

## **Elective Report for Louis Anthony Evans**

My elective was rich in opportunities to gain experience in the fields of research and surgery. The main focus of my elective was spent collecting data and writing a surgical study on geriatric patients undergoing surgery. This task allowed me to gain skills in data collection, writing and appreciating the time and effort that is put into a study for publication. I am now more familiar with the statistics aspect of studies, in terms of what software is used and which is more appropriate for particular studies. However, due to the time constraints and the steep learning curve for many of these programs, I was not able to gain any practical skills in using such software.

From travelling to different sites around the UK and Europe I have been able to observe how different hospitals operate from the Welsh ones, which are the only hospitals I am familiar with. Knowledge of how different hospitals operate is of use later on in my career when issues of how to improve the delivery of health care arise. From participating in surgeries I have also gained some surgical techniques; skills which are invaluable for later on in my aspiration to be a surgeon.

The main aim of this elective was for me to write a first draft of a study on admission/pre-operative estimated glomerular filtration rate (eGFR) and its effect on surgical outcomes in geriatric patients in an emergency setting. The patients in the study were those that were admitted as an emergency to a general surgical ward and were aged 65 or older. I was to write this paper alone with some input from my supervisors towards the end of the 8 weeks of my elective.

During the first couple of weeks I was based in the university hospital of Wales. My Task during these two weeks was to collect the follow up data for all the Cardiff patients and fill in any missing data. At the same time there were opportunities for me to visit the surgical theatres and assist in some operations ranging from endocrine, hepato-biliary and colorectal.

On the 3<sup>rd</sup> week of my elective I travelled to Scotland to stay for over a week at the Royal Alexandra hospital in Paisley. During my time up there I was taking part in surgery almost every day and going to clinics. A lot of the surgery I observed was Colorectal, with much of it being done laproscopically, however there were an ample number of open lapotomy surgeries for me to assist with.

While up in Scotland I was able to complete a Basic Surgical skills course with the Royal College of Physicians and Surgeons of Glasgow. Many of the skills I learned while on this course I was able to then use in subsequent surgeries I assisted in during the remainder of my time in Scotland.

The main outcomes of this study were readmission within 30 days of discharge, and 30 and 90 day mortality from the time of admission. The initial analysis showed that patients with an eGFR on admission corresponding to CKD 3-5 were more likely to die at 30 and 90 days, when compared to patients with an admission eGFR corresponding to CKD 1-2. Our analysis did not show any relationship between eGFR on admission with 30 day readmission. Our analysis also showed that patients with an admission albumin  $\leq 35$  were more likely to die at 30 and 90 days when compared to those with an albumin  $>35$ .

In my 6<sup>th</sup> week I travelled to Belgium to stay for over a week in Ghent. While in Ghent I was under the supervision of Professor Wim Ceelen at the University Hospital of Ghent. Professor Ceelen is a general surgeon who specialises in the Oncology surgery, particular cancers affecting the large bowel and any malignancy which has spread via the transcoelomic route over the peritoneum. In Ghent I

was able to observe and assist in a procedure only performed in two or three centres in the UK, which is called hyperthermic intraperitoneal chemotherapy (HIPEC). Another procedure I was able to observe was a variation of the HIPEC called pressurised intraperitoneal chemotherapy (PIPEC), however this was a laproscopic procedure and I only observed.

I am grateful for you awarding me the bursary, as it really helped with covering the travelling and accommodation costs during my elective. Therefore when we publish the study we will acknowledge that you provided funding during the writing of this study.