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Editorial/Commentary

Where to From Here?



The festschrift, or collection of learned articles, in this issue of *Pediatric Neurology* appropriately celebrates and recognizes the contributions of Dr. Gabrielle deVeber to the field of pediatric stroke. I expect that it will become one of her “few favorite things” currently listed as “Maddy, Nikki, David, Romeo—a horse, and Taylor Swift.” At the same time, for some of us the threat of her retirement has become all too real, all too soon. This perspective essay will track the course of Dr. Gabrielle deVeber's career with the hope that in so doing the answer to the question, “Where to from here” will become clearer.

Having completed a bachelor's degree in physical and occupational therapy and resident pediatric and child neurology training at the Hospital for Sick Children, Toronto, and the Massachusetts General Hospital, Boston, respectively, Gabrielle's future as a pediatric neurologist may have been reasonably predictable. And yet, as one of four young and driven research fellows in thrombosis at the McMaster University, Hamilton, her path was anything but predictable. Mentored by clinician-scientist Maureen Andrews—known for her pioneering work in the characterization and treatment of childhood thromboembolic disorders—Gabrielle was directed to study “clots above the neck,” and soon history was in the making.

In 1992, with a small grant and a team of two research assistants, Trish Domi and Shelly Brazier, Gabrielle started The Canadian Pediatric Ischemic Stroke Registry. This national population-based registry study, conducted across all Canadian pediatric hospitals prospectively enrolled over 1000 children presenting with acute arterial and/or venous ischemic stroke over a 16-year period.¹ Publications from this registry^{2–6} highlighted the high prevalence and morbidity of neonatal cerebral sinovenous thrombosis, the safety of anticoagulation in pediatric cerebral sinovenous thrombosis, post-varicella angiopathy, corticospinal tract diffusion restriction as a predictor of neonatal stroke outcome, and the late emergence of cognitive deficits post neonatal stroke. Many of these population-based studies were firsts and seminal in the field.

In 2003, and in recognition of the need for a global unified approach to understanding the “who, why, what, and when” of pediatric stroke, the International Pediatric Stroke Study (IPSS) was initiated. Originally formed by 11 co-investigators from Canada, the United States, and the United Kingdom, the mission statement “to perform international collaborative research aimed at understanding, preventing, and improving outcomes in pediatric stroke and to promote professional education, support families with pediatric stroke members, and support public education” embodied the decision to unite in purpose and has endured as a guiding principle. As chair of the IPSS since its inception, Gabrielle has overseen the growth of the IPSS. Fueled by the matriarchs and patriarchs of the

field, Fenella Kirkham, Donna Ferreiro, E. Steve Roach, Rebecca Ichord, Stephen Ashwal, John K Lynch, Finbar O'Callaghan, Steve Pavlakis, Guillaume Sébire, and Andrew Willan, and spurring the careers of many more, the IPSS now has over 150 actively enrolling investigators and affiliated research teams and includes over 50 actively enrolling centers worldwide. With over 6000 patients enrolled in the prospective database, and over 45 original manuscripts and published abstracts, the IPSS and its network of colleagues and researchers has advanced the field of pediatric stroke, highlighting the key risk factors for neonatal and childhood stroke and the outcomes in stroke and supporting the first clinical trials in the field. With early career financial support from the Heart and Stroke Foundation, IPSS operations seed money from the Child Neurology Society, and subsequent financial support from the Auxilium Foundation—under Dr. deVeber's leadership, the IPSS benefited from over two decades of financial security—allowing the otherwise unfunded network to conduct high-impact research using a large dataset, with minimal resources.

Accolades for Dr. deVeber's contributions to the field have come from patients, families, and colleagues alike. Awarded the Canadian Pediatric Society “Geoffrey C. Robinson Award” in 2007, the American Academy of Neurology “Sidney Carter Award” in 2010, and the Child Neurology Society's “Bernard Sachs Award” in 2014, her tireless efforts to improve our understanding and management of stroke in childhood never faltered.

I recall embarking on my own journey as a trainee to become a pediatric “strokologist.” All signposts pointed to the Children's Stroke Program at the Hospital for Sick Children, Toronto, and rightly so. Drs. MacGregor, Moharir, Askalan, and deVeber's charm, energy, and compassion for the children and families with stroke were infectious. The opportunities to work and learn in the program were endless. To date the program has trained and mentored over 18 pediatric stroke fellows, the majority of whom now support their local team(s) as the pediatric stroke expert, and many of whom are world-renowned experts in their own right. In addition, Gabrielle has supervised countless doctoral candidates, master's students, rotating fellows, and medical students, ensuring a legacy of knowledge and scientific exploration that will endure for decades to come.

In the last four years, Gabrielle established the Stroke Imaging Laboratory for Children, with the aim of using novel imaging for deeper phenotyping, toward the improved understanding of the predictors of outcome and recovery in pediatric stroke. She has planted the seeds for an IPSS organization, which would have an expanded scope, and planned for leadership succession with tenacity and sensitivity.

So, the question is, “Where to from here”? After such an accomplished career, what does a visionary do? After such leadership how does the body continue to move forward? The answer is in what

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always was. Neither luck nor chance was ever adequate to ensure the continued success of any plan or project. The continued success has occurred because of the collective purpose, interconnectedness, and ambitions of this community of families, clinicians, and researchers—inspired by the commitment and character of Dr. Gabrielle deVeber. We move toward a future of personalized, predictive, and preventative care for children with or at high risk of stroke because of the work of a collective of inspirational individuals and leaders who had the vision to lay the requisite foundations, plan, and mentor for the future. Gabrielle deVeber is one of these inspirational leaders whose being and service this festschrift celebrates, marking her as “one of our favorite things.” She has shown us by her works that courage can and does effect change. And for this we are all truly grateful. *Serenity*.

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