In Memoriam

Douglas Arthur Canning: A Tribute

On Memorial Day, May 30, 2022, as a warm afternoon breeze wafted in to the Connecticut shore from the Long Island Sound, a family lost their beloved husband, father and brother; a generation of families lost their doctor and unflagging advocate; and pediatric urology immediately felt the absence of one of its most innovative and kind friends, mentors and leaders.

Douglas Arthur Canning, the Chief of Urology at Children’s Hospital of Philadelphia (CHOP) over the past 25 years, passed away, surrounded by his loving family after suffering severe injuries from a bicycle accident.

Tributes poured in as the shock of Doug’s sudden passing reverberated across the globe, from a billboard celebrating his life in Gujarat, India to the Wall Street Journal’s main Opinion page. In an homage rarely offered to anyone, let alone a surgeon, the WSJ began, “Fame and acclaim in America these days are cheap commodities, accorded more for media appearances than achievement. We should spend more time noting the contributions of men like Dr. Douglas Canning, one of the world’s leading pediatric urologists…” [1].

Only a life’s arc of exceptional impact could evoke such raw emotion and passionate demonstrations of remembrance. Legions of those who tread the path of pediatric urology, even those who never had the good fortune of meeting him personally, will remember his groundbreaking achievements in our specialty. From hypospadias to posterior urethral valves, and from vesicoureteral reflux to bladder exstrophy, Doug’s impact will be abiding.

A keen understanding of the sequelae of posterior urethral valves on bladder physiology led Doug to the breakthrough manuscript that early primary valve ablation is superior to the previously more common upper urinary tract diversion [2]. Doug’s report on the beneficial effect of overnight bladder drainage in cases of upper tract dilation with poorly compliant bladder was nearly contemporaneous [3] to that of Koff [4], and along with his long-time partner and oftentimes mentor, Howard Snyder III, Doug offered evidence that even higher grades of vesicoureteral reflux resolve spontaneously and that, in some cases, antibiotic prophylaxis could be stopped without surgery in the toilet-trained child [5].

Doug took the baton from John Duckett, carefully investigating the versatility and reliability of vascularized pedicle flaps for the repair of hypospadias [6]. His uncompromising insistence on academic honesty set a new standard in transparency and self-assessment; he led the groundbreaking report on the limitations of the same flaps he once championed [7]. Doug’s genuine admission demonstrated not just humility, but seemed to give permission to more investigators to confirm what he had learned over the breadth of his practice—that proximal hypospadias with severe chordee evades simple solutions, and long-term followup into adulthood is a mandatory commitment for any urologist wading into hypospadiology.

Perhaps the capstone to a remarkable career was Doug’s immersion into the bladder exstrophy conundrum over the past decade. Always a keen observer and avid learner—aicularly polite and humble—Doug was compelled by Atul Gawande’s concept of “coaching” in the operating room. In that quest for self-improvement, even after 30 years of independent practice, Doug approached Michael Mitchell, whose own work refining the complete primary repair of bladder exstrophy and epispadias inspired him, to be his exstrophy coach. With Mike, Doug launched MIBEC (the Multi-Institutional Bladder Exstrophy Consortium), along with fellow exstrophy surgeons at Boston Children’s Hospital and the Children’s Hospital of Wisconsin, on a shared quest of unraveling mysteries that bedevil the exstrophy–epispadias complex.

Through the MIBEC program, Doug either performed or was present as coach for (virtually or in person) 178 bladder exstrophy and epispadias repairs over just 10 years. As Doug envisioned, prior to each exstrophy case, there were detailed examinations of anatomy, surgical planning, video review of previous successful “game films,” and regular multi-institution clinical and research conferences.


https://doi.org/10.1016/j.jpurol.2022.11.016
1477-5131

https://doi.org/10.1016/j.jpurol.2022.11.016
This exceptional commitment to exstrophy led Doug, reluctantly at first, to join another multi-institutional bladder exstrophy collaboration—this time in India. Doug historically had looked askance at surgical missions abroad, convinced that, without proper teaching and followup, these could leave profound complications behind while reducing little of the vast burden of surgical disease. But when his former fellow and partner (Aseem Shukla) and the late Richard Grady invited Doug to Ahmedabad, India’s Civil Hospital led by Rakesh Joshi, he relented. Doug saw the massive burden of exstrophy disease with over 100 children arrayed on beds in a single ward, and he was “all in.”

Bringing the same assiduous approach to the repair and an insistence that surgical results must match those he could deliver in Philadelphia, Doug was in the room for another 100 bladder exstrophy repairs since 2014 (Figs. 1 and 2).

This massive exposure to an otherwise rare disease, coupled with a keen eye for detail and a penchant to revisit dogma, propelled Doug to propose technical modifications that have nearly eliminated the risk of penile injury or dehiscence with the complete repair [8]. Doug reimagined approaches to continence after repair by counseling patience, postulating that physical therapy, approach of puberty and maturation of the pelvic floor facilitated by osteotomy may increase continence in children, preserving in more cases volitional voiding per urethra [9].

While Doug’s first priority was his family—Annabelle, his wife of 40 years, his son, John, and twin daughters Caroline and Maddy—the families and children in his care, who invariably carried his private cell phone number, held a place of great pride for him (Fig. 3). Doug’s mantra was always, “Start with the child and move out from there.”

After a full day of clinical, administrative and teaching responsibilities, it was not uncommon to find Doug, dictaphone in hand, reviewing every patient and imaging study for the next day’s clinic. These comprehensive pre-clinic notes would be dutifully transcribed by Elaine Bacon, his administrative assistant for 25 years, and served as a template for visit notes the next morning. Meticulous preparation was the hallmark of Doug’s approach to executing any responsibility he accepted.

The painstaking precision extended into the operating room. Doug possessed a unique ability to maintain a holistic view of the case, even as others might be seized with tunnel vision. Invoking his own mentor Bob Jeffs, when operating on puzzling, rare anatomy, Doug would often say, “Turn this case into something you’ve seen before, and then go fix that.”

Doug’s open office door was always an invitation for a trainee, nurse or colleague of any specialty to “drop in.” These were the times when Doug’s fabled mentorship talent blossomed. He had an uncanny gift as a listener, exuding a warmth making one feel like the most important person in his life at that moment. Personal experiences, shared vulnerabilities, a wisdom born from a career where major leadership responsibilities came early were dispensed. These huddles would often end with a signed book on leadership skills, how to define quality in health care, or for those who might just need it—with a wink of the eye—Dale Carnegie’s How to Win Friends and Influence People!

Annabelle captured well what mattered most to Doug. “Doug took such joy in being able to make a difference in the world. But even with all he did to help others, he was always so humble,” she said. “He would be the first to brag about other people and their accomplishments, but never about himself.”

Doug was born in New London, Connecticut in 1957 to William John Canning, an architect, and Marian Toner...
Canning, a nurse. He grew up in Groton, Connecticut as the youngest of 3 brothers, and after attending Robert E. Fitch High School, Doug enrolled at Dartmouth College, where he earned his undergraduate degree in chemistry in 1979. He then matriculated at Dartmouth’s medical school.

During his senior year at Dartmouth College, Doug met Annabelle Brainard, who was a sophomore at Dartmouth studying history. When he returned to Hanover in the fall of 1979 to attend medical school, he and Annabelle began what would be a 43-year romance. They married in 1982 in Princeton, New Jersey a week after he graduated from medical school (Figs. 4 and 5).

Doug accepted an Armed Forces Scholarship for his postgraduate urology training at the Naval Medical Center in Bethesda, Maryland. After his internship and residency, he pursued a pediatric urology fellowship at the Brady Urological Institute at Johns Hopkins in Baltimore. He then served in the U.S. Navy at the Naval Medical Center—San Diego for 4 years before returning to the East Coast in 1992 to work at CHOP. He became the Chief of the Division of Urology in 1997 after the passing of his legendary predecessor, John W. Duckett, Jr.

At CHOP, Doug held the Leonard and Madlyn Abramson Endowed Chair in Pediatric Urology, was appointed Professor of Surgery (in Urology) at the Perelman School of Medicine at the University of Pennsylvania and chaired one of the largest and most comprehensive pediatric urology programs in the world. Under his leadership, CHOP’s Division of Urology grew to 12 surgeon-scientists and 21 advanced practice health professionals, and established 6...
endowed chairs. A testament to Doug’s passion for teaching and mentorship, the CHOP Urology academic program trained more than 30 fellows and 100 residents during his tenure.

Doug’s professional and academic success was exemplary. He received numerous professional awards and accolades recognizing his excellence in teaching and medical practice, and served as president of the Society for Pediatric Urology and the Society of Academic Urologists along his professional journey.

An all-encompassing career still meant that family was first. Doug was known for cooking over the outdoor grill in his doctor’s coat over shorts, commanding a dinner table with his warm eyes and infectious smile. He loved good food, good music and adventures, but what truly brought him joy was sharing those experiences with family and friends.

Always answering his family’s calls no matter what else he was doing, Doug’s voice exuded love and grace at the sound of Annabelle’s voice on the other end of the line. Despite her own illustrious career in law, Annabelle was Doug’s greatest advocate, constant companion and most trusted sounding board. Their marriage, built on a foundation of enormous love, mutual respect and admiration, was an inspiration to those fortunate to share time with them.

Doug was irrepressibly proud of his children. When John, his eldest, was promoted to partner in his investment firm, Doug beamed and repeated a Gujarati proverb he had heard in India—that a father is proudest when his son...
exceeds him. Mention of his twin daughters, Maddy and Caroline, lit up his eyes. His delight that Maddy followed Annabelle into the power corridors of Capitol Hill and that Caroline chose medicine, with limitless possibilities ahead, was profuse.

Doug is survived by Annabelle Brainard Canning; his son, John Schaffer Canning and daughter-in-law, Alexia Katrine Pereira; his twin daughters, Caroline Ellen Canning and Anne Madeline Canning; his brothers, William G. Canning and Peter D. Canning; and many other relatives, including many nieces and nephews.

We picture Doug, breaking into that broad grin as the warm sea breeze came in that Memorial Day weekend. A perfect day to sail, he must have thought. And with that, always the unafraid sailor, a Navy veteran embarked on another adventure—a sail over the horizon.

References


Aseem R. Shukla*
Thomas F. Kolon
Children’s Hospital of Philadelphia, Philadelphia, PA, USA
*Correspondence to: Aseem R. Shukla, Children’s Hospital of Philadelphia, Philadelphia, PA, USA
E-mail address: shuklaa@chop.edu (A.R. Shukla)

Available online 1 December 2022