Report for BDIAP Bursary

Name – Jools Green Year Bursary awarded – 2023 Medical School – University of Southampton Topic of Elective – Histopathology (100% of the Project involved Histopathology) Department – Cellular Pathology Department, Poole Hospital

Summary of the Project and my Role – I was given tours of two histopathology labs, where I was able to observe and try processing, embedding and microtomy. I was exposed to the process of immunohistochemistry and how it is used to aid histopathologists in diagnosis. I talked to several consultant pathologists about the pros and cons of a career in histopathology and the pivotal role histopathologists play in the journey of many patients. One consultant told me that it is important to remember we are clinicians and have just as much responsibility as patient-facing doctors.

I observed macroscopic assessment of various specimens, as well as cut-up of smaller specimens by biomedical scientists. I also observed the preparation of various samples in non-gynae cytology which included observing the use of the centrifuge. I was fortunate enough to examine and learn about various specimens under the microscope with the guidance of a consultant histopathologist. I also sat in several MDTs where more complex cases were discussed, such as the dermatopathology and gynae cancer MDTs. I noticed how important clinicopathological correlation was to a pathologist's work and when there was discrepancy between clinical suspicion and biopsy reporting, the histopathologist would often be asked difficult questions. The relationship between radiology and histopathology became apparent. I was able to write a case report and produce a presentation on a uterine angiolipoleiomyoma, an extremely rare tumour which was discussed in a gynae cancer MDT.

I also attended a "LERN meeting" where several individuals, including surgeons, radiologists and histopathologists discussed a squamous cell carcinoma case, where there was concern that the SCC may have been misdiagnosed by the histopathologist as a ruptured cyst.

Aims and Objectives – I aimed to gain an understanding of the day to day functioning of a histopathology laboratory, from cut-up through to reporting cases under a microscope. I also aimed to report on some interesting cases.

How this project has changed my views on Histopathology and research – I was surprised by how many stages there were to the journey of a specimen, which relied upon biomedical scientists, medical laboratory assistants, histopathology trainees and consultants. I gained a much greater understanding of the team effort required to produce a diagnosis for the clinicians on the other end. I learned a lot about how pathologists deal with the pressure of making mistakes and the process that occurs when there is concern there may have been a missed diagnosis.

Presenting my work – I presented my uterine angiolipoleiomyoma case report to the team in the cellular pathology department. I was also able to write a 600-word reflection on my experiences and produce a PowerPoint to present to GP trainees about the journey of a specimen in the cellular pathology lab.