ESTRO 2008: Image Guided Radiation Therapy Course

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Horsemen at the Ommegang Festival in Brussels; bottom right: the EU

Image guided radiation therapy (IGRT) is a continually evolving practice in radiation oncology. New techniques and technologies that require ongoing education and training to keep up to date are being constantly introduced. As a recipient of the 2007 AIR International Travel Scholarship in Radiation Therapy, I saw this as a wonderful opportunity to broaden my knowledge in this field by attending the European Society of Therapeutic Radiology and Oncology (ESTRO) Image Guided Radiotherapy in Clinical Practice Teaching Course in December last year.

So I left the warm shores of Melbourne and headed to the five-day course in Brussels, Belgium, where I was greeted with rain and snow and sub zero temperatures. This teaching course is run annually at the University of Brussels and is an opportunity for professionals in radiation oncology (oncologists, physicists, radiation therapists) to be exposed to the latest in IGRT practices.

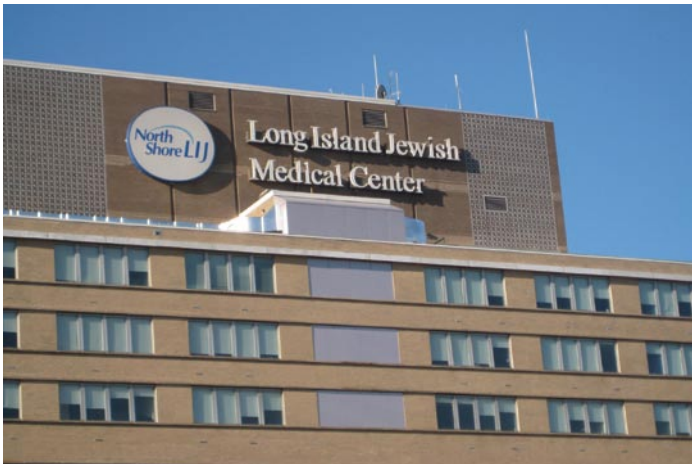
The ESTRO teaching panel consists of professionals, from all of the aforementioned disciplines, who develop material to assist clinical practitioners from all over the world to implement and improve the way they perform IGRT.

The practical side of the course was evident from day one, when a site visit was organised for each participant. We were given the choice of four radiation oncology departments we could visit – each presenting a variety of technologies.

Coming from the Austin Hospital in Melbourne, where we are utilising cone beam CT (CBCT) on the Elekta Synergy, the opportunity to visit the department at the University of Ghent allowed me to witness a department which was fully operational with CBCT technology. The department has a variety of treatment protocols spanning a large range of body sites. The members of staff were more than willing for myself, and others, to pick their brains as to how they do things, and to explain what they believe are the pros and limitations of this technology. This hands-on visit provided a great foundation for the rest of the week, where the clinical ramifications of this technology, and many others, were discussed at length.

The following four days provided a comprehensive overview of a wide range of image guided radiotherapy practices, covering how these practices can be implemented over a large number of treatment areas and in situations suited to the vast array of participants attending the course.

Of particular note were the relaxed nature of the event and the accessibility of the teaching staff. They were more than happy to be questioned, which led to countless open discussions over a wide variety of topics throughout the course. Having the likes of Marcel van Herk and Vincent Khoo open for questioning is an opportunity we rarely get in Australia. The chance to



The study tour ended in New York City

interact with these two (amongst many) in both a formal setting and informal chats, enabled me to gain knowledge specific on my interests, and beyond the realms of their teaching material.

A couple of social functions were scattered through the course. These allowed the delegates, in particular the rather healthy Aussie contingent, to get to know each other outside of the classroom and to enjoy a few of the sights of Brussels during the festive season.

Following the course, I took the train to Rotterdam in the Netherlands, where I had organised a site visit to the Erasmus Medical Centre (EMC) Radiation Oncology Department. The CMS Monaco Planning System is a tool that is being implemented in my department. EMC is a leader in utilising this system, as I had discovered during a presentation from one of their team, Peter Voet, during the CMS Users' Meeting 2008. I saw this as a great opportunity to tap into some of their knowledge to further the advance of this technology in my department. I was lucky to spend a day with Peter, gaining hands-on clinical practice with the system. I came away from this experience with plenty of tips that have helped me with my Monaco planning since I returned to Melbourne.

Six full days of learning called for a few days of R and R in the lead up to Christmas, enjoying Europe and everything it has to offer at such close proximity – something we aren't used to living in this part of the world. Paris, Barcelona and London were soon over and I headed across the Atlantic to New York, my final destination.

IGRT in breast irradiation has a newly developed technology known as Align RT. In short, it relies on infrared surface matching of the treatment volume (in this case the breast) to ensure its accurate localisation during daily radiotherapy.

While this technology is also utilised in other body sites, I was able to witness Align RT's use clinically in breast radiotherapy at the Long Island Jewish Medical Centre. I gained a great understanding of how this technology can be used for image guidance in practice today, and the possible directions for its future use. While it is still in its infancy in Australia, I saw this as a great opportunity to see the use of Align RT in a fully operational department.

I would like to thank those involved for helping me facilitate the site visits. The structure of these visits allowed me to get hands on and not just visit the department. I gained a whole lot more out of the experience thanks to their input.

Finally, I would like to take this opportunity to thank the AIR for the scholarship, and the great opportunity it gave me to witness what is being done beyond our shores. I've gained a whole new set of ideas – which I can bring, not only my department, but to the profession in Australia.