

June 23<sup>rd</sup>, 2022

Each year, the CPDP awards the **MCH Recognition Award** to a physician who has had a lasting, positive impact on the MCH. To be recognized by one's peers for a lifetime of contributions is perhaps the highest honour there is. This year's recipient is **Dr. Lorraine Bell** (Nephrology). While everyone knows Lorraine, many may not know the transformative influence she has had on the MCH.

Lorraine started on faculty at McGill in the Dept. of Pediatrics in 1986. At that time, very few dialysis and transplantation programs existed for children with kidney failure and Lorraine witnessed the sad consequences of the limitations of treatment for children. As a junior pediatric nephrologist, Lorraine undertook the major task of starting an end stage kidney disease (ESKD) program at the MCH. By 1991, she had established successful dialysis and transplantation programs for children of all ages, including infants. She both taught, and learned alongside nurses and allied health professionals as, together, they were among several groups in the world leading the development of what would become the standard of care for infants and children with kidney failure.

The impact of Lorraine's work in establishing dialysis and kidney transplantation at the MCH is nothing short of **transformational**. One must only imagine the MCH without dialysis or transplantation programs to understand the profound impact of her work. We now take for granted that dialysis (and its offshoots: continuous renal replacement therapy, plasmapheresis, red blood cell exchange, and white blood cell exchange) is accessible 24 hours a day. This service supports the entire hospital -- patients presenting to the Emergency department or admitted to the wards or PICU with acute kidney failure or severe intoxications depend on the rapid availability of dialysis. Infants in the NICU with inborn errors of metabolism, or kidney failure depend on the availability of dialysis. The cardiac surgery program requires the support of dialysis services. The work underlying a functional dialysis service is extensive. Lorraine was the driving force behind the establishment of both hemodialysis and peritoneal dialysis at the MCH. For hemodialysis alone this required the selection and maintenance of the appropriate dialysis machines, central venous catheters (in the right variety of sizes), a safe water supply (a whole science in itself), establishment of protocols, training of nurses and a hemodialysis technician, and ongoing team-building efforts. But this was only part of the work. A peritoneal dialysis program required selection and maintenance of a whole other set of equipment and supplies: dialysis cyclers, dialysis solutions, and peritoneal dialysis catheters had to be sourced, vetted, and stocked. An expert peritoneal dialysis nurse had to be trained. Lorraine was behind all of this. She also had to collaborate with the surgical teams who placed the catheters – which are the patients' lifelines. Lorraine also led the monitoring and continuous quality improvement efforts that have resulted in programs with exceedingly low rates of line infections and technique failure. No ESKD program is complete with kidney transplantation, the treatment of choice for ESKD. Transplantation care has been Lorraine's 'baby'. As in everything she does, Lorraine has been tireless in her efforts to ensure that the most cutting-edge evidence-based treatments are available to our transplant patients.

As ESKD care became well established, and children who previously would have died were now surviving to adulthood, Lorraine was among the first in the world to identify the major challenges associated with transition from pediatric to adult-oriented care. Her devotion to supporting adolescents and young adults in their transition to adult care is evidenced by the Transition clinic that she founded, bringing together nephrologists, nurses, Adolescent medicine, and allied health professionals to support young people in developing self-care skills and creating structures to ensure a smooth transition. Not satisfied that her

efforts on the 'pediatric side' would provide adequate support, Lorraine established a Young Adult Kidney transplant clinic at the Royal Victoria. This clinic, staffed by pediatric nephrologists, provides important continuity of care during a tumultuous time, and supports these young recipients, ultimately improving their outcomes.

True to her devotion to the care of young people, Lorraine recognized that it was not only patients with kidney disease who struggled with the transition to adult care. Since 2011 Lorraine has been the founding Director of Transition services at the MUHC, taking her expertise and passion for the care of young people beyond the realm of transplant to all chronic conditions needing ongoing care. This has been a labour of love for Lorraine. In this role, with little support, she developed structures, care pathways, and resources relevant for all specialities to aid in the transition to adult care. This important work will serve as the foundation for integration of pediatric and adult care across the MUHC. Lorraine's work truly embodies the "Best care for life" advertised as the MUHC's mission.

Lorraine's advocacy for the care of young people with kidney disease and other chronic illnesses has not been limited to those in her own institution. She served on the Quebec Transplant kidney pancreas committee from 1994 to 2020, helping shape organ allocation policy in the province. Lorraine also served as the chair of the Canadian Society of Transplantation (CST) Pediatric Group from 2007-2009 and the President of the Société Québécoise de Transplantation from 2009-2013. She is an internationally-recognized champion for the improvement of the transition from pediatric to adult care. Lorraine was advocating for improved transition care before this became a 'hot topic'. Indeed, she was instrumental in taking this from a fringe issue, to one of the major focuses of pediatric care. She chaired the American Society of Transplantation Pediatric Community of Practice from 2005 to 2006, and during her tenure organized and chaired an international Consensus Conference on Transition to adult.

Lorraine embodies the core qualities of an excellent academic clinician. While always providing the best quality evidence-based care to her patients, she also pushes the boundaries, trying innovative therapies with a sound biologic basis at the leading edge of the curve.

Medical education has always been a major interest of Lorraine's. She has been heavily involved with medical education at all levels, and served as pediatric nephrology residency program director for 8 years. Lorraine had a hand in training pediatric nephrologists in 5 centres across Canada, and many other countries all over the world, including Kuwait, Saudi Arabia, United Arab Emirates, Jamaica, Israel, Switzerland, and Australia. Because of her expertise as a teacher she has also been sought after to mentor residents with educational difficulties. Her dedication to education is not limited to the education of physicians. She has led numerous teaching and training sessions for allied health professionals and led the development of educational materials for pediatric kidney transplant recipients as an American Society of Transplantation initiative. Lorraine has authored several textbook chapters on a variety of topic relevant to the care of children with kidney disease and on transition to adult care.

Innovative clinical care, dedication to education, and commitment to the development and improvement of transplantation in Quebec and Canada naturally led Lorraine to become implicated in many research efforts. Not only has she been an active and enthusiastic collaborator on numerous research projects, but she has been extremely supportive of the careers and projects of her colleagues. She notices funding opportunities and encourages junior colleagues to apply. She takes on additional clinical work to ensure that her research-focused colleagues have time to prepare grant applications and present at conferences. This has permitted four clinician-scientists within the Division of Pediatric Nephrology to succeed with their research paths. Personally, I credit Lorraine with pushing me to apply for NIH funding to study

adherence in young kidney transplant recipients. The application and trial were successful, but would never have happened without her encouragement.

Lorraine's devotion to her patients and to the mission of excellence in dialysis and transplantation, as well as her attention to detail in every aspect of her work, her tireless efforts in education, and her role as a champion for improvements in care of patients transitioning from pediatric to adult care made her a clear choice for this award. When serious life-threatening illness struck Lorraine in the spring of 2020, she not only maintained a positive outlook, but continued to work towards ensuring the success of all the programs she had initiated more than 30 years earlier. She truly defines clinical innovation. Her profound and transformative impact on the MCH, the people who work here, and the patients and families who depend on us resonate today and will continue to do so in the future.

Have a great weekend.

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