For the first portion of my elective, I was selected as one of 20 medical students globally to participate in the Training Disaster Medicine Trainers (TdmT) initiative; a collaboration between the International Federation of Medical Students’ Associations (IFMSA) and CRIMEDIM (Research Centre in Emergency and Disaster Medicine) in Italy starting July 17th. Before the residential aspect, the programme included a three-month, weekly e-learning package, aiming to give participants comprehensive knowledge of the core problems that physicians face in disaster environments, and methodologies to best prepare for such instances.

Table-top and Computer Simulations

Though I’ve always enjoyed clinical aspects of medicine, my main passion has always lied within management, with an appreciation for socio-political intricacies, henceforth, I felt that the teaching on ICS system truly brought all of these interests together. The breadth and multifaceted disaster response system, which requires an ICS commander to have a solid basic knowledge across all fields, is a truly fascinating feet one could uptake. My favourite portion of the course was the live simulations we undertook, beginning with table-top exercises, stepping up to computer simulations, and finally a real-life disaster simulation facilitated by CRIMEDIM in partnership with the Italian Red Cross. Pairing this practical simulation experience with the theoretical knowledge, especially the pathophysiology’s related to each disaster scenario – be that floods, earthquakes, mass collisions, or bomb blasts – was an incredibly stimulating experience; one that I have been hoping to have since starting medical school.
Trauma surgery, has always been a source of interest of mine. Hence, a rotation at the most historic unit in the country, based within the city with the highest homicide rate within the US was a truly remarkable experience.

After, I began my rotation on the burns service, and to say that I was hooked would be an understatement. The consultant on the unit, Dr. Poulakidas (pictured), swiftly became one of the greatest teachers and mentors I’ve had the pleasure to work with. Thus, I chose to spend remaining three and a half weeks of my elective on his service.

Cook County being a governmental hospital, one was able to observe the most weird and wonderful cases that you would not expect within one of the riches countries of the world due to those neglecting seeking medical care due to lack of insurance or legal documented status.

Being on ICU I not only had the opportunity to learn of the specific care needs of burn patients – such as wound care, fluid resuscitation, compartment syndrome prevention – but I also had the opportunity to exponentially increase my knowledge of care for a critically ill patient. This included learning markers for progressing deterioration, including severe co-morbidities such as inhalation injuries, and how to manage ICU critical interventions such as vent management. This experience paired with two dedicated days for surgical cases per week in which Dr Poulakidas allowed us to assist made for the best clinical – and specifically surgical – rotation I have had to date.
Medical elective report

For the first half of my elective I had a placement at the University Hospital of Bern, Switzerland, working in the ENT department. Usually the day started with a handover meeting at 7:15am to which all the doctors would go to, followed by a ward round. My job involved clerking all the pre-op patients who would typically come to the ward the day before their surgery. I had to take their history followed by a full ENT exam, including nasendoscopies on every single patient which meant I quickly learned how to do them myself. I also had to consent patients for surgery which was a whole new experience considering, as medical students, we are not allowed to do that in the UK. At noon I had to present all the patients to the consultant who would then spend about 5min to see each one again. Depending on how many patients I had seen in the morning and the number of patients that were scheduled to come in the next day, my afternoons were filled with admin and paperwork or left free to do what I wanted. Unfortunately, I spent the majority of my afternoons in front of a computer, entering my clerking notes, sorting out medications and preparing patient notes for the next day. However, I managed to go to a few theatre lists, including a parotidectomy and neck dissection, clinics and occasionally to A&E to see emergency ENT cases.

I spent the second part of my elective at the orthopaedics department at the Western Regional Hospital in Pokhara, Nepal, which is a government-funded hospital in a country where road traffic accidents are one of the most common cause for hospital attendance. Unsurprisingly it was a very different experience to the well-equipped Swiss hospital I came from. The day usually started with a ward round at around 9:45am which involved seeing around 40 patients in a little more than one hour. The orthopaedic ward was very basic and men, women and children were put together in the same bays. Whoever did the ward round would then join the other doctors in the outpatient department which was one big room with tables and chairs where several patients would be seen at once. Confidentiality was essentially non-existent and often other patients or other patients’ relatives would listen to someone else’s consultation. Nepal still has a very paternalistic view of health care where a patient fully trusts their doctor and there would not be any discussion about alternative treatment options. Orthopaedics had two scheduled operating days plus the occasional emergency on other days. The lack of resources and the general poor state of the theatres was astonishing. Power cuts happened on a regular basis. Nevertheless, the Nepali surgeons did an amazing job fixing all kinds of fractures, including open and closed tibial fractures, as well as deep cut wounds with tendon and nerve injuries. I’m glad that I had the opportunity to experience such a different healthcare setting, making me very grateful for the NHS and the resources that we have available here in the developed world.
Elective in Peru
The Vine Trust-Forth Hope Medical Ship
1st – 14th April 2018

The vine trust is an organisation which uses two ex-British-military ships to provide healthcare to the small remote communities in the Amazon basin, Peru. Each month the ships carry out a trip down the tributaries of the Amazon river. The boat provided me with accommodation, good food and a friendly group of fellow doctors, a dentist, English-Spanish translators and many nurses and lab technicians who are paid by the Peruvian government or the charity in order to provide this very important care. The boat can accommodate up to 8 volunteers at a time, be they students or qualified doctors and dentists.

These ships are equipped with multiple treatment rooms and a laboratory giving tests for haemoglobin, glucose, malaria, cyphilis and HIV tests. There are also dental surgeries which are almost fully equipped. The boat and the crew provide care of a medical, dental, obstetric and paediatric nature, including vaccinations and antiparasitic treatment. There is also basic optometry for over 40s.

As my team joined the boat halfway through a mission, in order to reach the boat we flew from Lima, capital city of Peru, to Iquitos in the Loreto area. This small city is the closest for many within the Amazon basin and is home to almost half of the approximately 1 million population of the area. We travelled from Iquitos to Requena by road and speedboat for 5 hours, then after a night in Requena we took another speedboat for 5 hours to meet the forth hope ship which had reached a very remote part of the Amazon.

The population we were to treat include villages with populations from 30 to 2000. 38 out of 56 districts living with less than 2 US dollars per person per day. Less than 10% of the inhabitants have access to clean water and there are high prevalences of malnutrition and anaemia. In this region I was shocked to discover that there are only 4.1 doctors, 3.4 nurses, 2 midwives and 0.86 dentists per 10000 people.

The population has low rates of alcohol use and smoking, however they do have access to high sugar snacks and their diet consists of a lot of carbohydrate rich food and fried meat such as chicken. There are, however, many fruits and a fresh supply of fish in addition to this. The average inhabitant drinks approximately 2 small cups of water per day despite 30 plus degree centigrade temperatures.

I have been in a unique situation wherein I can provide help in two disciplines using my training as a dentist and in the field of Maxillofacial surgery to provide simple dentistry and minor oral and facial surgery where required. I have found that the patients in these villages often decline any kind of preventative care and instead often elect for extraction of their decayed and
painful teeth. I feel that mostly they are just pleased to be out of pain and wish for the simplest treatment options which is in stark contrast to that of patients at home. I have learned to tailor my advice and treatment to the population’s requirements and preferences with the guidance of the Peruvian medical team on the boat.

My main contribute however was as a medical student assisting in the assessment and providing care for simple ailments. These often include headaches, often caused by dehydration in the high heat, diarrhoea often due to bacterial causes and back pain, often caused by manual labour, however I have learned how important it is to look beyond the simple and suspect tropical diseases as well as other causes more common to the location such as parasites, from drinking river water and malaria and dengue fever as there is a high level of mosquitos in the region. In the future I will use this to tailor advice to the location in which I am working. I have been well guided by both Peruvian and British doctors on the trip who have different outlooks on the treatment of these patients. It has been useful and interesting to see both.

We traveled amongst many remote villages within the Amazon basin, where patients in general attended the boat for consultations, however time was spent before several of the clinics in the schools of the villages teaching the signs, symptoms and preventative steps in sex education and sexually transmitted diseases and dental hygiene advice. I feel it is the preventative education that could make the greatest impact if distributed correctly although I get the impression some cultural beliefs and practices are engrained and require multiple message reinforcements to make any difference.

One of the most eye-opening aspects of the trip was the realisation of how far the patients would have to travel for any specialist care should we find something that is not treatable on the boat or required further investigation.

Other patients I saw with more complex problems such as suspected breast cancer and suspected hepatitis were also referred to Iquitos, however in reality there is often many limitations to the possibility of this; including time away from work, as most are self employed, leaving large families at home as well as financial considerations. Healthcare in Peru is government funded but this only provides basic care and basic medication.

This experience has not only taught me the difference between populations and to tailor my treatment to the area, it has also taught me that despite the amazing amount of expertise, and treatment that we can provide in such a small space in a remote area,

This whole experience would not have been possible without the financial support of Wong Choon Hee travel bursary. I am very grateful to the committee for the opportunity to experience, participate and learn in a culturally and financially different healthcare structure to the one I’ve lived and will work within in the UK.
In January 2018 I travelled to Cape Town, South Africa, to start a 3 month surgical elective placement; to experience surgery and peri-operative care. My elective consisted of two parts, 4 weeks of Trauma surgery at Tygerburg Hospital followed by 4 weeks of Orthopaedic surgery at Groote Schuur Hospital.

The 4 weeks were in the Department of General Surgery & Trauma at Tygerberg Hospital, Stellenbosch University. The hospital, together with Groote Schuur Hospital, serves as the referral centre for the Western Cape Province and sees 22500 trauma cases per year.

The first 4 weeks primarily consisted of time spend in the “trauma front-room”, a unique experience of the pre-operative care of various trauma cases prior to emergency surgery. The hours were long and the work intense but the time spent here was one of my most valuable learning experiences to date. It was a unique opportunity to experience acute surgical and trauma presentations, and their management, in a volume and nature not seen in the UK.

The second 4 weeks was a very different experience, but no less valuable. I chose to be attached to the Hip & Knee surgeons at Groote Schuur Hospital and primarily my time was spent in outpatient clinics and theatres. In the 4 weeks I assisted in over 15 knee replacements, experience and exposure that is difficult to come by as a medical student in the UK.

Both placements allowed me to strengthen my basic clinical and surgical skills; including suturing, cannulating, taking blood & ABGs and clerking patients. Such experience has undoubtedly benefited me now I am working as an FY1 doctor.

Throughout my time in Cape Town I also volunteered with ‘SHAWCO’, an organisation who provide primary care services to townships otherwise without access to healthcare. These student-led evening and weekend clinics offer primary healthcare in under-resourced communities, with fully equipped mobile facilities (image 1). These clinics often serve as the only port-of-call for community members of deprived townships. This was a memorable and unique experience of healthcare delivery totally different to that I’ve previously known, and allowed me to offer support to the community my elective was within.

The ability to spend time in a single surgical department for 4 weeks is rare, and is often difficult to achieve at medical school. This elective gave me the opportunity to become more integrated within the surgical teams, as well as facilitated a better understanding of the day to day of a surgeon. I have a strong interest in Trauma & Orthopaedics and this combination of placements gave the opportunity to gain a real insight in the specialty to inform my future career ambitions. Beyond helping inform my choice of surgical specialty it was ideal preparation for surgical and A&E foundation jobs, boosting my confidence. Lastly, it was a once in a life time chance to live and work in the beautiful country of South Africa.

I could not recommend Cape Town highly enough to any future medical students interested in surgery and trauma medicine, it was an experience of a life time and I am extremely grateful for the support offered by the Wong Choon Hee Bursary, which helped make this elective possible.
My Surgical Elective in Melbourne

My elective took place in the Royal Melbourne Hospital (RMH), Australia. I have a keen interest in urology and aspire to pursue a career in this specialty. To expand my exposure into the subspecialty of urologic oncology, I chose to complete my elective at the RMH Urology Unit, a high volume robotic surgery department and leading centre in prostate cancer care and research between 13 March to 31 March 2017.

My time spent in the department was divided into ward rounds, clinics and theatre. During the ward rounds, I learned the principles of post-operative management of urological patients. The weekly departmental meetings provided learning opportunities from complex case discussions. I was also able to participate in uro-oncology clinics at the Australian Prostate Cancer Research Centre.

I thoroughly enjoyed my time in theatre, where I observed some of the finest robotic surgery Melbourne has to offer. It was truly fascinating to observe the robot-assisted radical prostatectomy and the surgical precision involved in this technique. The urologists were highly experienced and able to achieve satisfactory tumour margins while minimising the morbidity of the operation. I found their ability to provide healing in men suffering from prostate cancer truly inspiring.

In addition to robotic surgery, I was exposed to the breadth of urological procedures, such as endourologic management of kidney stones, transurethral resections of prostate and bladder tumours and female urology. I took every opportunity to scrub in and assist in operations, and was able to practice my suturing skills during wound closure. I also learned how to perform flexible cystoscopies to identify bladder tumours. These experiences have emboldened me to continue pursuing a career in urology and I look forward to continually develop these skills throughout my career.

The second leg of my elective was spent in the RMH Trauma Unit between 3 April to 21 April 2017. This was a dedicated trauma liaison service, led by consultant trauma surgeons. The team would manage between an average of between 40-50 patients around the hospital at any point. I was exposed to a variety of trauma cases, from road traffic accidents, sports injuries, assault and attempted murder. As the majority of patients suffer from polytrauma, the team would often liaise with other surgical specialties and interventional radiology.

I learned the principles of primary, secondary and tertiary surveys in the evaluation of the trauma patient. Over time, I was able to develop my confidence and competence in performing these surveys and enhance my clinical skills. Exploring the variety of trauma cases also allowed me to develop skills in radiology such as identifying pathology on CT scans and plain films.

I am grateful for the opportunity to learn about surgery abroad and feel more prepared for my foundation years and urological training in the future. I would like to express my immense gratitude to the Royal College of Surgeons Edinburgh for the Wong Choon Hee Elective Bursary, without which none of this would have been possible.

(496 words)
Image 1| The Royal Melbourne Hospital and helicopter frequently used to transport trauma patients from all across the state of Victoria

Image 2| Robot-assisted radical prostatectomy in action. Left: Consultant urologist, Mr Homi Zargar operates the console. Right: Robotic arms in the pelvis are used to remove the prostate.
I would like to begin my expressing my utmost gratitude for the support given to me from the Wong Choon Hee Bursary, without whom this elective and learning experience would not have been possible.

I carried out my elective at Memorial Sloan Kettering Cancer Centre (MSKCC) in New York City, USA. MSKCC is a worldwide renowned centre for the medical and surgical treatment of cancer. The surgery I experienced at MSKCC was an amazing learning experience and one in which I was able to assist with robotic surgery for cancers of the base of tongue (a technique that is only used at a few centres in the world). Additionally, I was able to scrub and assist with my thyroidectomies and neck dissections. This was an amazing opportunity to refamiliarise myself with surgical anatomy and well as to experience the differences in the management of Head & Neck Cancers between the UK and US. Working closely with the team of Head & Neck surgery pioneers at this institution served to reinforce my desire to pursue a career in ENT surgery and has revitalised my ambition to succeed in this specialty. Although I gained a wealth of knowledge and experience, I will briefly discuss my main learning point that I gained from my elective: the differences between UK and US healthcare systems.

The US has an extremely privatised healthcare system where most people are provided medical insurance through their work. If not, Medicare is the insurance provider for elderly Americans and Medicaid provides limited insurance for those considered below the poverty line. Although, I knew this was the case I did not appreciate how big the difference would be before I started work at MSKCC. I feel that, as an NHS trained doctor, the learning curve with the US healthcare system was steep. First and foremost, I found it quite challenging to encounter patients who could not seek treatment as they did not have adequate healthcare insurance. This is obviously very different from what would occur in the NHS and was therefore took some time to adjust to. That said, the standard of care offered at MSKCC was second to none. I would see patient in the morning in clinic who would see their doctor, have a full work-up (including biopsy, reporting and imaging) then would be operated on later that week. I was astounded by the care offered to patient at MSKCC but my time there has served to give me a newfound pride and appreciation for the NHS in the UK. Despite the inherent issues with the NHS, it offers universal, high-quality care for all, regardless of socioeconomic status.

Practically, organising an elective in the United Sates can be challenging, with a lot of paperwork and logistics that must be carried out before embarking on the elective. Then there is the issue of costs-US electives are expensive so advanced planning is essential! In summary, this elective was one of the most rewarding experiences in my medical career to date and I would encourage future medical students to pursue an elective in the United States.
States.