members are given a say in the direction the society progresses, meaning you can express personal views which will be taken into consideration. The meetings are always well organised, interesting and often result in fruitful networks!