Three very energetic and accomplished young urologists from the Canadian Urological Association (CUA), led by their senior advisor Prof. J. Chin, took part in the ongoing academic activities of the EAU. They visited some top urology units in Europe just prior to the EAU Congress in Barcelona.

We gained academic knowledge and established invaluable potential linkages with European colleagues for research and academic collaboration. We experienced extremely generous hospitality from our gracious hosts at every stop for which we are most grateful.

As an academic vision and a robust prospective data capture system

In every centre we visited, there was a mature systematic approach to standardised prospective data collection which has helped to drive the research portfolio of these institutions. A strong academic vision, support and commitment to infrastructure were evident, leading to a positive research culture, productivity and a collective belief that research is complementary to providing excellent clinical care.

We started our visit in Milan (IT) at San Raffaele Hospital, which is internationally recognised as a urology research powerhouse. Professor Francesco Montorsi introduced us to his research team, comprised of clinicians, basic scientists and data managers. The data managers are responsible for maintaining prospective comprehensive databases in a wide range of urological conditions, including oncology, andrology and functional outcomes. In addition, basic scientists work alongside clinicians, in the impressive urologic research Institute at San Raffaele focusing on andrology, infertility and oncology. The well-structured integration of clinicians and basic scientists focused on urological research is uncommon, and this greatly supports collaboration and translational research.

Waltz and his team. Their impressive automated data capture system coordinated through integrated forms and the electronic health record was used as a case study to drive their research. We have found this to be a powerful approach to research, and other centres are beginning to explore this model.

Next we visited Valencia (ES) with Dr. Jose Rubi-Botines at the Instituto Valenciano de Oncología. A comprehensive cancer centre, the group has a commitment to prospective data capture by performing cardiac data abstraction for oncological, andrological and functional variables and outcomes. Additionally, we were introduced to novel diagnostic and therapeutic techniques, such as confocal microscopy of tissue biopsies and prostate focal therapies, and the group at IVI are actively studying these modalities. Adapting new approaches and studying the impact of surgical and technological innovations on patient care is strongly emphasised in the clinical and research vision at IVI.

Finally, our journey ended in Barcelona (ES) with Professor Antonio Almansa’s team who showed us their innovative data gathering approach to answer innovative questions in renal transplant, surgical technologies and endourology at Hospital Clinic de Barcelona. The group at Hospital Clinic de Barcelona is at the forefront of innovation in urology and renal transplantation, the commitment to education, research and surgical innovation was very evident.

Exchange of research ideas and opportunities for collaboration

To encourage collaboration, we participated in a rich exchange of ideas by sharing our research projects and interests with our host institutions. Through these well-organised research symposia, we presented our projects at the sites we visited: Dr. Tristan Dumes presented on approaches to small renal masses, including a prospective trial on irreversible electroporation for small renal cancers; Dr. Mélissa Keays presented on information technologies and patient reported outcomes in surgery; Dr. Paul Leren discussed his translational research projects on predictive markers of response to abiraterone and also on the role of sex hormones and innate immune cells on cancer progression and Prostate; Dr. Joseph Chin presented on surgical therapies after radiation failure and management of lymph nodes with prostate cancer. Reciprocally, we learned about numerous research areas in the different centres and the power of multi-centre collaborative research which is commonplace in Europe. One particular highlight was to learn more about the impressive EAU’s Young Academic Urologists (YAU) network, which includes talented up-and-coming European academic urologists under 40 years of age. The YAU network demonstrates the power of research collaboration and mentorship, and allows young urologists to meaningfully participate in EAU guideline development and educational curricula.

Innovations in surgery

We were all very impressed with the level of innovation and early adoption of surgical technology in the European centres we visited. Robotic technologies were very prevalent, with application in prostate, bladder (including salvage cases), extensive modal and renal surgery. Advanced diagnostic and minimally invasive approaches to prostate cancer were commonplace in the centres we visited. MRI-fusion biopsy technologies, focal therapies and the use of PSM/RTT scans are extensively used, more so than in Canada. We also got to witness laparoscopic nephrectomy for renal dialysis for penile cancer, ESMO treatments for erectile dysfunction, and learned about robotic approaches to renal transplant and even natural orifice surgery.

..."strong academic vision, support and commitment to infrastructure..."

Training, education and Canadian-European connections

One of the most interesting things we learned on our exchange is the incredible difference within the Canadian and European urology training models. Unlike Canada, where most medical students compete for medical school positions after an undergraduate degree, European medical students are selected into medical school upon completion of a competitive written examination upon completion of high school. In Europe, selection into urology residency does not involve reference letters, portfolios or multiple interviews but is based on one’s ranking in a standardised national examination, where the highest scoring applicants select their preferred residency programme. Many of the residents and fellows we encountered were among the highest ranked in their cohorts. Instead of staying in one centre during residency, we found it fascinating to learn that many urology residents participate in a country-wide fellowship, which includes a strong Canadian-European connection between Milan and the Centre Hospitalier de l’Université de Montreal. We also learned that resources exist to encourage graduating urology residents to pursue additional advanced education. For example, graduating Spanish urology residents have the opportunity to pursue further supported studies (such as a PhD) through a competitive nationally sponsored programme.

The model of health care delivery is integral to training and we discussed the potential impact of the European mixed public-private model health care delivery and education. Although there were some parallels to Canada’s completely publicly funded hospital health care model in every country we visited, many cities had combined public and private clinics and related differences in work times and access to various diagnostic and therapeutic procedures. To ensure adequate exposure and training, certain aspects of surgical training have been centralised in Europe, with the creation of the European Robotic Curriculum. This well-studied model uses structured and validated modular training aimed at improving the ability of trainees to perform robotic surgery through simulation, case observations and modular onsite training at the learner’s home institution. This model appears to be very useful, especially if the private system limits the ability of the trainees to participate in certain operative cases.

Women in urology

Our exchange programme occurred during the month of the International Women’s Day and included the first Canadian female to participate in the exchange, Dr. Melissa Keays. We were impressed to have met so many women who were leading programmes in their institutions and crafted successful practices while maintaining balanced personal lives. At each centre, we met accomplished female faculty and researchers on staff, including faculty who had completed training in Canada (Dr. Mélissa Keays from BC) and had returned; prior participants in the CUA-EAU exchange (Dr. Carmen Mill from Valencia, ECU-EAF 2018 exchange) and saw one of our hosts being acknowledged as a female pioneer in urology (Prof. Maria Rídal from Barcelona (ES)) at the EAU International Friendship Banquet. As in Canada, European centres have an increasing number of female urology trainees and we shared our meaningful dialogue to our local contributions to the field and how to encourage more women to pursue leadership positions in urology.

Highlights of European cultural experiences

With a packed agenda, we took advantage of experiencing the local cities and sites during the free hours we could to experience the richness of European culture. In Milan, we were treated to spectacular Italian cuisine and great company culminating in an evening stroll by the Castello Sforzesco with Prof. Montorsi and the DU Milan with Prof. Salonia. In Barcelona, we enjoyed a city tour with a fantastic view from Notre-Dame de la Garde with Dr. Thomas Meubert a guided tour of the Provence region and we ended our time in Marseille with a run through the beach-taking in Parc des Calanques with Prof. Waltz. In Valencia, we were fortunate to witness the spectacular Las Fallas festivities with Dr. Rubio-Briones and colleagues, including “feeling” the explosive masquerade display.

Final thoughts on the CUA-EAU exchange

We are all incredibly grateful to our gracious hosts for planning a very engaging, interactive and truly meaningful academic exchange despite their busy clinical schedules and personal lives. Finally, we are all incredibly thankful to our local departments, clinical partners, spouses and families who covered our clinical and personal responsibilities that allowed us to participate in this once in a lifetime experience.

We returned home with new insights, ideas and friendships that will surely lead to exciting new collaborations!

For further information on applying for the 2020 Canadian Tour please visit: www.uroweb.org/exchange-canada