Forensic Pathology Elective at University of Glasgow

Lucie Williamson – Final year medical student at Hull York Medical School.

I am honoured to be a recipient of The Royal College of Pathologists and The Pathological Society combined medical elective bursary. I have always been interested in a career in forensic pathology and have attended many events run by the Royal College of Pathologists. Unfortunately, the general medical training curriculum does not contain large amounts of pathology, therefore, I was very keen to pursue an elective in pathology.

I was fortunate to be put in contact with the University of Glasgow Forensic Medicine Department. Glasgow was an amazing place to have my elective. It has one of the busiest mortuaries in the UK which allowed me to experience a wide range of medical conditions, that I have not seen in my current medical school. All the consultants were very friendly and more than happy sharing their experience. This insight into life as a forensic pathologist and the histopathology training path is very valuable to my career and I am grateful that I had this opportunity.

My mornings would start at Queen Elizabeth Hospital Mortuary observing the autopsies of routine cases. I was able to see pathologies from all different organ systems. Some examples were ischaemic heart disease, pulmonary embolism, wide range of cancers, mesotheliomas, burn patients and road traffic collisions. This was great exposure to conditions I have read and seen patients with on the wards. Being able to see the conditions in front of me allowed me to see how the diseases affect the body and understand more about the pathology behind them. After observing over a hundred post-mortems I was able to have experience performing part of one myself. It was a lot harder than what the consultants made it look and required a lot more physical force and accuracy at the same time. Despite the challenge, I enjoyed the experience and am looking forward to performing more in the future.

As with a lot of things in medicine, the afternoons varied on a day-to-day basis. They were usually left open for any suspicious cases that may have occurred over night. I was advised that during my elective the mortuary had a significant increase in suspicious deaths while I was there. The first case I watched was a stabbing victim. It was impressive to observe the skill it takes to examine all the external injuries and accurately describe the pathway of each individual stab wound and the injuries they caused. Having not revised anatomy since second year of medical school I soon realised how much I needed to refresh to fully understand all the anatomical structures, this made the first few post-mortems more challenging to understand. However, it was more rewarding towards the end of the placement when I was able to correctly identify the muscles of the neck and other structures.

I was fortunate to receive teachings from the pathology team. I was taught about the different post-mortem changes, different types of injuries and the correct way to describe them and how to carry out a post-mortem. This was interesting and allowed me to get more out of my elective experience, especially in the suspicious cases.

I was also invited to attend case presentations every other week, run by the forensic consultants and histopathologist consultants that have a special interest in post-mortems. This was a good opportunity to witness discussion about difficult cases that are on-going. I found that the process highlighted the importance of teamwork and help from more senior colleagues even at consultant levels. Everyone was able to bring their own experience to the discussed cases to help with establishing the cause of death.

During the first case presentation I attended a question was proposed about injuries sustained during road traffic collisions due to an unusual case. This sparked my interest and I started a project on ‘Injury Patterns of Road Traffic Fatalities in Car Occupants in Glasgow in 2022: An Autopsy Based Report’. I looked at 30
cases of drivers, front and rear seat passengers and compared the injuries seen in these cases to that known in literature. I am hoping to enter my work to The British Association in Forensic Medicine undergraduate Prize.

The University of Glasgow also contained the laboratory for preparing the microscope slides. It was interesting to follow the specimens from the mortuary to tissue preparation and finally under the microscope. I was lucky enough to be allowed to practice my preparation skills on training tissue samples. Again, this proved a lot harder than it looked, but with some practice I started to cut the samples to the correct size. I also had teaching on the basics of histology using a dual headed microscope. During my second year of medical school, I shadowed a histopathologist which enhanced my interest of histopathology and this was confirmed during my elective. Although it was rather challenging at first to identify what the specimens were and the abnormal section of the slide, it was fulfilling after some teachings when I was able to identify some cells. I am looking forward to building on these skills and hopefully understand more when I become a histopathologist trainee.

During my elective there was a disaster victim identification (DVI) training event which I was honoured to be able to attend. I observed the mortuary aspect of this training. This involved the specialised DVI police, forensic consultants from all over Scotland and the mortuary staff. It was very good to observe the good teamwork and communication skills between all the different departments to achieve one overall aim which was to ensure the correct identifications of the victims.

I really enjoyed my elective in Forensic Pathology, and I am very appreciative for the advice and training that I was given to pursue a career in this area. Once again, I am very grateful for The Royal College of Pathologists and The Pathological Society combined medical elective bursary for allowing me to carry out this elective.