
DIVISION OF NEUROLOGY
DEPARTMENT OF MEDICINE, UNIVERSITY OF TORONTO

Academic Statement

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Academic Career History

I completed medical training at Dalhousie University in 1999 and went on to Neurology Residency training (1999-2004). This was followed by a Stroke Fellowship (2004-2007) and a Master of Science degree (2005-2007) with a focus in Clinical Epidemiology at the University of Toronto. Since 2007, I was appointed Assistant Professor in the Department of Medicine, University of Toronto. I am a Clinician Investigator and Neurologist in the Division of Neurology – Stroke Program at the of the University Health Network (UHN)–Toronto Western Hospital (TWH), the Regional Stroke Centre for the Toronto West Stroke Region. In 2011, I founded and became the Director of the TIA and Minor Stroke (TAMS) Unit at UHN–TWH.

Career Progress Since Last Promotion

Development of exemplary professional practice

I am putting forward my application for academic promotion to Associate Professor of Medicine at the University of Toronto on the basis of Creative Professional Activity (CPA) with a focus on the development of exemplary professional practice. Within this CPA category, my academic career has entailed developing national recognition and a reputation as an expert and leader in stroke care, including in stroke best practices and quality of care. Encompassed within my vision to effect change in the Canadian healthcare system and improve the care and outcomes of people with stroke and cerebrovascular diseases, I led a team to develop an innovative, comprehensive ambulatory care model for the urgent evaluation and treatment of people with a transient ischemic attack (TIA) or minor (non-disabling) stroke that has changed the care of this patient population.

Since my academic appointment, I have developed a national reputation for my expertise in best practices and quality improvement; most recently leading the 2012-2013 update of the Canadian Stroke Best Practice Recommendations – Hyperacute Care and Acute Care sections as Co-Chair, and being re-appointed for a second term for the 2014-2015 update. Also, with my leadership skills, I was elected to the Board of Directors of the Canadian Stroke Consortium, a national organization involved in the execution of multicentre clinical stroke trials in Canada, as well as in leading the professional development of healthcare practitioners in the field of stroke and cerebrovascular disease, including through Continuing Medical Education programs and student education programs. My work has had an impact on the professional practices of healthcare practitioners nationwide through the dissemination of the best practice recommendations for stroke care and my leadership in driving the implementation of best practices in centres across the country.

At the local and provincial level, I am recognized as a leading stroke expert, and was elected as a Director and Best Practices Champion on the Board of Directors of the Ontario Stroke Network. In this role, I contribute to the development of provincial stroke system initiatives to effect change in stroke care in Ontario. Further to this, I have been invited as a stroke expert to participate on the Health Quality Ontario (HQP) Expert Panels for stroke care in Ontario – HQP is a branch of the Ontario Ministry of Health and Long-Term Care that is responsible for redeveloping the healthcare system and funding model for stroke care. I was invited as the lead stroke expert in the post-acute, community-based care Expert Panel, and subsequently was invited to the Expert Panel to merge the recommendations for acute care and post-acute care. In my role, I am informing and guiding the dialogue and the development of the recommendations for best practice-based, quality care that will also inform the future funding model for stroke care. My leadership in the development and knowledge translation of ambulatory care models for patients with TIA and minor (non-disabling) stroke is also acknowledged in these invited positions. In another provincial setting, I am an invited member of the Ontario Vascular Health Primary Care Work Group as a stroke expert to lead in policy development for the integration of health care groups and initiatives for optimal vascular health for people in Ontario.

Further to my provincial roles and responsibilities, I am dedicated to developing the Stroke Program at the UHN and have taken on leadership roles at the University Health Network–Toronto Western Hospital, including being an active member on the steering committees for the Neurovascular (Stroke) Unit and the Stroke Lean Process Improvement Initiative, directed at optimizing acute stroke care. I am also a medical advisor for the Transition Improvement for Continuity of Care (TICC) Initiative of the Greater Toronto Area Stroke Regions, directed at improving stroke care across the care continuum (primary care – acute care – rehabilitation – community reintegration – stroke prevention).

Research Endeavors

My clinical research program involves the evaluation of patient care models for improving stroke care for secondary stroke prevention, and stroke outcomes research, including the evaluation of prognostic factors such as glucose, sex/gender differences in stroke outcomes, and ethnic/cultural aspects of stroke care. I have successfully secured grants through peer-reviewed funding sources as principal investigator to fund my research program.

Through my work in developing the TAMS Unit care model, I have developed within my research program the study of various aspects of the TAMS Unit including clinical outcomes, cost analysis, evaluation of the educational program provided in the TAMS Unit, and patient satisfaction. Through this research, the benefits of the TAMS Unit care model in improving patient care and outcomes are being demonstrated. My research program involving the TAMS Unit care model aligns with and supports my academic interests and CPA objective of exemplary professional practice and improving patient care. Further development of my work with the TAMS Unit is ongoing, including developing collaborations with family physicians in the community, as well as within other Stroke Regions across Ontario. This will further increase the impact of my work in reaching patients directly in the community to allow them to access optimal best practice-based care. Beyond this, through collaborations across Canada, evaluation of the benefits of rapid-assessment units/clinics in the stroke system is feasible.

I am also an investigator in the University of Toronto Stroke Program (UTSP), an organization that fosters multicenter investigator-led clinical stroke research at the University of Toronto-

affiliated hospitals. In this role, I am one of the lead investigators across the city involved in developing the research portfolio of this city-wide initiative. I am also actively engaged in multicentre national and international clinical trials as principal site investigator, co-investigator, and on steering committees and data safety monitoring boards.

Teaching Accomplishments or Educational Scholarship

From the time of my initial appointment, my goal was to develop strong, effective teaching skills and I have accomplished this through broad teaching responsibilities. I focused my educational scholarship to develop my teaching skills to serve three broad audiences: (1) Continuing Medical Education – where my role as a teacher will enhance the knowledge of healthcare practitioners in the care of people with stroke and prevention of stroke, (2) students – where I can impart knowledge on the future healthcare practitioners, many of whom will be involved in stroke care, and (3) patients/informal caregivers – where through teaching, I can empower people to improve their health. I am very serious about my teaching commitments and continually strive to improve my knowledge and skills in teaching.

My major teaching accomplishment since coming on faculty was the development of a national reputation as a leader in teaching in the field of stroke and cerebrovascular disease. Most prominent in that acknowledgement was being chosen to lead, as Co-Chair, the national Stroke Review Course for residents and fellows, run by the Canadian Stroke Consortium, on the basis of my teaching excellence in addition to my leadership skills. Furthermore, at a national level, I was invited to participate on the Heart and Stroke Foundation of Canada steering/planning committee for the 2014 Canadian Stroke Congress. Within the Canadian stroke research community, I am a co-investigator on a grant application to CIHR for a Canadian Stroke Trials for Optimized Results (CaSTOR) Community Development Program, and have been appointed as Co-Chair for the Training and Career Development committee to lead in the professional development of stroke experts across the country into the future. Through my national reputation as a stroke expert, with specific expertise in TIA and minor (non-disabling) stroke care and in best practices and quality improvement, I have also garnered many invitations to speak to national audiences for their continuing medical education.

In addition to these Canadian events, I have been an invited faculty member for an international interventional radiology stroke course for several years in the United States. Furthermore, at a local level, I continue to lead as a teacher for students at the University of Toronto. Significant roles include being Co-Chair of the Department of Family and Community Medicine and Toronto West Stroke Region academic half-day in stroke prevention, as well as being one of the stroke neurologists who provides a rich educational experience on the Neurovascular (Stroke) Unit (NVU) for the many residents, medical students, and stroke fellows that participate in the Stroke Neurology rotation, and providing education to the NVU interprofessional team members. Finally, my strong commitment to teaching patients and informal caregivers continues and, in my role as Director of the TAMS Unit, I am evaluating the comprehensive and patient-focused education program provided to patients/informal caregivers by stroke nurse practitioners and stroke neurologists in the TAMS Unit compared to usual care education provided in the Stroke Prevention Clinic.

Impact and Relevance of Work

As the population ages worldwide, stroke and related cerebrovascular conditions such as vascular dementia are becoming ever more prevalent. Stroke and related conditions are devastating to those in our population who experience their effects and the effects on society are staggering. Therefore, there is a need for strong leadership and excellence in the development of professional practices to affect change in the system and improve stroke-related outcomes in our Canadian population. The academic work accomplished to date in my early career embodies Creative Professional Activity with a focus on exemplary professional practice – with endeavors including innovation in clinical practice and development and dissemination of practice-changing recommendations for best practices in stroke care. This body of work has not only benefitted large numbers of patients with TIA and stroke through improved health but also numerous students and healthcare practitioners on whom important knowledge about stroke care and stroke prevention has been imparted. The impact of this work has been demonstrated through peer-reviewed publications, awards and honors, invitations to speak at multiple forums including at a national and international level, and through my engagement with policymakers and government.

Summary – Key Accomplishments

1. National lead in the development of the hyperacute care and acute care recommendations of the national guideline for stroke care in Canada, the Canadian Best Practice Recommendations for Stroke Care. I was also invited for a second two-year term to lead this section group due to my leadership skills and effectiveness in the role.
2. Recognized as a national stroke expert with invitations as a Visiting Professor to other academic centres, including McMaster and the University of Calgary, as well as invitations to speak at many other events at the national, provincial/regional, and local levels to promote and disseminate knowledge about best practices in stroke care and novel care models that are shaping the standard of care for patients with TIA and stroke.
3. Lead of a team in the conception and development of a new ambulatory care model to optimize the implementation of best practices in the care of patients with TIA and non-disabling stroke – the TIA and Minor Stroke (TAMS) Unit.
4. Honored with a major award recognizing excellence in innovation for my work in developing the TAMS Unit. Award: Best New Approach for Cardiovascular and Stroke Care, awarded for the most Innovative, Transformative and Adoptable Program of all projects funded by the Ministry of Health and Long-Term Care through the Academic Health Science Centres AFP Innovation Fund in Ontario in the 2011-2013 funding. Recognition of this award was made by the Ontario Medical Association (OMA) president, Dr. Scott Wooder. The OMA also honored my work with the TAMS Unit through the online campaign: Ontario's Doctors – the Innovators.
5. Invited as a credible stroke expert to participate on policy and government committees at a provincial level and to participate as a leader in committees of national organizations including the Heart and Stroke Foundation of Canada and the Canadian Stroke Consortium to actively guide changes and improvements in the stroke system.