### **BDIAP Report Draft**

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#### Introduction:

I want to start by taking the opportunity to thank the BDIAP for awarding me their student elective scholarship, to support my undertaking of a 4-week placement in the Department of Cellular Pathology, at St Thomas' Hospital (STH), London, under Dr Ula Mahadeva. The purpose of this placement was two-fold.

### Aim 1: To Learn about the Scope and Spectrum of A Histopathologist's Job:

I participated in a broad range of activities in the department. In the first week, I dedicated my mornings to the mortuary, where I observed both adult and perinatal post-mortems. This was a fascinating start to my pathology elective as I had the opportunity to see the macroscopic, post-mortem appearance of common pathological conditions that I had previously only come across clinically, such as pericarditis, pulmonary thrombo-embolism, and ischaemic bowel. To finish my mortuary week, I read through some post-mortem case reports (including a maternal death case), and and reviewed some of the relevant post-mortem histology.

I spent a lot of time with histopathology trainees during my placement, attending departmental formal teaching sessions with them. By shadowing them, I was able to experience what histopathology training is like on a day-to-day basis, and how the nature of the work differs from that of the specialties I had previously been exposed to during my medical school training. I did a range of histology and cytology (gynaecological and nongynaecological) reporting with trainees and consultants throughout my placement. In addition, since cut-up of surgical specimens is a significant part of a histopathology trainee's job, I spent time observing the cut-up of surgical specimens from a number of specialties during my placement. Under supervision, I was able to have first-hand experience of cutting up a few specimens. For one of the specimens, I also had the opportunity to follow it through from cut-up to embedding and sectioning in the lab, and eventually reviewing the slides. By spending time in the histology lab and the cytology lab, I was able to gain an understanding of how slides are made, and hence how artefacts may arise from various stages of the process. In fact, I came across an example of a "carry-over" artefact where tissue specimens possibly from two cases were mixed up, and up and saw how this artefact introduced some uncertainty at the multi-disciplinary meeting (MDM) when the particular case was discussed.

I attended a number of MDMs during my placement and they highlighted how pathologists work together with the wider clinical team, contributing to and influencing clinical decisions and patient management. The close relationship between a pathologist and the doctors managing the patient was also evident when I observed a lung frozen section case, where the pathologist's timely review of the specimen and provisional diagnosis helped guide the surgeon in this case to proceed with a lobectomy.

To appreciate the full spectrum of the job, I was particularly keen to experience aspects of a histopathologist's job that involve direct patient contact. To this end, I attended fine needle aspiration (FNA) and endo-bronchial ultrasound (EBUS) clinics, where I saw how the pathologist interacted with patients to perform FNA of palpable lumps and how a pathologist's expertise helped inform the clinician regarding the adequacy of the FNA or EBUS sampling. In one of the FNA clinics, I also observed how a pathologist was able to directly address a patient's queries about why a core biopsy would be more suitable and more likely to yield a diagnosis in her case than a repeat FNA. Prior to this conversation, the patient was reluctant to proceed with the core biopsy. I saw first-hand how the pathologist's explanation of how diagnoses are made and the differences in samples obtained from a core biopsy versus FNA, made a significant difference to the patient; in this case it reassured the patient of her concerns and ensured that she was able to give informed consent for her core biopsy.

# Aim 2. To Undertake a Service Evaluation Audit Project in Histopathology:

As a national referral centre for infectious disease histopathology, STH currently provides a service where specialist infectious disease (ID) histopathologists review cases for the Hospital of Tropical Diseases (HTD) in London. This service has been provided for over a decade. The aim of my project was therefore to evaluate this service regarding its value and necessity. I collected data to document the clinically significant disparities, if any, between the original histopathology department's diagnoses relative to that provided by STH for HTD ID cases, starting from those in 2017. The project remains in progress and I aim to collect more data and complete the audit following my elective period abroad.

## **Conclusion:**

This four-week placement was a perfect opportunity to see if histopathology as a specialty and career would suit me well. I am very glad to say that I thoroughly enjoyed my time in the department and the specialty itself has won me over. The trainees and consultants I have met along the way have inspired me and I can now see myself seriously pursuing histopathology as a career option. I very much look forward to returning to the department to continue working on the service evaluation project I started. Thanks again to the BDIAP for supporting my histopathology elective placement.