



Canadian
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Canadian Tour 2012 Academic Exchange Programme

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of Urology

Vancouver and Toronto offer a glimpse of quality urological research work to tour participants

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Editorial Note: The following report is a continuation of the previous edition's article on the Canadian Tour 2012 Academic Exchange Programme. The authors provided here a summary of their impressions during a visit to two major Canadian cities, Toronto and Vancouver which are the headquarters to the country's most prestigious urological academic and research centres. Reports were written by A. Erdem Canda, associate professor of the Department of Urology at Ankara Atatürk Training and Research Hospital in Turkey; Peter Nyirádi associate professor and deputy head of the Department of Urology at Semmelweis University Budapest, Hungary; Roman Sosnowski associate professor of the Uro-oncology Department at Oncology Centre in Warsaw, Poland; and Rolf Ackermann, former chief and professor emeritus of the Urology Department at the Heinrich-Heine-University in Düsseldorf.

Toronto

Toronto, the third stop in our tour, is rapidly developing city with numerous impressive tower buildings along the beautiful shore of Lake Ontario. A hearty welcome party was arranged by Prof. Laurence Klotz and his wife at their home where we met most of the faculty members (Photo 1).



Photo 1: Welcome party at the home of Prof. Klotz and his wife Ursula with some of the faculty members of the Department of Urology, University of Toronto

Academic urological services of the highest standards are provided by the University Health Network (UHN) of the University of Toronto and affiliated hospitals. Besides the facility of Sick Kids we visited the urological facilities of the other affiliated hospitals including St Michael's Hospital, Sunnybrook Hospital and Mount Sinai Hospital.

The busy programme organised by our hosts began with a very instructive visit of the Hospital for Sick Kids, a world-renowned centre for paediatrics. The complex cases presented at the morning conference and the discussion of the problems by Prof. Pippi Salle, Chairman of the Division of Urology, with the other experts demonstrated impressively the high competence level of this institution. We also toured the clinical facilities and had a glimpse of the new big research building.

Prof. Bägli and his research co-workers introduced their exciting research work which focuses on the role of cell-matrix in various regenerative tissue processes at an epigenetic level.

Next in our Toronto tour was a visit to the facilities of the Department of Urology at the Toronto General Hospital. The department specialises on the surgical management of malignancies of the uro-genital tract. We observed the surgical cases which ranged from robot-assisted radical cystectomies to the exceptional demonstration of a nerve-sparing retroperitoneal lymph node dissection, post chemotherapy, of a testicular cancer case by Prof. Jewett.

We also saw the busy outpatient activities and the laboratory facilities for banking of biomaterial at the Princess Margaret Hospital located along University Avenue.

A unique computer software called "Bladder Cancer Information System," developed by Prof. Jewett to follow-up bladder cancer patients, is one of the many tools used in the research activities of the department. The work on cancer genetics and biomarkers carried



Photo 2: Case presentations, Department of Urology, The University of Toronto

out in the laboratory of Prof. Jarvi also drew our attention.

Clinical case discussions

We were invited to actively participate in clinical case discussions organised by Prof. Zlotta, and presented by the fellows of the department with contributions from the faculty members (Photo 2).

We were also impressed by the young fellows' achievements in basic research. During our visit at the research lab directed by Prof. Bapa, the fellows in this facility presented their projects which focus on identifying new biomarkers for prostate cancer by epigenetic analysis, prostate cancer immunopathology and the search for biomarkers in male infertility and germ cell maturation of fertility by applying proteomics (Photo 3). Following their presentations, we gave talks about the EAU's role, structure, goals, achievements and collaborative projects, and the national urology practices in our own respective countries.



Photo 3: Presentation of transurethral ultrasound, Department of Bio-Engineering Urology, The University of Toronto

Prof. Herschorn showed us the Department of Urology in Sunnybrook Hospital where we observed the outpatient clinics for patients with reconstructive urological conditions (Photo 4). We discussed some of his complex cases which were managed with great success. The fellows of the research laboratory at the Sunnybrook Health Science Center, headed by Prof. Venkateswaran, introduced us to their current projects, one of which examines the intriguing effect of capsaicin on prostate cancer. Other projects focused on developing new technical tools for prostate cancer diagnosis and therapy.



Photo 4: Prof. Sender Herschorn, Department of Urology, Sunnybrook Hospital, The University of Toronto

Meeting faculty members during the dinner gave us the chance to discuss and exchange ideas about future collaboration. Despite the busy schedules of the programme, we visited old and historical buildings of the University of Toronto with Prof. Zlotta as



Photo 5: Prof. Goldenberg, Department of Urology, The University of British Columbia

competent guide. We also had a great time at the Picasso Exhibition which displays a large collection of Picasso's masterpieces from the Toronto Museum. As soccer fans, we cheered for our chosen soccer teams and watched their live matches on TV for the European Football Championship.

Vancouver

As a participant in last year's Canadian group tour in Europe, Dr. Chew did his best to make our stay in Vancouver comfortable right from the start with a warm welcome at the airport. Our programme began with a tour of the department's clinical facilities. At the OR, department chairman Prof. Goldenberg demonstrated a case of robotic radical prostatectomy (Photo 5). Meanwhile, Prof. MacNeilly, as the department's programme director and a leading paediatric urologist, explained in detail the various educational and training programmes, and impressed us with the wide range of activities the department covers in its daily routine.

Prof. Goldenberg and his wife hosted a wonderful reception at their beautiful home, giving us a very special welcome and the opportunity to meet the faculty members and the former chairman (Photo 6).



Photo 6: Welcome reception by faculty members, Department of Urology, The University of British Columbia

Since an essential part of our programme at the Department of Urology at the University of British Columbia in Vancouver focuses on their research activities, we were very eager to learn more about the exceptional structure and the programmes that made the Prostate Cancer Center a world-renowned institution, which merited a 'Center of Excellence' distinction.



Photo 7: Prof. Martin Gleave, Prostate Cancer Centre, The University of British Columbia

Multidisciplinary programme

In his briefing, Prof. Gleave, Executive Director of the Prostate Cancer Centre (Photo 7) noted that the continued research on cancer progression and treatment resistance remains as one of the centre's core missions. The strategy is anchored on an extensive multidisciplinary programme consisting of basic, clinical, translational and patient research projects. Activities in these four areas are the essential cornerstones which provide the relevant clinical data, enabling basic investigations that aim for quality results. Current research efforts focus on understanding the molecular changes that cause castrate resistant tumour growth. Dr. Zoubeide's work, for instance, concentrates on identifying common molecular changes which are responsible for metastasis formation and treatment resistance.

We toured the impressive facilities, meeting the scientific staff with whom we have had insightful discussions about the research work in molecular biology and functional genomics, genetics, pharmacology or immunohistochemistry, to mention a few of the areas they are working on. Having met the staff was also useful in getting an overview of the centre's conceptual and structural framework, and an understanding of how personal skills and expertise match and fulfill the demand for excellence. Concluding that part of our visit, we were invited to give presentations about the EAU and the clinical and research activities we're engaged in our own respective institutions.

Laboratory visit

A visit to a laboratory of the Department of Electrical and Computer Engineering introduced us to another exciting research field-- the research development work on ultrasound elastography concepts and tools for diagnostic and therapeutic application in prostate cancer. We had a very informative talk with the scientists who gave us a glimpse of their work and the aims which are also within the context we previously have learned at the Prostate Cancer Center. Combining the benefits of an improved technical methodology with the relevant biological information about prostate cancer drew our interest, impressing us with the scope of the work being done by the scientists in Vancouver, and as mentioned by Prof. Goldenberg himself. (Photo 8)



Photo 8: Department of Computer Engineering, The University of British Columbia

A visit to the Division of Pediatric Urology (the only tertiary referral centre in the BC region and located at the BC Children's Hospital), we were welcomed by the division's head, Prof. MacNeilly, who briefed us on the main tasks of the department. Unfortunately, we didn't have sufficient time to observe the activities in the other areas such as the management of stone disease and related research headed by Prof. Chew.

With Dr. Chew as our enthusiastic and inspiring guide, we hiked to the foothills of the Grouse Mountain (elevation at 1,200 meters) on a rainy Saturday morning, a wonderful and fitting end to our Vancouver tour. A live concert by Bryan Adams at the Roger's Stadium also completed this memorable exchange programme, and we expressed our deep gratitude to our hosts when we left Vancouver the following day.