

*Having a*

# BLAST

*during My Overseas Elective,*

# Literally

By Warren Ong

Most local medical students would consider their elective periods to be the best times of their lives in medical school, and this is true for me as well. I will, no doubt, remember with fondness all the stories of my overseas elective.

The end of Community Health Posting Test marked the beginning of my six-week escapade to the US. It was nerve-wrecking having to travel alone to the US for the first time, but I was definitely looking forward to exploring its healthcare and medical education system while having a good break before M5 commenced.

My first stop was Atlanta, Georgia. My team, a multidisciplinary group from National University of Singapore (consisting of students from Engineering, Biomedical Sciences, Public Health, Medicine and Business), was selected to represent our university in a Global Health Case Competition held in Emory University. The case required teams to recommend specific sanitation programmes and countries for China to invest in. It

was certainly a great learning experience, as I was the only Singaporean medical student who took part in the competition.

In preparation for our presentation, we endured severe sleep deprivation of more than 72 hours. Our efforts paid off, and we were placed sixth in the competition, beating strong contenders such as University of Pennsylvania and Princeton University. We were also nominated as a finalist for the Innovative Award.

After bidding farewell to my team, I continued on my journey towards the West Coast to meet up with my fellow medical school colleagues in San Francisco, California. We then toured the West Coast before heading east.

## **Arriving in Boston**

My elective officially started upon arrival at the wonderful city of Boston, Massachusetts. I was very fortunate to have been among the 15 students selected from my batch to attend an overseas elective at Harvard Medical School.

Photos: Warren Ong and Stock.XCHNG



One of the oldest cities in the US, Boston is immensely rich in history, especially in the field of Medicine. Boston's first family of Medicine, the Warren family (my namesake, coincidentally), was renowned for laying the foundation of Medicine in the US – in 1782, John Warren founded Harvard Medical School, now one of the world's leading medical schools, and his son, John Collins Warren, cofounded Massachusetts General Hospital (MGH) in 1811. What's more, the Ether Dome, located in MGH, was the site of the first public demonstration of surgical anaesthesia in 1846.

I had chosen a surgical critical care, trauma and burns management subinternship in Brigham and Women's Hospital (BWH), which is situated within the Longwood Medical and Academic Area. This area is a region of Boston with a very high concentration of medical and research facilities, and is home to numerous reputable institutions. It is not uncommon to see half the "T" (the major public train system in Boston) filled with medical personnel.

The surgical intensive care unit (ICU) in BWH is slightly different from that in Singapore. BWH's surgical ICU is managed by a group of physicians and surgeons accredited in critical care, including anaesthetists, general surgeons and emergency physicians. In contrast, surgical ICUs in Singapore are primarily run by anaesthetists trained in intensive care. Also, at BWH, medical students in the ICU form an integral part of the team; as a subintern, I was given a lot of autonomy in patient care. For instance, I was responsible for handling the handovers from the operating theatre anaesthetist, preliminary history taking and physical examinations, deciding and ordering relevant investigations, creating admission and discharge summaries, as well as synthesising a management plan for every patient under my charge.

A typical day on my rotation began at 5.45 am, where I prerounded with residents, presented cases during rounds and discussed management plans with doctors. Daily resident teaching sessions began at 6.30 am, and covered topics such as mechanical ventilation, metabolic derangements and nutrition support in the critically ill. The attendings would round up after the teaching session, and I would present the daily updates and management plans that I had devised for my patients. The fellows and attendings would then question the interns and residents about the rationale behind their management plans, expecting the explanations to be supported by evidence.

### **A day to remember**

On 15 April, despite waking up in the wee hours of the morning, I was in high spirits. It was Patriots' Day, a public holiday commemorating the anniversary of the Battles of Lexington and Concord (the first battles of the American Revolutionary War), as well as the day of the Boston Marathon – the world's oldest annual marathon.

I reported for work as usual that morning. Although scheduled to be on call, I requested for time-off to watch the marathon, one of Boston's largest events, and promised to return that evening. My apartment was located along Beacon Street in Brookline, which was cordoned off as part of the race route. I headed home with my colleagues, eager to watch the marathon from our apartment. As the race progressed, we took a stroll towards the finishing line at Copley Square, oblivious to the impending peril that would go down in American history.

Arriving somewhere slightly away from the finish line, we were hoping to take some photographs with runners



A Boston Marathon bombing memorial held at Copley Square

who had finished the marathon, for memories' sake. Alas, we were unsuccessful, as a large barricade prevented us from doing so. Moreover, as many of the runners who had left the area looked exhausted, we did not bother them.

At around 2.40 pm, we left our prime viewing spot and headed for lunch in Chinatown, some two stations away by T. It was only when we started using our mobile phones at the restaurant that we discovered that ten minutes after we left the marathon venue, at 2.50 pm Boston time, two bombs had gone off at the spot where we had been at, killing three and injuring 264 others. At that time, we did not give much thought to the incident, dismissing it as one of the occasional random acts of violence in the US. But just to be on the safe side, we decided to head home immediately after lunch.

Only after travelling down Boston Common and upon arriving at Boylston Station did we realise the gravity of the situation. All forms of public transportation were shut down, police patrol cars were seen at every corner, ambulance sirens could be heard from a distance perpetually every second, and everyone seemed to be in a panic, moving hastily back home for safety. The telecommunication networks were overloaded. We could neither contact other Singaporeans within Boston by phone nor access Google Maps to find our way back to Brookline. In such dire straits, we relied on primitive methods – instinctively following Charles River, which ran alongside Brookline and Boston, we were able to orientate ourselves and move in the right direction.

While heading towards the river, we heard a third blast

from a distance. To say that we were frightened was an understatement. At that moment, we were certain that the third blast was part of a series of bombs executed by terrorists, and that we were not safe at our current location. Memories of my National Service days came flooding back – I was on high alert and suspicious of every person around the Common, staying away from rubbish bins and any object that looked inappropriately placed. This third blast was later found to have gone off at the John F Kennedy Presidential Library, and was unrelated to the first two blasts at the marathon.

While walking along Charles River, I was contacted by my resident from the surgical ICU to head back to the hospital as soon as I could. The blasts had, expectedly, resulted in a high influx of patients, causing a manpower shortage in the hospital. It took me nearly two hours to arrive at the hospital. Chaos greeted me at the ICU, with many patients being pushed in after their emergency operations. I was stricken with fear, looking at the sheer physical damage and worried faces of fellow healthcare professionals as they continued working in this precarious situations where their own safety was not assured. But through it all, I saw their determination, passion and dedication as they stayed behind to treat those who needed them.

Despite bomb threats made on hospitals in Boston, my team and I stood firm and continued caring for our patients, braving the terror within us. This felt like the longest call I'd had in Boston, watching tears streaming down the faces of family members and victims continually



being wheeled into the ICU. The hospital was placed on lockdown until the following morning, and through the night, Boston police officers, FBI agents and SWAT officers on sentry duty surrounded the hospital.

**The turmoil continues**

While preparing for my ward rounds the next morning, I overheard that First Lady Michelle Obama was scheduled to visit the victims at Boston Children's Hospital and BWH in the afternoon! My team and I managed to have a short conversation with her while she visited the victims in the ICU. In those dark hours, she was like a beacon of hope for both the victims and hospital personnel. After a long, tiring and eventful call, I headed home, satisfied that I had helped to ease the Bostonians' pain in some small way.

On 18 April, I was fresh and ready for my next call. As my call was rather uneventful, I managed to log onto Facebook during my free periods. An ex-high schoolmate, currently studying in Massachusetts Institute of Technology (MIT), had posted on Facebook that MIT students should stay indoors to steer clear of danger. Puzzled, I probed further and found out that an MIT police officer, Sean A Collier, had been fatally shot within MIT's grounds that evening.

Just when I was certain that the turmoil had ended with Monday's bombings, this unabated series of violence once again sent shock waves through my being. As words of caution and comfort spread rapidly via social media, the night evolved from a single tragedy into a firestorm of events. Throughout the night, there were police radio reports of injured police officers, stolen police cars, long guns and explosives being fired, and bomb threats throughout the Greater Boston area. The next morning, reports confirmed that the MIT shooting was linked to the Boston Marathon bombings.

My resident and I tried our best to focus on the work at hand while on call that night, but we were inevitably distressed at the tragic developments just a couple of miles away from us. I tried in vain to contact my Singaporean colleagues to inform them of the situation. I only managed

to get word to them in the morning that the town was on lockdown again, and that postcall, I would be stuck in the hospital indefinitely until the suspect was caught. At around 8.45 pm on postcall night, the Boston Marathon bombing suspect, Dzhokhar Tsarnaev, was finally arrested following an extensive manhunt.

**To cure sometimes, to relieve often, to comfort always**

While I was in the hospital's elevator a few days later, a young Caucasian man in a wheelchair next to me remarked, "You must be feeling tired and unappreciated." Dressed in a BWH gown, the lethargic-looking patient's limbs were wrapped in bandages. I introduced myself as a Singaporean medical student on exchange, and we had a short conversation.

As I was walking out of the elevator at the eighth level, he left me these parting words: "Thank you for your sacrifice. I saw that you were around throughout Boston's worst week. Being a doctor, you'll often be underappreciated. But always remember that there are always people like me who need you and appreciate the work you do. Thank you for helping us. Be a good doctor when you return to your country."

About a week after my return to Singapore, while searching online for updates on the aftermath of the Boston bombings, I chanced upon a video posted on the *Boston Globe's* website. There he was, Jarrod, the young man from the elevator, walking steadily to the podium and making a speech about his recovery from the Boston bombings. I smiled to myself, knowing that I had made the right choice in becoming a doctor. **SMA**



*Warren Ong is currently a final year medical student at Yong Loo Lin School of Medicine. He enjoys engaging in activities both within and outside medical school, and believes that experiencing random things in life will always benefit oneself, somehow, someday.*