



THE WILSON CENTRE
SELF-STUDY REPORT EXTERNAL REVIEW
2015-2019



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1. EXECUTIVE SUMMARY

The Wilson Centre is a research centre dedicated to the science of health professions education. Its members create new knowledge and educate new education scientists and scholars. Theory-driven research is core to the science that emanates from the Centre; this positions members of the Wilson Centre community to create knowledge that pushes conceptual and methodological boundaries.

Working collaboratively with our broader community and partners, we mobilize this knowledge and implement research findings in education practice. Findings from the science produced at the Wilson Centre are used by educators to develop innovative evidence-based education programs and to ensure that the next generations of healthcare providers are well prepared for their future work.

The Wilson Centre was established in 1996 as an Extra Departmental Unit C (EDU:C), and as such undergoes regular reviews in accordance with University of Toronto policy. This current external review encompasses the period from January 2015 to December 2019. This report was prepared collaboratively through a process of self-study designed to take stock of the recent achievements of the Centre, our challenges, and our potential future directions.

As part of this self-study process, we have explicitly identified several core practices that have served the Wilson Centre well and are thus important to maintain. Members of the community were invited to take these core practices as a point of departure in preparing their contributions to this report:

1. An expectation of cognitive flexibility among faculty members—that is, an openness to, and capacity to engage with, a diverse range of disciplinary and multidisciplinary approaches.
2. Engagement in theory-informed approaches to research that enrich its scope, draw together comparable findings, and encourage original research directions.
3. A commitment to achieving and promoting excellence in research funding, execution, publications, research supervision, and teaching.
4. Participation in distributed and democratic leadership, which has been an essential ingredient of the success and stellar reputation of the Centre.

In this report, we outline our growth and priorities in the past five years with a focus on education, research, and partnerships. We provide details of our organization, finances, resources, infrastructure, alumni and advancement, and recommendations from previous reviews. We also suggest some future directions. Independent reports are provided by each of our three core membership groups: Scientists, Researchers, and Learners.

This report highlights a number of strengths of the Wilson Centre. These include two sound institutional structures that underpin it. The first, dual governance, has been present since the Centre's inception and is described in Section 5 of this report. The second is an exciting new development. Established in 2019, The Institute for Education Research (TIER) at University Health Network (UHN) provides a local platform for recognition and advancement of education science. TIER also provides additional administrative and organizational support for research at the Wilson Centre. Shared leadership between TIER and the Wilson Centre has created opportunities to collaborate on events, extend our network of research collaborators, and engage with frontline teachers and healthcare providers.



Within the Wilson Centre itself, we are proud of several significant accomplishments that have expanded and strengthened our community over the past five years:

1. The Wilson Centre successfully launched its PhD program in Health Professions Education Research (HPER) in September 2018 in the Dalla Lana School of Public Health (DLSPH). A doctoral concentration in the DLSPH Institute for Health Policy, Management and Evaluation (IHPME), this program is intended to broaden and enhance research quality and prepare scientists and scholarly educators who are well equipped to meet the future needs of the field.
2. The Wilson Centre has continued to foster and build a community of scholarly engagement with collaboration among Wilson Centre scientists, researchers, and broader university and hospital colleagues to provide theoretically-informed evidence for educational delivery and transformation. Strengthening and broadening these engagements brings findings from the science created at the Centre into education practice.
3. The Wilson Centre international programming has been considerably advanced, with several new partnerships including supporting a Master of Health Sciences Education in Ethiopia through the Toronto Addis Ababa Academic Collaboration. All of our international work is designed to facilitate research capacities locally, nationally, and globally in order to inform and influence the education of future health professionals. Exchanging both research knowledges and faculty is an important vehicle for meeting this objective.
4. The Wilson Centre has begun foundational work in the area of Indigenous health education scholarship. This work is led by an Indigenous MD scholar, with dedicated seed funding and space. Initial work has included support for Indigenous scholars and health professions learners, the education of non-Indigenous members of the Centre about Indigenous health and cultural safety, and collaboration with others to advance Indigenous health education.

These priorities, structures, and core practices allow the Wilson Centre to build scholarly capacity for ourselves, our learners, and our many communities and partners. We continue to strive to increase the depth of research, increase cross-cutting research, increase cognitive flexibility, and increase diversity of representation of voices in our field.

2. INTRODUCTION AND CONTEXT

ABOUT THE WILSON CENTRE

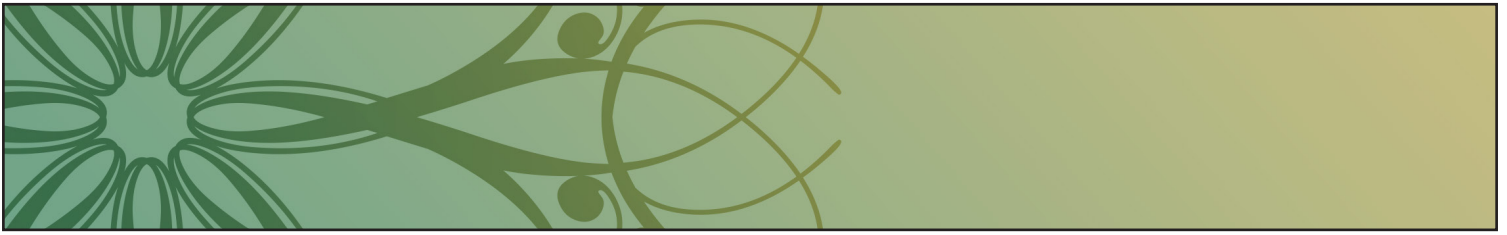
The Wilson Centre was established in July 1996 with a mandate to foster rigorous interdisciplinary research about how health professionals are educated. The insights produced through this research would then be used to improve educational practice. In the process, and under the inaugural directorship of Dr Richard Reznick (1996–2003), the Wilson Centre sought to establish the importance of education research, which was not then a prominent or valued focus within the health sciences.

To achieve these goals, the Wilson Centre was established as an extra-departmental unit (EDU:C) at the University of Toronto (U of T) with a unique location and dual governance structure. The Centre is physically based at the University Health Network (UHN) and jointly governed by these two institutions, university and hospital. As we will elaborate, this structure remains central to the character and achievements of the Wilson Centre.

Over the past 24 years, the Centre has undergone several changes in leadership. Dr Brian Hodges became the second director from 2003–2011 (with Dr Heather Carnahan serving as acting director from July 2009–June 2010). Dr Mathieu Albert was the acting director from 2011–2013, and Dr Charlotte Ringsted was director from February 2013–December 2014. This self-study report focuses on the past five years, including the interim directorship of Dr Nikki Woods, from January to August 2015, and the current directorship of Dr Cynthia Whitehead, starting in September 2015.

Since its inception, the Wilson Centre has grown in size, depth, diversity, and stature, while remaining guided by a similar vision and mission. Education research is now well established as a field within the health sciences, owing in no small measure to the achievements of the Wilson Centre and its network of alumni. Two distinguishing features of the Wilson Centre are influential across the field and emphasized throughout this report: (1) our commitment to genuine collaborative scholarship that pursues pressing questions beyond disciplinary (and geographical) borders and (2) our commitment to advancing innovative research in and through practice. These commitments are conveyed by our current Vision and Mission statements.

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VISION AND MISSION

The vision of the Wilson Centre is to be a **global leader in advancing healthcare education and practice through research.**

The vision of the Wilson Centre highlights its aspiration to be a global leader and reiterates its fundamental role in research that advances healthcare education and practice. These are not two discrete activities; rather, research in healthcare education informs practice, and research in the practice of healthcare informs education.

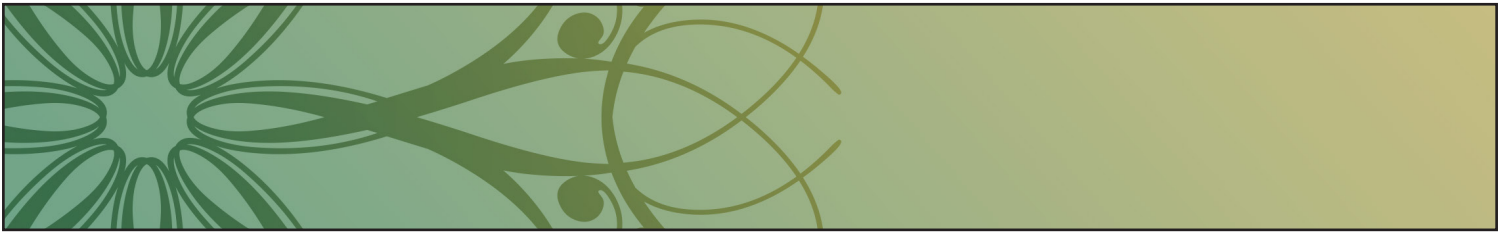
The mission of the Wilson Centre encapsulates three parallel paths towards realising the vision. The Wilson Centre will:

1. Foster the discovery of theory and new knowledge relevant to advancing healthcare education and practice.
2. Foster translation of new knowledge by promoting creative synergies between diverse theoretical perspectives, and between theory and practice.
3. Cultivate future research leaders in healthcare education and practice.

When I first became involved with [the Ontario Institute for Studies in Education (OISE) MEd in Health Professional Education]... , the number of people who were interested in medical education was modest, and they viewed themselves as quite outliers. The notion of their interactions with the university as a clinical appointment, the notion was that their prestige and their future career trajectories would be much more easily made by doing traditional medical research. And so, the notion that they might actually develop careers where their focus literally was on education and on trying to strengthen the quality of education within the medical profession initially was regarded as a bit of a risk. That this wasn't a trendy thing to do. And medicine itself, it took a while for medicine to come to recognise the tremendous importance of focusing attention on medical education as a way of transforming the profession itself. And I think the Wilson Centre has played a role in that. It has done so by essentially providing this really important space for medical research. It's done so through its leadership. The Faculty of Medicine now regards medical education as a quite legitimate stream in terms of promotion within clinical practice. It's regarded this as an extremely important area.

Glen Jones¹

¹ Refer to Appendix 1.2 for a description of the roles and affiliations of individuals who provide testimonials throughout this self-study report.



SIGNIFICANT DEVELOPMENTAL MILESTONES

These commitments—which are underpinned by the concepts of cognitive flexibility and integration—are central to the character and reputation of the Wilson Centre. As the sections of this report demonstrate, they are manifest across the diverse activities of our community. They characterize our educational programming, our research activity, our governance structures, our partnerships, our community building, our pursuit of equity, and our approach to social transformation. This underlying consistency has been carefully cultivated across our diverse groups and structures, all of which have grown more robust over the period of this self-study review. This purposeful organizational work constitutes a significant achievement, central to the sustainability, vibrancy, and influence of the Wilson Centre.

In the past five years, our most significant and tangible milestone has been the successful approval and launch of the Wilson Centre’s PhD Concentration in Health Professions Education Research (HPER) within the Institute of Health Policy, Management and Evaluation (IHPE) at the Dalla Lana School of Public Health. Establishing a graduate program has long been an aspirational goal of the Wilson Centre. Achieving this goal involved five years of planning, proposal writing, meetings, and negotiations with many diverse stakeholders. It is testimony to the sustained commitment and tenacity of our community. It has brought that community together in new ways, tested and strengthened our collaborative capacity, and opened new possibilities for the Wilson Centre.

Our first cohort of graduate students began in September 2018. As we prepare this report, we have successfully entered our second year of the program. We have had exceptional applicants and our admissions process has been highly competitive. While the Wilson Centre continues to build upon the successes of its traditional Fellowship—through which we mentor the work of students pursuing a variety of master’s and doctoral programs—the PhD program provides the first opportunity to train cohorts of education researchers in the full breadth and depth of theories and methodologies important for health professions education research as a distinct field.

STRENGTHS

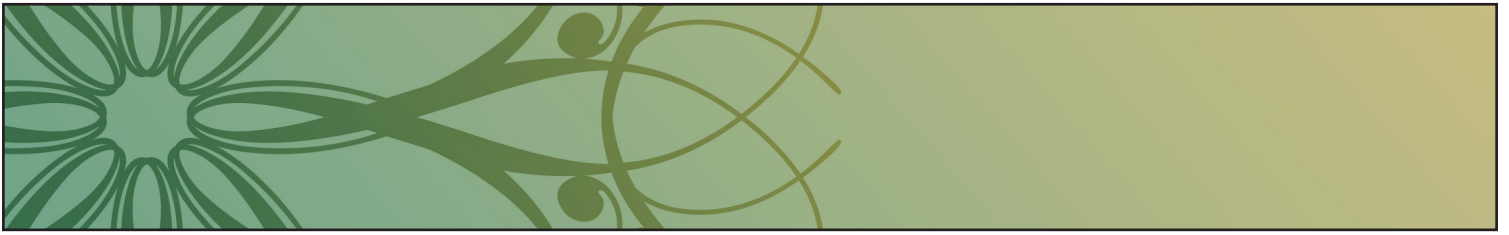
Key areas of strength at the Wilson Centre include our unique governance structure, the quality and diversity of our science, the quality and depth of our educational programs, our challenging and supportive culture, and the talent and commitment of our people. A brief summary of these areas is provided below; further details can be found in relevant sections of this self-study report and in the 2019 Annual Report (Appendix 2.1).

SCIENCE

The Wilson Centre is recognized internationally for the rigour, depth, and diversity of the education science created by its scientists, researchers, and fellows. Within the Centre, individuals are creating new knowledge that moves the field forward. While we celebrate the rigorous theoretical contributions of individuals, perhaps even more important is the collective contribution of the Centre to raising the bar and pushing boundaries in terms of what is considered legitimate knowledge. Examples of this include a proliferation of collaborative research between scientists from disciplines that are epistemologically diverse; such work goes beyond traditional notions of “mixed-methods” research and instead seeks to build bridges across theoretical perspectives.

There are a number of important questions that I know that the Wilson Centre has been working on that influence health professions education. But the strength of the Wilson Centre is that there are different people that are working on these questions from different perspectives. As a result of these multiple perspectives, there is a greater appreciation of the complexity of the questions and also the reality that underpins it, and so what results is, hopefully, a thoughtful reflective critique. But not being critical, but rather being a critique of the concepts and ideas because of the richness occurring when you’ve got people coming together from multiple perspectives.

Jerry Maniate



GOVERNANCE

A key feature of the Wilson Centre, one carefully structured from its earliest days, has been that of dual governance by hospital (UHN) and university (U of T). This dual governance structure has been noted by many to be foundational to the success of the Centre. Dual accountability ensures dialogue between both governing partners. It enables the Centre to be visible and valued within each institution and at the same time to occupy a powerful in-between position, addressing—and at times bridging—university and hospital concerns, values, and priorities. This central liminality allows the Centre to be a unique space for creativity, cognitive flexibility, boundary-pushing, and out-of-the-box thinking.

Practically, this dual governance means that both the hospital and the university lenses are applied to all we do, keeping us as a Centre in a constant creative tension. Education informs care; care informs education. Theory informs practice; practice informs theory². By virtue of reporting to both U of T and UHN, the Wilson Centre also has a layer of protection from potential shifts in priorities and leadership on either side, allowing us to keep our focus on theory-driven knowledge creation that can be used by both partners to advance education and care.

This governance configuration also directly benefits the two governing partners. It provides a sustainable means for both parties to develop conceptual models and a set of sustainable processes and practices to guide and support their important relationship and mutually beneficial work together. Having governance oversight from both the U of T Dean and the UHN CEO creates a space between the two organizations that affords unique opportunities.

Hospitals are supposed to look after people, patients. And if you look at the original documents, the Hospitals Act doesn't talk about research or education. The U of T Act doesn't talk about looking after patients or healthcare. But you bring those two organisations together, you create the space, and then you govern it in a way through governance rules that are about a collaborative commitment, collaborative shared decision-making, you tend to make better decisions.

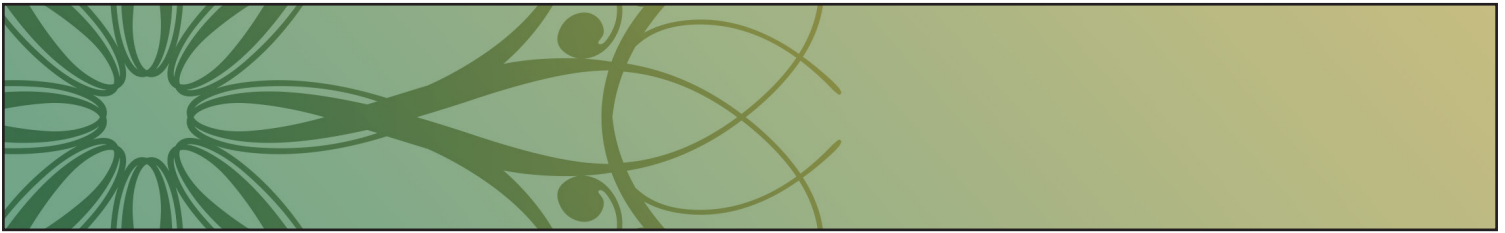
Sal Spadafora

Enabled by this dual governance structure, the physical location of the Wilson Centre has also been key to its success. The collaboration between U of T and UHN has allowed the centre to operate as an academic space with direct ties to patient care and educational practice. In addition, the Centre is a resource for all the other hospitals within the Toronto Academic Health Science Network (TAHSN).

Over the past 5 years, the Wilson Centre has been able to maintain its status and influence within academic circles while making significant advances in the translation of education science to education and care delivery. Wilson Centre Scientists have participated simultaneously in curriculum renewal at the university and the creation of teaching intensives for clinical teachers at the hospital. The recent launch of the Institute for Education Research (TIER) at UHN creates a new opportunity to further cement these translational activities. TIER will bring Scientists at the Wilson Centre closer to researchers and clinical faculty across all of the clinical programs at UHN. The aim of this hospital-based initiative is to raise the profile of education science while leveraging the resources and infrastructure of UHN Research to capture new sources of research funding.

Beyond its external institutional relationships, governance is also a strength within the Wilson Centre. Because the Centre's external links are many and diverse, as are its scientific foci, leadership responsibility must be shared to be effective. As we elaborate in Section 5 of this report, we have adopted distributed leadership practices internally. These practices share many strengths with our dual governance structure: they serve to bridge concerns, values, and priorities across different traditions of research, and they foster original, challenging, and creative work.

²Lewin, K. (1951) *Field Theory of Social Science: Selected Theoretical Papers*. Edited by Dorwin Cartwright. New York: Harper & Brothers.



EDUCATION

Education is the core business of the Wilson Centre. We create knowledge about education and collaborate to bring this knowledge into education practice locally, nationally and internationally. As part of our commitment to the science of health professions education, we recognize the critical importance of educating the next generations of scholarly health professionals, scholarly health professions educators, researchers of health professions education, and education scientists. As a community, we value and support learners from diverse backgrounds with wide-ranging interests who wish to be academically engaged in this eclectic and exciting field.

The major development in terms of educational offerings of the Wilson Centre over the past 5 years is the successful launch of our PhD concentration in Health Professions Education Research (HPER). We were happy to find a home for this new program at the Institute of Health Policy, Management and Evaluation (IHPME) at the Dalla Lana School of Public Health and we are appreciative of the support and goodwill of our IHPME and Dalla Lana partners. We have developed a HPER doctoral program with a strong focus on the interdisciplinary application of theory and methodology. Our first cohort of students started in September 2018, and we have now welcomed our second cohort. We welcome the diversity of disciplinary backgrounds of our new graduate students, as well as the mix of students from the health professions and from other disciplinary backgrounds.

The Wilson Centre Fellowship program continues to be strong, supporting graduate students from multiple graduate programs. Our scientists, researchers, and fellows regularly engage in teaching locally, nationally, and internationally. We run highly acclaimed ateliers. As part of the Toronto Addis Ababa Academic Collaboration (TAAAC) we are working with AAU colleagues to co-develop and co-teach a Master of Health Sciences Education.

CULTURE

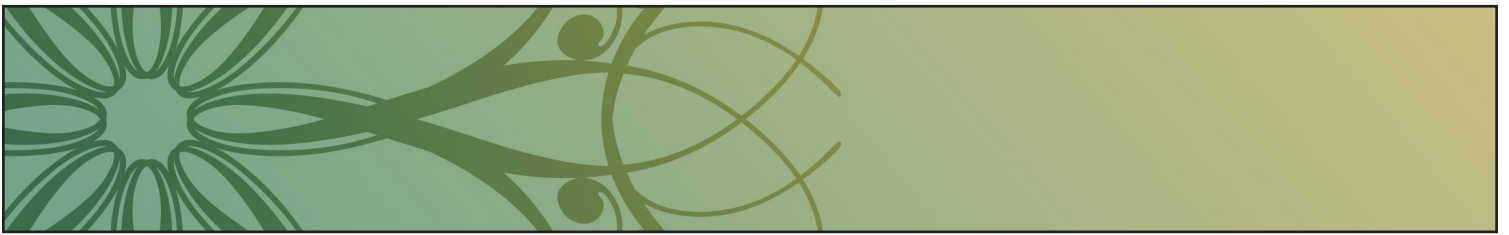
Visitors to the Wilson Centre frequently remark on the supportive culture as well as the continual pushing of boundaries and ideas. At the Wilson Centre, it is not culturally acceptable to consider one form of knowledge “better” or “more true” than another. Instead, a culture of inquiry, openness to diverse theoretical perspectives, and dialogue across those perspectives—that is, cognitive flexibility—is celebrated and promoted. As a Centre, we aim for our environment to be strongly supportive and also challenging, encouraging in-depth, high quality projects. Churning out academic products is not our goal; instead we focus on rigorous, creative, theory-rich explorations of topics that are significant and meaningful in the field.

I just think the culture is one of questioning, and challenging, of bringing in other fields besides linear medical education. Take the discussions and bring in anthropology, and sociology, bring in economics, bring in kinesiology, and our understanding of culture and its impact. Bring them all to the table, everyone is welcome, the door is open, not just medicine, and not just medical education, because all these lights will enable us to think more effectively about what we do every day.

Ivan Silver

I think they have created an environment that allows people to ask provocative questions or ask questions others don't want to ask. And they've done so in a way that has allowed them to create a bit of a community around that.

Jerry Maniate



PEOPLE

At the Wilson Centre, we have a rich mix of people who all contribute to making the Centre a safe and generative place for inquiry and openness to diverse theoretical perspectives. Our community includes several core groups: Scientists, Researchers, Fellows, PhD students, and Staff. For more information about our membership categories, see Appendix 2.2, as well as Sections 3 (Education), 4 (Research), 11 (Report of Members: Scientists), 12 (Report of Members: Researchers), 13 (Report of Learners).

Strength comes from the diversity of these people (in their backgrounds, research foci, and professional responsibilities), from their talent, and from their exceptional commitment to our shared goals and values. Our Scientists are internationally recognized across a variety of fields. Our Researchers come from varied health disciplines and research backgrounds; this group includes frontline teachers and education leaders who are able to implement practices informed by education science at the University of Toronto and across TAHSN. Our Fellows and doctoral students are a core strength of the Centre. They challenge themselves, each other, and the larger community as they develop their scholarly and research skills.

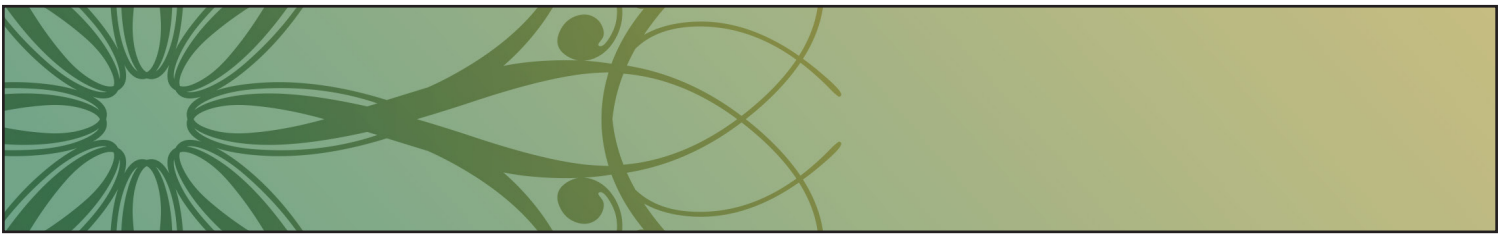
We have stars here, world class stars; educators are waiting to hear what they're going to write next, like the hit parade [...] There's at least a half a dozen scientists that people in the medical education community read everything they're writing because they say something different, new and ground breaking. You can tell that, too, when the Wilson Centre scientists take a topic and twist the language in the title, you can tell that they're up to something new and different. It's not linear, they don't think linearly, they think upside down and inside out, you know, i.e. using complexity theory or work by Foucault. The Wilson Centre is a place where you're waiting to hear the next new thing in health professional education.

Ivan Silver

The Wilson Centre is truly fortunate that several core people have been with us since the first days of the Centre more than twenty years ago. Mariana Arteaga, the Centre's business officer, is extraordinarily capable and ensures the smooth running of the day-to-day functions of the Centre. Her open door, readiness to listen, and ability to help solve and fix things make her the heart of the Centre. Doug Buller, the Centre's visual rhetorician, has used his artistic creativity and incisive questioning to push the presentation skills of Scientists, Researchers, and Fellows. "Doug slides" are now recognized internationally as part of the Wilson Centre brand. Doug also demonstrates the Centre's recognition of fluidity of roles and expertise. Doug's engagement with the science of scientists, fellows, and researchers through the process of developing presentations adds important nuance to the work. Doug is also the lead on the Centre's very popular Say Something Atelier, a two-day intensive workshop on writing and delivering excellent presentations. Professor Emeritus Niall Byrne was instrumental in getting the Centre started along with Richard Reznick, our first director. While officially retired, Niall is still at the Centre most days, and many scientists, researchers, and fellows regularly seek his wise counsel. Niall is a holder of institutional memory and assists our community in contextualising current issues and debates, which helps guide the Centre forward.

There's a certain stability of core members, that people who work there seem to work there for quite a long time... I think that ... having a core of people who keep going is important, because ... centres really suffer if they're headed by one person. And if there's a very key person and that person leaves, that can cause a lot of damage. So, one of the things I see the Wilson Centre having has been that kind of succession planning and stability.

Jen Cleland



Of course, not all of our key people have been with the Centre since its inception. Cheryl Ku, Education Coordinator, provides exceptional administrative support for Centre operations. Jeannine Girard-Pearlman, Philanthropy Lead, was a Wilson Centre Fellow while enrolled in a doctoral program post-retirement. Jeannine recognized the value of the Wilson Centre community in supporting graduate students, and after completing her PhD stayed on in a volunteer capacity, working tirelessly to assist the Centre through the many hoops and hurdles to get our doctoral program approved. She continues to play a key role with fundraising efforts.

The Wilson Centre has a history of inspiring exceptional and enduring commitment. It offers a sense of hospitality, community, and intellectual home that both attracts excellence and fosters it.

DEFINING CHARACTERISTICS

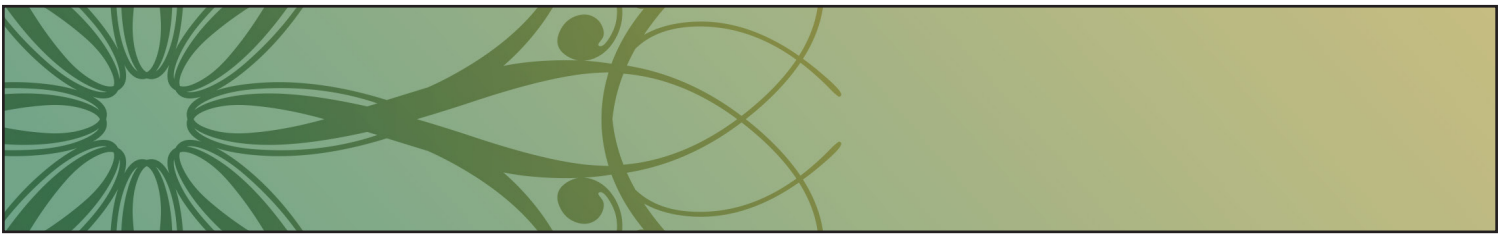
The Wilson Centre is characterized as a place of questioning, curiosity, and cognitive flexibility. The Wilson Centre community is consistently pushing the boundaries of the field and re-setting the bar for scientific excellence. The Wilson Centre “brand” has become an international marker for rigorous theoretical research. The Centre is also known for being a place for engaged (and at times heated) academic conversations. Members of our community do not shy away from topics that may be seen by some as provocative, challenging, or thorny. Instead, while seeking common ground, we also welcome respectful disagreements, knowing that working through these in a rigorous way will deepen everyone’s understanding. Another characteristic of the Centre is our collective desire to build connections and networks with those beyond our immediate community.

And I’d like to say, when I interact with the scientists or have been involved in hiring them, when people say, what are you looking for? I usually say, I don’t know, but I want to find someone that will take me to places that I didn’t know that I needed to go, didn’t think I wanted to go, and never imagined I would ever visit. And it’s only through the Wilson Centre that you’re allowed to do that. In many other places, an education centre like the Wilson Centre would be asking people to be well within one standard deviation of the mean, to ride the prevailing waves of ideas and I guess, what the Wilson Centre is doing is not riding the wave, it’s creating the new wave. Figuring out where that ripple is going to start. And I don’t know if that’s a bit long-winded, but that’s sort of where I see the role of the centre has been in terms of fostering this idea that it’s okay to question the status quo.

Sal Spadafora

RISKS AND CHALLENGES

An important part of building for future success is anticipating potential risks. For the Wilson Centre, these include issues of resources, structures, and time. While the Wilson Centre is in a sound financial position, it is always important to be mindful of potential economic challenges, particularly at times when both universities and hospitals face budget pressures. The structures that underpin the Wilson Centre are both a source of strength and a potential risk. While dual governance by UHN and U of T is a source of strength, as we have described, other structural aspects are not. As an EDU:C, our scientists cannot be hired directly by the Centre. Governed by the Clinical Faculty Policy in the Faculty of Medicine (whereby MDs are not tenure-eligible), disciplinary MD scientists (here distinguished from MD-PhDs) are also not deemed eligible for tenure. This has led some MD scientists to leave the Centre in search of a tenured position. In addition, with the university’s Clinical Limited Term Appointment policy, MD scientists are unable to be hired directly at the University. They are left with less secure employment structures, being hired at hospitals with a status-only appointment in a clinical department. These clinical departments obviously have expectations of service and teaching from their scientists, and may not always fully understand scientists’ other commitments including the teaching load in our new Wilson Centre HPER doctoral concentration.



EQUITY, DIVERSITY, AND INCLUSION

There are people in the Wilson Centre who take on the challenging issues of power and inequity within medicine and medical education. And I'm not trying to suggest that they would be doing something different if [they hadn't become connected with the OISE MED] program, but I do think that this notion of understanding medical education from a wide range of ways, and recognising that there are a whole bunch of different theoretical approaches that can be adopted to both understand what's going wrong and how to improve it, ... that's been a strength of the Wilson Centre.

Glen Jones

The Wilson Centre is aligned with the university and hospital commitment to equity, diversity, and inclusion (EDI) in terms of hiring, admissions, and career development. We act upon and amplify EDI work in three intersecting ways:

1. We are pursuing programmatic initiatives that seek, as their core purpose, to advance equity, diversity, and inclusion.
2. Scientists, Researchers, Fellows, and graduate students are pursuing programs of research that produce knowledge and theory relevant to equity, diversity, and inclusion.
3. We are actively working to ensure that the Wilson Centre itself is an equitable, diverse, and inclusive learning and work environment.

The following sections profile work of each type currently being done by our community.

PROGRAMMATIC INITIATIVES THAT ADVANCE EQUITY, DIVERSITY, AND INCLUSION

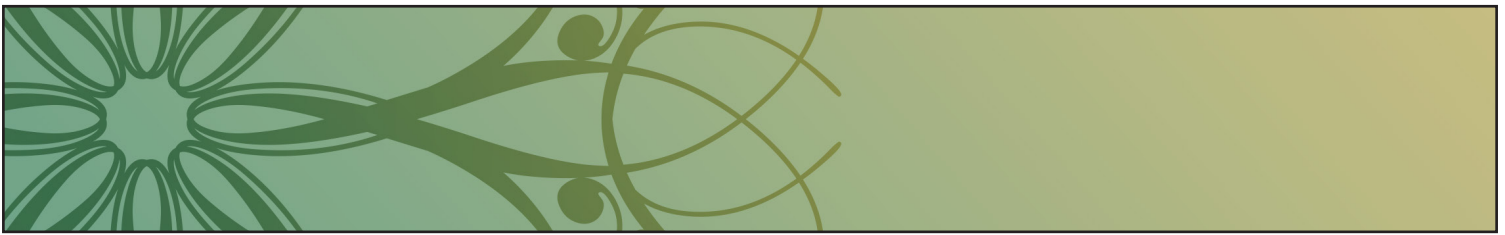
The identification of EDI research as an area of Wilson Centre focus became more explicit with the Centre's 2017 Strategic Refresh Plan. This document aligns closely with key priorities in the Faculty of Medicine Strategic Plan. Two new areas identified in the Refresh (added to five core areas of longstanding activity) are international collaborations and Indigenous health education.

INTERNATIONAL COLLABORATIONS

At the Wilson Centre, we have worked to engage with partners in ways that build scholarly capacity in “non-Western” contexts. For example in 2015, the Wilson Centre, through the Toronto Addis Ababa Academic Collaboration (TAAAC), agreed to co-lead, with colleagues from Addis Ababa University (AAU), the development and implementation of a new Master of Health Sciences Education. The fourth cohort is nearly finished, and a fifth cohort began in January 2020. This thesis-based master's degree is the first of its kind in East Africa. Graduates from the program are working in key positions in the Ethiopian Ministry of Health and Ministry of Education. They are also taking on major leadership roles at various Faculties of Health Sciences across Ethiopia. For further details about this and other collaborations, please see the Internal and External Relationships section. The Centre has supported scholarly exchanges so that members of our community can learn from the expertise of our Ethiopian colleagues.

INDIGENOUS HEALTH

In the area of Indigenous health, the Wilson Centre was successful in obtaining funding to support an Indigenous Investigator Award in 2016. This award is currently held by Dr Lisa Richardson. Dr Richardson is an Anishinaabe/European physician and scholar who works to integrate decolonizing and Indigenous perspectives into medicine and health professions education. She has been involved in innovative projects such as digital storytelling with Indigenous patients, learners, and healthcare providers to guide the creation of a framework for teaching Indigenous health, and an evaluation of the Indigenous Blanket Exercise as a transformative learning activity amongst second-year medical students.



A national leader in Indigenous medical education, Dr Richardson is currently chairing the Royal College of Physicians and Surgeons' Indigenous Health Committee. Under her leadership, the Royal College mandated that Indigenous health become a mandatory component of curriculum, accreditation, and assessment in all specialty training programs. She has led or contributed to numerous high impact reports such as the Indigenous Health Primer (<http://www.royalcollege.ca/rcsite/health-policy/initiatives/indigenous-health-e>), Bringing Reconciliation to Healthcare in Canada (<https://www.healthcarecan.ca/2018/04/11/bringing-reconciliation-to-healthcare-in-canada-wise-practices-for-healthcare-leaders/>) and the Association of Faculties of Medicine of Canada's Joint Commitment to Action on Indigenous Health.

In addition to establishing this new award, the Wilson Centre's commitment to Indigenous health is apparent across a range of other activities and initiatives. These have included:

1. Supporting Indigenous scholars and learners:

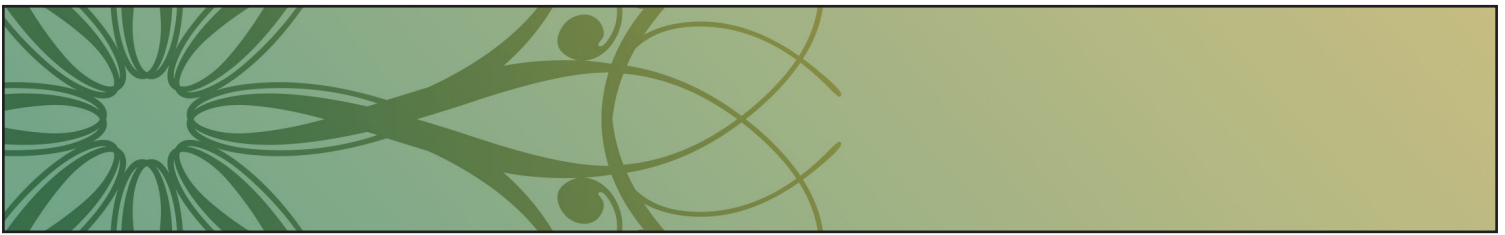
- The Indigenous health investigator award
- Indigenous summer studentships (three Indigenous students, one non-Indigenous summer student over a four-year period)
- The recruitment of members with a commitment and/or focus on Indigenous health education, including Marcia Anderson, Allison Crawford, and Jason Pennington
- The recruitment and support of Indigenous fellows (Cathy Fournier)

2. Educating non-Indigenous members of the Wilson Centre about Indigenous health and cultural safety:

- Collection of educational materials by Indigenous scholars in the new library
- Creation of a space that celebrates Indigeneity through art (Niall Byrne Library)
- Learning sessions devoted to Indigenous health, such as a recent workshop by Lisa Boivin
- Visit by prominent Indigenous scholar, Dr Marcia Anderson
- Inclusion of content by Indigenous learners and scholars at the annual Richard Reznick Research Day (including a plenary panel in 2018)
- Involvement of Cat Criger, a traditional teacher, at all Wilson Centre formal events

3. Collaborating, formally and informally, with Indigenous and non-Indigenous organizations to advance Indigenous health education:

- Women's College Hospital's Indigenous Health Education Group
- Office of Indigenous Medical Education at the University of Toronto
- Ongomizwin Health Institute at Rady College of Health Sciences, University of Manitoba
- Waakabiness-Bryce Institute of Dalla Lana School of Public Health
- Massey College, University of Toronto



RESEARCH AND ADVOCACY EXPLICITLY RELEVANT TO EQUITY, DIVERSITY, AND INCLUSION

The above examples represent programmatic initiatives undertaken by the Wilson Centre as a whole. Our community also fosters equity by supporting the research of individual members. Many other Scientists, Researchers, and Fellows engage seriously with issues of equity, diversity, and inclusion as an explicit—and for some primary—aspect of their research and advocacy. These engagements are profiled below.

DR KINNON MACKINNON WILSON CENTRE FELLOW

Dr Kinnon MacKinnon studies population health inequities with a focus on sexual and gender minorities. His work addresses health disparities created by social stigma, policy, and health professions education gaps. He has applied theory to explicate and address substandard treatment in healthcare for sexual and gender minority populations. During his recent Fellowship at the Wilson Centre, he undertook several research projects that aimed to address gaps in access to health services for LGBTQ people. For example, through institutional ethnographic work, he identified (1) how clinicians learn, and teach others, to work with transgender (trans) patients equitably in the context of gender-affirming medicine; (2) barriers to gender-affirming medicine for trans patients perceived to have complex mental health issues; and (3) a paternalistic, rather than patient-centred, model of care. Mobilizing insights from his research, Dr MacKinnon has worked to close educational gaps by producing educational resources and undertaking community-engaged knowledge translation.

DR MATHIEU ALBERT WILSON CENTRE SCIENTIST

Dr Mathieu Albert's work on interdisciplinarity, and specifically on the inclusion of various forms of knowledge within health research, has shown how the dominant scientific culture in medicine can become an impediment to the contributions of non-biomedical researchers in understanding health and illness. His findings have brought to light some of the barriers to the establishment of a fully inclusive research field across faculties of medicine in Canada. In this sense, while his work meets the highest standards in academic sociology, its ultimate goal is to build a health research field where all voices can be heard.

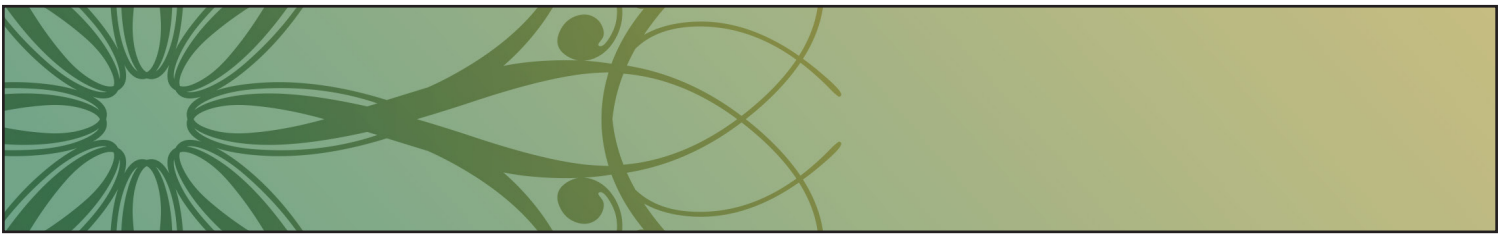
CATHY FOURNIER WILSON CENTRE FELLOW

Cathy Fournier's research explores the integration of Indigenous medicines and knowledges into health care. This research has the potential to contribute to diversity within medical education research by incorporating diverse methodologies, such as using decolonizing Indigenous methodologies in health professions research, as well as highlighting differing perspectives/worldviews on health and healing. It also has the potential to act as a form of advocacy for the integration of non-biomedical forms of medicine into healthcare.

DR ARNO KUMAGAI WILSON CENTRE RESEARCHER

As Vice Chair of Education in the Department of Medicine at the University of Toronto and the F.M. Hill Chair of Humanism Education at Women's College Hospital, Dr Arno Kumagai's scholarship, teaching, and administrative work are focused on educating for critical consciousness and social justice, humanism, and person-centred care. As a faculty member and Vice Chair of Medicine, he is very active in mentoring and promoting individuals from historically marginalized groups, as well as efforts to nurture and sustain a climate of inclusion and support.

Arno Kumagai has had a long-standing interest in scholarship on education for equity and has published oft-cited studies and commentaries on teaching for justice in medical education, including *Beyond Cultural Competence: Social Justice and Multicultural Education*; *Cutting Close to the Bone: Trauma, Free Speech and Institutional Responsibility in Medical Education*; and *Remembering Freddie Gray: Medical Education for Social Justice*.



DR AYELET KUPER
WILSON CENTRE SCIENTIST

Dr Ayelet Kuper’s scientific work is recognized internationally for its contributions to EDI. The core of her research program lies in this area, and she has recently agreed with University of Toronto Press to write a book about power, culture, and justice in medicine for current physicians and physicians-in-training.

Dr Kuper is increasingly called upon to speak to issues such as equity, inclusion, power, privilege, and voice, and their relevance both to the ways in which doctors care for patients and to the ways in which educational offerings are structured within academic institutions. She has been recently invited to deliver keynote addresses related to EDI at major meetings in Europe and South Africa.

Dr Kuper contributes to teaching and faculty development about EDI at the University of Toronto, including all first-year MD Program students as well as residents and faculty members in the Department of Medicine. She also runs “train-the-trainer” sessions and is part of the core group that has been tasked with creating a TAHSN-wide EDI faculty development strategy at the Centre for Faculty Development. She has also led a working group within the Department of Medicine addressing a number of priorities related to improving EDI within that Department, including understanding pay differences within practice plans, documenting diversity in hiring, and promoting a sense of inclusion among faculty members from structurally minoritized groups.

DR TINA MARTIMIANAKIS
WILSON CENTRE SCIENTIST

Dr Tina Martimianakis’ research focuses on making visible the misalignments in educational delivery that stratify or sideline expertise and inadvertently stifle the career potential of faculty and learners. She also contributes to the training of health professionals through lectures and courses that focus on how intersections of race, class, gender, disciplinary background, and other distinguishing characteristics of professional identity complicate learning and interprofessional and patient interactions. Her research and educational initiatives have had national and international recognition and she receives regular invitations to inform curricular reform to address explicit and implicit marginalization and other hidden curriculum effects.

DR UMBERIN NAJEEB
WILSON CENTRE RESEARCHER

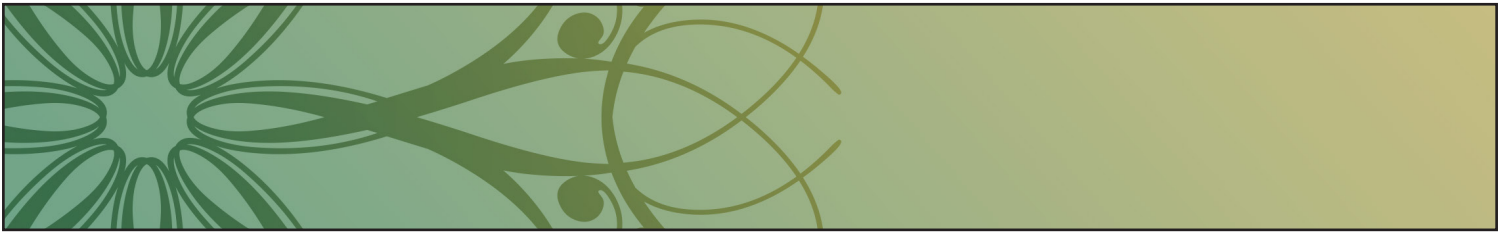
Dr Umberin Najeeb, Assistant Professor of Medicine and Researcher at the Wilson Centre, has combined her interests in medical education with the challenges and issues surrounding International Medical Graduate (IMG) education. She has addressed these issues in a scholarly manner to facilitate the transition and integration of IMGs (and other Internationally Educated Health Professionals) into their training and working environments. She has designed multiple curricular innovations including an observership program, an orientation day, and a unique research-based longitudinal-collaborative mentorship program for IMG physicians.

DR STELLA NG
WILSON CENTRE SCIENTIST

Dr Stella Ng’s research program focuses on critical reflection and associated approaches to education. Critical reflection focuses on challenging societal and individual assumptions toward social improvement; thus, it is particularly useful when striving for equity, diversity, and inclusion.

DR SOPHIE SOKLARIDIS
WILSON CENTRE SCIENTIST

Dr Sophie Soklaridis’ research raises the important issue of tokenism in healthcare, which includes the practice of recruiting a very small number of patients (or one patient “voice”) to give the appearance or impression of social inclusivity as a strategy for patient engagement in research and education. Tokenism can undermine patient-centred care in the same ways that a flawed randomized control trial can ruin a medication study. Through grants and publications, Dr Soklaridis has demonstrated excellence in research by shifting the paradigm from a paternalistic “physician knows best” model to a relational model of “nothing about us without us” by including patients and families in clinical and educational activities in ways that are trauma-informed and demonstrate collaboration, compassion, equity, respect, and justice. Tokenism in academic medicine is also a focus of her research in the area of gender and leadership, mentoring and international collaborations. She has several publications that both interrogate the status quo and promote the importance of equity, diversity, and inclusion in health professions education and care.



**DR CYNTHIA WHITEHEAD
WILSON CENTRE SCIENTIST AND DIRECTOR**

Dr Cynthia Whitehead's programs of inquiry touch on issues of EDI in two distinct ways: through a focus on the globalization of medical education, and through the examination of practices, processes and structures within bureaucratic institutions with the aim of ensuring that Indigenous practices are appropriately incorporated into health care settings. These programs of inquiry are facilitated by Dr Whitehead's roles in administration, teaching, and scholarship.

At the international level, a current priority for Dr Whitehead is to work collaboratively with colleagues in other settings (particularly the Toronto Addis Ababa Academic Collaboration [TAAAC]) to try to build education research/scholarly capacity in non-Euro-American contexts and to develop theories and models that can assist international partnerships between high-resource and low-resource settings.

At the local level, Dr Whitehead is a lead executive team member in advancing the Indigenous health strategy at Women's College Hospital (WCH). With Lisa Richardson as the WCH Indigenous strategic lead, the organization is working towards cultural transformation in order to become a safer and more welcoming place for Indigenous patients, families, learners, faculty and staff.

**DR SARAH WRIGHT
WILSON CENTRE SCIENTIST**

Dr Sarah Wright is leading a research project (funded by the Faculty of Medicine's Education Development Fund) exploring the experiences of medical students who are first in their family to go to university. This will help us better understand the ways in which the medical school culture either values or devalues the diversity that these students bring. This study is an international collaboration with colleagues in Australia (Dr Caragh Brosnan and Dr Erica Southgate). Other Wilson Centre scientists are also collaborators (Dr Maria Mylopoulos, Dr Nikki Woods, Dr Lisa Richardson).

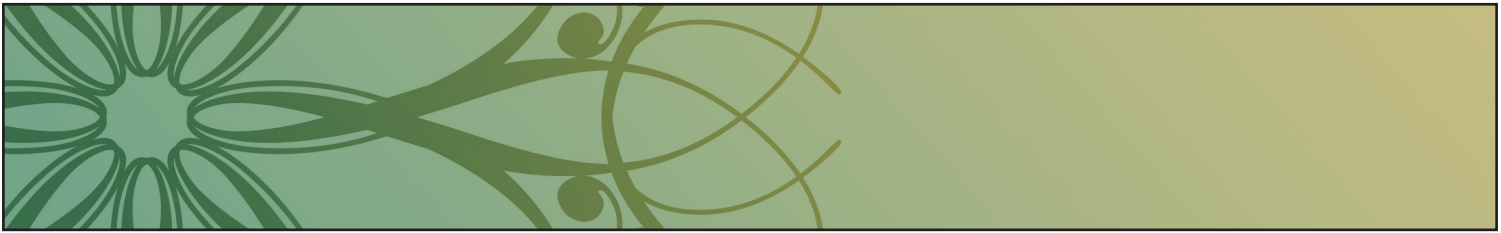
Dr Wright is also leading a Royal College grant studying how residents understand and enact the advocacy role. She is also a collaborator on a project (along with Dr Lisa Richardson) evaluating the Indigenous Blanket Exercise, and is a collaborator on a project investigating resident attitudes toward, and readiness to care for, transgender patients. Dr Wright and Dr Whitehead are also mentoring a group evaluating poverty teaching with lived experience tutors.

PURSUING EQUITY, DIVERSITY, AND INCLUSION WITHIN OUR COMMUNITY

Within the Centre, we follow both U of T and UHN processes for onboarding faculty members, learners, and staff. These include training modules that address EDI issues. Many of our members have done additional EDI training, including the San'yas Indigenous training. We pay close attention to hiring policies that highlight EDI practices including recognizing implicit biases and microaggressions. We provide continuing professional development and sessions for learners on EDI in practice and research.

Joining the Wilson Centre as a trans scholar was the perfect place to marry my backgrounds in social work and community-based research with my budding interest in health professions education.

Kinnon MacKinnon



INDICATORS OF THE WILSON CENTRE ENVIRONMENT

Continual critical reflection and improvement are integral to all activities at the Wilson Centre. As a diverse community of scholars, we are also keenly aware that indicators of quality and success are difficult to standardize and not benign. As a result, we draw upon a dynamic range of evidence in evaluating our activities. That range of evidence is apparent within the pages of this report.

I'm not sure that we can measure impact with any known metrics. But I think there are stories to be told that should be told. In other words, I think there are ways in which we can develop narratives that demonstrate how ideas have moved. And I think telling those stories will become increasingly impactful because I do think we need to tell the impact stories.

Glen Jones

One primary type of evidence is testimonial. Many sections of this self-study report—as illustrated by this one—are punctuated by the voices of learners, researchers, scientists, senior administrators, past leaders, and other stakeholders whose perspectives and experiences offer a robust picture of the Wilson Centre’s work and trajectory. These quotations are drawn from several different sources: in depth interviews conducted for a recent history of the Wilson Centre, testimonials solicited explicitly for the purpose of this report, and excerpts from course evaluations and visiting scholar reports. Appendix 1.2 provides a list of cited individuals, along with the source of their testimonial and their affiliation at the time of providing it.

And so, it was a critical success factor that this new Centre had to, in addition to its academic mission, have a positive value proposition for the hospital.

Richard Reznick

In addition to marshalling narrative evidence, we have undertaken an extensive process of data collection and analysis related to the academic productivity, excellence, and engagement among our core membership groups: Wilson Centre Scientists, Cross-Appointed Scientists, and Wilson Centre Researchers. These indicators are detailed in Section 4 of this report.

A final set of descriptive indicators pertains to the size and composition of the Wilson Centre community. **Tables 2-1 and 2-2** present the number of current Wilson Centre members across different membership categories.

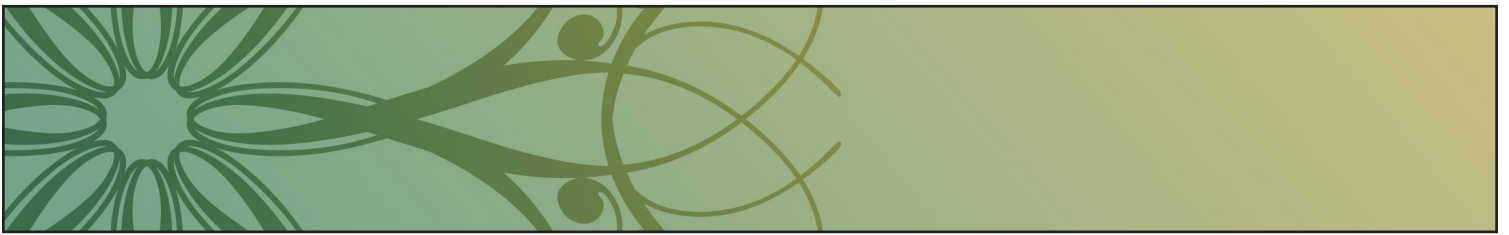
Table 2-1 Number of Wilson Centre members across different membership categories

Scientists since 2015	Current Scientists	Researchers since 2015	Current Centre Researchers	Current Cross-Appointed Researchers	Invited Members	General Members	Current Staff
included in this report	as of Jan 1st, 2020	included in this report	as of Jan 1st, 2020	as of Jan 1st, 2020	as of Jan 1st, 2020	as of Jan 1st, 2020	as of Jan 1st, 2020
23	20	14	15	20	33	153	3

Table 2-2 Number of Wilson Centre trainees

Fellows in Fellowship Program	Current Fellows	Current HPER PhD Students
since Jan 1st, 2015	as of Jan 1st, 2020	as of Jan 1st, 2020
57	17	10

* 4 PhD students are also Wilson Centre fellows and included in both columns 2 and 3.



REPORT OF THE DIRECTOR

It is a true honour to serve as the Director of the Wilson Centre, and to engage with the many members of our community as the Centre grows, diversifies, and deepens. My first four years as Director have flown by! I am blessed to be able to work with superb staff, a very strong leadership team, and a close and engaged community of Scientists, Researchers, Fellows and Graduate Students. Individually and collectively, these incisive thinkers and creative scholars push conceptual boundaries and create new knowledge that advances the field.

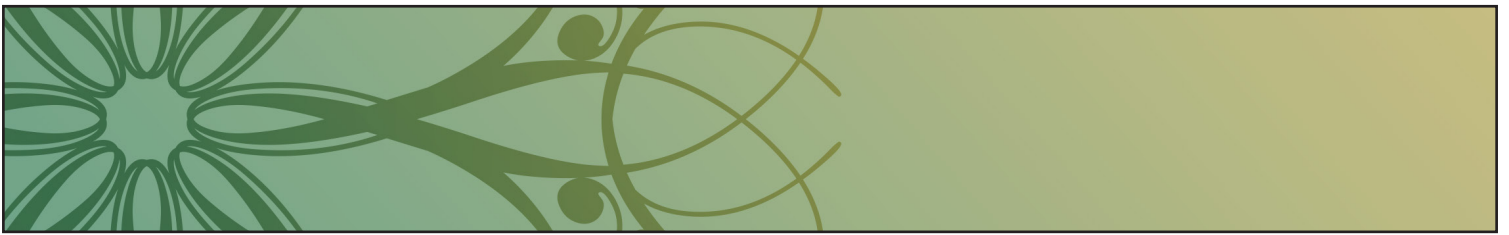
I have deliberately built a collaborative leadership team and engaged the Wilson Centre community broadly in all meaningful decision making. Our 2017 Strategic Refresh Plan is a good example of how our community came together to articulate values, principles, and priorities for the Centre. The self-study for this external review has also been an important community engagement process. I have been heartened that so many members of our community have happily stepped up to participate and contribute, and I know that going through this process has further strengthened us.

At the Wilson Centre, we explicitly avoid setting specific content or theoretical priorities. Instead, our strategy is to encourage Scientists to pursue their intellectual passions, having great confidence (supported by data of the productivity of the Centre) that giving brilliant people space to explore, delve, and interrogate is the most effective way to ensure meaningful contributions to the field. When I became the Director of the Centre, I knew that a key priority was to strengthen this culture and ethos.

Many people, both internal and external to the Wilson Centre, have commented on the Centre's unwavering commitment to supporting Scientists to engage in curiosity-driven research. It is our strong conviction that this is the best way to ensure the relevance and importance of the knowledge creation that happens here. We also believe that holding this as a core community value encourages cognitive flexibility and openness to new ideas.

It is important to note that this curiosity-driven theoretical focus is not commonplace across health professions education research units internationally. Many of these units define particular education content areas or privilege specific forms of research. As I have visited different centres internationally, I have become used to hearing versions of “the Wilson Centre is so lucky to have the ability to give free reign to its Scientists, but that approach would never work here—we have to meet very specific deliverables — which influences the scope of work of our Scientists.”

The field of health professions education research is increasingly recognized internationally as both paradigmatically diverse and multidisciplinary. This phenomenon is—of course—not isolated to the Wilson Centre. The Wilson Centre is, however, recognized internationally to be a strong contributor to the exciting expansion of the field. The Wilson Centre has long had a strong focus on welcoming to our community scholars from wide ranging disciplinary traditions and clinical backgrounds. Historically, the Centre started with a strong focus on surgical skills education and simulation. Under previous Directors, this expanded to include medical education and then health professions education more broadly. In my first term as Director, I have supported the push to expand legitimate content areas and diversify disciplinary breadth. Among more recently appointed Scientists we now have representation from Anthropology (Janelle Taylor), Occupational Therapy (Paula Rowland), Paramedicine (Walter Tavares), and Audiology (Stella Ng). Current Fellows and Graduate Students include learners with backgrounds in Bioethics, Registered Massage Therapy, Geography and Planning, and Pharmacy, to name but a few.



There has also been expansion over time in the content areas that are considered to fall within the health professions education research mandate: from surgery to medicine to health professions to health education more generally, including patient education. From a disciplinary perspective we are very pleased to have moved beyond the qualitative-quantitative research divide. Instead, we celebrate the diversity of the field and the Centre's disciplinary breadth. This is reflected in the structure of our doctoral programme with its two strong, complementary streams: Cognitive, Behavioural & Epidemiological Sciences and Critical & Interpretive Social Sciences.

It has been a delight and a privilege to serve my first term as the Director of the Wilson Centre. I am fortunate to be in this role at a dynamic time in the historical development of the field of health professions education research. I am grateful to work with wonderful colleagues and I look forward to being an ongoing part of the continued deep engagement of the Wilson Centre in creating new knowledge, educating next generations of education scholars and scientists, and collaborating with local, national, and international colleagues and partners to bring high quality theory-informed education science into education practice.

ABOUT THIS REPORT

The Wilson Centre community has been deeply engaged in the process of this self-study. Each of the four Associate Directors took responsibility for leading a section of the report, building a team of scientists, researchers, and fellows to work on that section. The student report was led by Jacquelin Forsey (Fellows representative). The member report was led by Dr Paula Rowland (Scientists) and Dr Joanne Goldman (Researchers). Dr Niall Byrne and Dr Jeannine Girard-Pearlman each authored a section, in addition to providing comprehensive feedback on the report as a whole. Mariana Arteaga and Cheryl Ku gathered data and resources and kept area leads on track. Paula Veinot extracted, ordered, and analyzed data. Carrie Cartmill collated and aligned various sections of the report and skillfully coordinated the groundwork of the team, along with all supporting documents and appendices, among other acts of magic. Dr Sarah Whyte revised and integrated the sections, providing editorial coherence. Doug Buller formatted and designed the document, providing visual coherence. Dr Cynthia Whitehead authored core components of the report and closely coordinated the conceptual and collaborative work of the team. Drafts of the report were circulated widely within the Centre, and also shared with key stakeholders and colleagues to ensure that the messages in this self-study resonated with multiple groups.

In short, this document instantiates the collaborative spirit of the Wilson Centre.

Because this report was a collaborative effort, we often write as a collective, using the pronoun “we.” Where it is more appropriate—as when we are presenting evidence to demonstrate the collective or individual achievements of the Wilson Centre and its members—we adopt a more removed, third person perspective. While we have taken care to knit the sections together, shifts of voice and format may remain across the components of this report.

3. EDUCATION

At the Wilson Centre, education is our core purpose. We are driven by intertwined commitments both to produce knowledge about education and to ensure that this knowledge shapes educational practices: our own practices within the Wilson Centre, those within our directly affiliated organizations, and ultimately those of health professions educators around the world. In this section of the report, we focus on our local educational programs and activities. Internal to the Wilson Centre, the most significant among these are our two primary training programs: the longstanding Wilson Centre Fellowship Program and the newly established PhD in Health Professions Education Research (HPER). Establishing the HPER in conjunction with the Institute of Health Policy, Management, and Evaluation (IHPME) has been a formidable undertaking and achievement. Outside of the Wilson Centre, many scientists and researchers have adopted leadership and consultancy roles, in addition to teaching activities, that enable them to mobilize (and advance) their expertise at a programmatic level across the University of Toronto. The growth and strengthening of these leadership roles represent another significant and exciting development in our education profile over the past five years.

In this section of the report, we focus on our local educational programs and practices. These programs are offered for various learners within the Wilson Centre and across the University of Toronto. Educational work extending beyond local contexts is discussed in other sections of this report.

Our core educational program, the Wilson Centre Fellowship, has an established history and reputation as long as the Centre itself. Through this program, graduate students enrolled in a variety of master's and doctoral programs (not limited to the University of Toronto or even to Canada) have come to the Wilson Centre to conduct their applied research, receive direct mentorship, and participate in interdisciplinary training and professional activities relevant to health professions education research.

We have built upon that history in two significant ways over the past five years: we have expanded and strengthened our leadership and administrative roles beyond the Wilson Centre, and we have established a new doctoral training program in health professions education research. We are proud of these significant achievements. Together they build an infrastructure that enables us to maintain and deepen our theoretical commitments while effectively mobilizing the knowledge that we produce, integrating theory into practice at a structural level.

In addition to these significant programmatic developments, the Wilson Centre hosts ongoing, short-term educational programs and events. Individual members engage in a wide range of other teaching and capacity-building activities within their home academic and clinical departments that are specifically relevant to education research. These ongoing activities are also described, more briefly, in this report.

We begin by describing the principles that underpin all of the educational programs and activities, formal and informal, undertaken by scientists and researchers at the Wilson Centre. We then review these programs and activities in three categories: leadership and knowledge mobilization, internal programs, and local teaching and capacity building.



PHILOSOPHY

The Wilson Centre is committed to supporting learners in developing the knowledge, skills, and resources to enhance health professions education research. Our educational programs span the continuum from undergraduate education to faculty and professional development. Our programming emphasizes theory-driven, rigorous, interdisciplinary research. Our expectation is that learners will develop the cognitive flexibility necessary to appreciate and conduct research in the interdisciplinary field of health professions education. We embrace collaboration and imagination, and we are committed to equity and inclusion as essential dimensions of high quality education. These principles underpin all of our educational programs and outreach.

LEADERSHIP AND KNOWLEDGE MOBILIZATION

At the Wilson Centre, they ... have now become not only the go-to place for education theory [but also] masters at how to take that education theory and implement. ... So, they help create the big discoveries and now they're helping to implement in the undergrad curriculum. And I think we're starting to see that in post grad as well, and I believe we'll see more in CPD [continuing professional development] Will I see that tomorrow? No, I think we're going to see that in the next five to ten years. ... It's not direct, and so, you've got to believe. You've got to take a leap of faith. So, if you believe in science and you believe in the truth, and getting there requires respectful discourse, and then you believe that there's a group of people that can actually make it happen at the coalface of programs and the interface between learners and learning, you've got to be a patient person because it's like watching a glacier move. It's slow, but it carves valleys. The impacts will be big.

Sal Spadafora

The members of the Wilson Centre also serve as leaders for scholarly and evidence-informed education practice across the Faculty of Medicine and beyond. Our Scientists, Researchers, alumni Fellows, and members are represented in education leadership and administration in many of the hospitals and units affiliated with the Faculty of Medicine. Uniquely, most of the education activities engaged in by Wilson Centre Scientists are directly related to their research and/or their field of expertise. For example, Scientists Chair or Co-Chair committees that oversee aspects of the MD program, including the Curriculum Committee (Dr. Maria Mylopoulos) and the Student Assessment and Standards Committee (Dr. Mahan Kulasegaram). They also provide input to ongoing postgraduate program renewal in a number of Faculty of Medicine departments (Drs. Paula Rowland, Walter Tavares, Tina Martimianakis, Ayelet Kuper). Scientists mentor and support education leaders in establishing scholarly and evidence-informed education practices. In addition, Scientists are leading or supporting the evaluation of education practices in various aspects of MD and Post MD education (Dr. David Rojas).

Many of these roles are assumed by Scientists because of their expertise in the domain; they require and enable the translation of findings or theories from the Scientists' research programs into practice. Visible examples include the Person Centered Care Initiative (Drs. Sarah Wright, Ayelet Kuper, Lisa Richardson), MD program admissions renewal (Drs. Nikki Woods and Mahan Kulasegaram), Family Medicine Ethics Curriculum (Dr. Mahan Kulasegaram), Social Pediatrics Ethics Curriculum (Dr. Tina Martimianakis), and the recent renewal of the MD program Foundations curriculum.

[T]here were forces of nature going on that helped to build the Wilson Centre linkages and to build the social capital that it established.... It has significant "presence", it has a critical mass of highly respected individuals. The Wilson Centre passed a critical threshold of excellence and depth and now that culture runs by itself. Now, of course, you don't want to lose it, and you have to be vigilant to maintain it, but that's happened, and it's happened because it's also provided so much service, it's been so useful for health science education in Toronto. It's not just been a theoretical research and ground-breaking centre, but it's provided practical help with the undergrad curriculum at the medical school, for example. The scientists have deliberately reached out to make themselves indispensable in terms of undergrad education, post grad education, and now continuing professional development. CPD research wasn't always attached to the Wilson Centre but happy to see that it is now.

Ivan Silver



The education of medical doctors has always been a predominant focus of research and practice at the Wilson Centre, a focus undergirded by our structure and institutional affiliations. However, our education activities are also known for cutting across disciplinary siloes and engaging learners from diverse academic disciplines and health professions. For example, collaborative rounds with colleagues from other University of Toronto Extra Departmental Units (EDUs) and education units mix educational domains as well as theoretical and applied research. This diversity promotes exchange of ideas and useful networks across the Toronto Academic Health Science Network (TAHSN) system.

And so, the interactions between the Wilson Centre and OISE [Ontario Institute for Studies in Education] provided some possibilities to advance the field in the context of looking outside of the traditional approaches, methodologies, and epistemologies of medicine in order to look at some of these issues in very different ways.

Glen Jones

Notably, educational activities also include staff from various hospitals and units who are eligible to participate; examples include our ateliers and Wilson Centre Research Rounds.

INTERNAL PROGRAMS

The Wilson Centre offers two primary educational programs: the longstanding Wilson Centre Fellowship and the newly established PhD program in health professions education research. These programs are constitutive to the Wilson Centre and we describe them in detail.

In addition to these foundational programs, we also host short courses and events. Ateliers are intensive, fee-based courses offered primarily for learners outside the centre. Research rounds are periodic events open to our members and other interested participants. These smaller programs are described in brief.

1. FELLOWSHIP PROGRAM

The Wilson Centre Fellowship program has been a cornerstone of the Centre's educational activities since the Centre's inception.

The program is a full-time research fellowship for individuals who plan a career either as a full-time scientist in health professions education research or as clinical faculty in a health professions training program with a substantial portion of their academic time dedicated to research in education. Fellows must be enrolled in a graduate program, find a scientist at the Wilson Centre willing to supervise their work, and commit to engaging actively in Wilson Centre activities for at least two years.

Fellows receive mentorship and training to initiate, design, and conduct innovative research relevant to the field of health professions education research and practice. The Fellowship includes master's, PhD and postdoctoral trainees from a broad range of graduate programs, within and beyond the University of Toronto, relevant to health professions education research. Within the University of Toronto,

many Wilson Centre Fellows have been enrolled in the Master of Education in the Health Professions program at OISE or in graduate studies programs at the Institute of Medical Science. Each Fellow is primarily supervised by a Wilson Centre Scientist who assumes primary responsibility for the Fellow's progress. Often the supervisor of the fellowship also functions as the supervisor of the master's or PhD thesis.

[The OISE MEd in Health Professional Education] would often include any combination of surgeons and general practitioners, as well as a few people from other related professions. There were nurses, there were people from occupational therapy, there would be even people from chiropractics who would come in from time to time. And so, the notion was to create this health professional group, this health professional program that would serve the needs of the faculty of medicine but do so in a way that was more broadly constructed around education, and was more interdisciplinary than anything that the faculty of medicine could probably run on its own.

Glen Jones

Table 3-1 Fellowship program enrolment over past 5 years

	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
Total number of fellows ¹	29	31	28	29 ²	30 ²
PhD fellows	15	17	17	20	21
Master’s fellows	12	12	9	9	8
Postdoctoral fellows	2	2	2	0	1

1. Each fellow is counted in multiple years for the duration of their fellowship (typically 2–5 years, depending on program of study and other factors).

2. The number of fellows includes students enrolled full time in the HPER graduate program (1 fellow in 2018–2019 and 4 fellows in 2019–2020).

Fellows are expected to participate fully in activities associated with the Fellowship, including the Wilson Centre Fellowship Seminar Series, the Richard K. Reznick Wilson Centre Research Day, and the Hodges Symposium, as well as relevant local conferences and meetings. A key offering of the Fellowship Program is the Fellows Seminar Series, which is developed annually by senior Wilson Centre Fellows. The Seminar Series is typically 15 sessions spread across the year from September to June. Topics are curated by one or two senior fellows, who are appointed annually by the Associate Director of Training Programs, with the intent of meeting the specific needs of each cohort.

Table 3-2 Example of seminar series schedule (2018–2019)

Date	Topic	Leader(s)
September 17, 2018	Orientation Session	Everyone
September 25, 2018	Fellow Presentations	Everyone
October 9, 2018	Equity in health professions education research	Ayelet Kuper
October 23, 2018	How to play with numbers – experimental and social science approaches	Nikki Woods, Laura Naismith
November 6, 2018	Scientist Research presentation	Paula Rowland
November 20, 2018	A little less unpleasant: Presentation design	Doug Buller
December 4, 2018	Fellow Presentations	Everyone
January 22, 2019	The Moulton lab: A thrilling tale of discovery	Carol-anne Moulton
February 5, 2019	Person centered care: Broadening the curriculum beyond bioscience	Ayelet Kuper
February 26, 2019	Writing winning grants	Tanya Horsley - Royal College
March 5, 2019	Writing for publication	Walter Tavares
March 19, 2019	Using theory in health professions education research	Mahan Kulasegaram, Tina Martimianakis
April 2, 2019	Educating health professionals in the 21st century: What will we need humans for?	Brian Hodges
April 16, 2019	Careers in Medical Education	Brian Hodges, Geoff Norman
April 30, 2019	Fellow Presentations	Everyone
May 14, 2019	Fellows’ Retreat	



The success and reputation of the Fellowship program are evidenced by its continuous enrollment of diverse and accomplished students over the past quarter century. One mechanism of evaluation that has been used within this program is the completion of annual reports by the Fellows. The reports are prepared following an annual retreat supported by the Centre, and they are reviewed by the senior management committee. This provides an opportunity for continual reflection and improvement of the fellowship program. Section 13 of this self-study report (the report of learners) also captures the current success of the program, as well as the Centre's active engagement of, and responsiveness to, learners' perspectives.

One consistently celebrated feature of the Wilson Centre Fellowship has been the disciplinary and professional diversity of its students. While this diversity of perspectives remains a key strength of the program, administrative diversity has presented a consistent limit and tension. For example, the supervisory structures and graduation requirements for students' degrees lie outside the control of, and are variously aligned with, those of the Wilson Centre fellowship program. The fellows' professional development series allows for an introduction to the wide range of topics important to HPER but not for in depth study of a field that has matured considerably. These limits are overcome with the launch of our PhD program.

2. PHD PROGRAM

As previously described, in 2018, the Wilson Centre launched its first ever interdisciplinary PhD program. It is open for both full-time and flex-time students to accommodate learners who are already working in the field of healthcare. (Note: Full-time students are also considered Wilson Centre Fellows. Flex-time students are not considered fellows, as full-time engagement at the Wilson Centre is a core criterion of that program.)

The aims of the program are to:

1. Create research leaders who will specialize in emerging fields of knowledge relevant to advancing healthcare education and practice.
2. Create education and practice leaders with interdisciplinary expertise in the study of health professions education.
3. Establish a community of practice that will foster theoretical and methodological innovations in health professions education, practice, and scholarship
4. Establish a community of practice equipped to mobilize knowledge in health professions education
5. Develop a robust cohort of scholar-educators who can nurture the next generation of students in health professions education research

It's been an honour to be part of the first cohort of [the] new PhD program. One of the many strengths of the program is its interdisciplinarity, which mirrors the field of health professions education as a whole. Students and faculty come from diverse professional backgrounds, yet we're all working toward the common goal of advancing the quality of healthcare by improving how we educate health professionals. This diversity means that we're always being pushed to productively challenge our own perspectives, which has been central to advancing my research. The courses in the HPER program are underpinned by a strong emphasis on the importance of theory, as well as alignment between theory and methodology, which I feel prepares us to conduct high quality and impactful research. Uniquely situated between IHPME and the Wilson Centre, it's been great to build connections through extracurricular activities in both communities, including research rounds, journal clubs, research days, grant and scholarship writing seminars, and social events. But, for me, what truly sets the HPER PhD program apart is the faculty's unwavering commitment to mentorship, both in terms of research and professional development. At the Wilson Centre, office doors are always open, and students' questions are always met with thorough (though almost never simple!) responses, usually paired with a stack of helpful readings!

Victoria Boyd



PROGRAM STRUCTURE AND COURSES

The HPER PhD Program is organized around two streams reflecting the interdisciplinarity of Wilson Centre: (1) the Cognitive, Behavioural and Clinical Epidemiology stream, and (2) the Critical, Interpretive and Social Sciences stream. Students choose one stream as a concentrated focus for their coursework and research. However, they receive exposure to both streams, as well as the potent synergies between them, through the completion of core courses and through enculturation to the Wilson Centre community.

Students are required to complete a minimum of ten (10) half-credit courses (including a comprehensive examination), a research thesis proposal, and a thesis. Five half-credit courses are core courses, four are electives, and one is the comprehensive examination course.

The program includes core courses, which will be offered on a regular basis:

INTRODUCTION TO METHODS/METHODOLOGIES FOR HPER

This course provides an introduction to research methods and designs relevant to health professions education research. The course introduces the elements of the research process and includes a survey of quantitative and qualitative approaches. It will expose students to the planning and design of common research methodologies in HPE. In the process, students will learn to situate their own research interests and develop the competence to design and carry out their own research.

ESSENTIAL SKILLS FOR HPER

This course is a professional development course. It will provide students with information and experiences on how to write a successful grant application, ethics application, how to write abstracts and papers, and will encourage critical reading of the health professions literature. It will also include oral presentations skills, career planning and other topics and experiences of interest to HPER students.

INTERMEDIATE CRITICAL AND INTERPRETIVE SOCIAL SCIENCE METHODS/METHODOLOGIES FOR HPER

This course will immerse students into the variety of research methods social scientists use in HPE research. The course will start with an overview of the concepts of ontology, epistemology, and methodology. Then, various data collection and analytical approaches will be introduced. Exploration of approaches may include grounded theory traditions, ethnographic traditions, critical approaches, textual and discourse analytical approaches. Students will also gain deeper exposure to conducting observations, interviews, surveys, and other data collection approaches used in social science research.

SURVEY OF CRITICAL AND INTERPRETIVE SOCIAL SCIENCE THEORY FOR HPER

This course will provide an overview of key theories and theorists in the Critical and Interpretive Social Sciences stream in the interdisciplinary field of Health Professions Education.

SURVEY OF COGNITIVE, BEHAVIOURAL AND EPIDEMIOLOGICAL SCIENCES THEORY FOR HPER

This course will provide an overview of key theories in the Cognitive, Behavioural & Epidemiological Sciences stream in the interdisciplinary field of Health Professions Education.

INTERMEDIATE COGNITIVE, BEHAVIOURAL AND EPIDEMIOLOGICAL SCIENCES METHODS/METHODOLOGIES FOR HPER

This course will expose students to the various research designs used in experimental methods, including randomized control trials and quasi-experimental designs, as well as regression and survey designs. The course will then cover statistical analyses, including an introduction to descriptive and inferential statistics, review of parametric and non-parametric statistical tests. The focus will be on providing students with the ability to match experimental designs to the research question, and to select appropriate statistical tests for various experimental and association research designs.

COMPREHENSIVE COURSE: HOT TOPICS IN HEALTH PROFESSIONS EDUCATION RESEARCH

This course will examine some of the hot topics in the field of health professions education research, highlighting how these are being examined from a variety of disciplinary perspectives and helping students understand some of the current foci and controversies in the field. Topics may include (but are not limited to): the role of health professional training in contemporary society; current theories of learning and skill development; the socio-politics of knowledge production in health; simulation and e-learning in the health professions; the social organization of the health professions and interprofessionalism; formative and summative assessment of performance; the social construction of the medical curriculum and the hidden curriculum; the study of competence and expertise; and the effects of globalization on health professions education.



In addition to the core courses detailed above, the HPER program will offer courses designed around the faculty members’ areas of expertise and specific student interests. These offerings—which will initially be offered as reading courses—provide an opportunity for students to develop in depth expertise foundational to their research. They may also provide opportunities for faculty members to teach the leading edges of the field and to advance their own work. The current repertoire of proposed and planned courses includes the following:

- Clinical Reasoning and Expertise
- Motor Learning and Control
- Pierre Bourdieu’s Social Theory
- Foucault and the Health Professions
- Advanced Statistics Regression Designs
- Globalization and its Effects in Health Professions Education
- Historical and Textual Approaches in Health Professions Education Research
- Institutional Ethnography for Health Professions Research
- Instructional Innovations in Health Professions Education (HPE)
- Constructivist Grounded Theory Methodology in Health Professional Research
- Assessment of Competency
- Research with Big Data Sets
- Proposal Development/ Academic Writing

ENROLMENT AND EVALUATION

Thus far, two student cohorts with 5 students each have been accepted in 2018 and 2019. The plan is to continue to accept 5 students per year. Since we expect students to finish in 4–5 years, eventually the program will run at a steady state of 20–25 students. The mix of students with different backgrounds and interests has created a diverse program that combines both theoretical and practical, real-world experiences to enrich the interaction between both groups.

Table 3-3 PhD program enrolment over past 2 years

	2018–2019	2019–2020
Number of Applicants	10	6
Number Accepted	5	5
Flex Time	4	2
Full Time	1	3
Cognitive, Behavioural and Epidemiological Sciences Stream	3	2
Critical and Interpretive Social Sciences Stream	2	3

Since the program’s inception in 2018, we have offered a total of 7 core courses with 4 currently in progress for the winter 2020 term.

While the program has not yet been running long enough for us to compile meaningful evaluation data, we do have testimonials from students that reflect the quality of the teaching within the program. (Note: Electives have been offered as reading courses, which do not undergo formal evaluation at the University of Toronto.) The feedback of graduate students is also captured within the Report of Learners (Section 13 of this report).

The course relied on self-projected goals and objectives, and reflective exercises helped built upon those goals. I found the pace, the freedom to explore the extents of my developing voice, and socialization key to my confidence and learning.

Student from Essential Skills in HPER, Fall 2018

It was an excellent course to lay foundations for the PhD work one will do. The course directors were extremely knowledgeable, available and generous in encouraging understanding. They created safe, open spaces for learning.

Student from Intro Methods/Methodologies for HPER



3. LOCAL ATELIERS

The Centre also provides high quality education in research skills through its atelier series. Ateliers are short, intensive courses (2–5 consecutive days) offered by teams of Scientists, Researchers, and Staff at the Wilson Centre. These fee-based courses are open to learners inside and outside the local Wilson Centre community. They are often attended by local leaders, researchers, and educators, as well as participants who travel to Toronto from across Canada and around the world.

Two ateliers are offered on a regular (usually annual) basis. The Qualitative Research Atelier is a four-day long course covering foundational topics in research; offerings alternate between introductory, intermediate, and advanced levels. This well-established atelier has been offered 12 times since 2008. In 2013, the series received the Helen Batty Award for Excellence and Achievement in Faculty Development in the category of Innovation in Program Development and Design. Enrollment has remained strong over the past five years, with 82 participants since 2015 (see table 3-4).

Table 3-4 Qualitative Atelier program enrolment over the past 5 years

	2015	2016	2017	2018	2019
Number of Participants	22	16	12	17	15
Level	Introductory	Intermediate	Advanced	Introductory	Intermediate

Building upon the success of this model, the Say Something Atelier was initiated more recently, led by Douglas Buller. Say Something is a two-day workshop on writing and giving outstanding presentations. Across these two days, participants learn the basic craft of presentation design and the cognitive principles that inform it. Participants also get the opportunity to work for several hours with performance/voice coach, LJ Nelles. Participant enrolment is limited to a maximum of twelve to ensure sufficient participation and instructor interaction. As a result, Say Something has run at maximum capacity for the five years it has been offered since 2015.

The following testimonials highlight the value that the ateliers have brought to the careers of participants over the past five years:

I came into the course anxious and worried and I leave with a completely new perspective on the possibilities this will open up and enthusiastic about moving forward. Stimulating and engaging. Excellent faculty. Very open and generous with knowledge and advice.

*Beginner Qualitative Research
Atelier participant, 2015*

My goal was to come out of this atelier with a greater and more solid footing in qualitative research and my goals were met. I was able to reflect on my own research experience and where I have been successful and where I have not so much. The format allowed for lots of reflexivity.

*Intermediate Qualitative Research
Atelier participant, 2019*

I took a lot out of this course even though I came into it with experience taking several graduate level methods courses. I appreciated all the presenters' insights and experiences. They all did an excellent job!

*Intermediate Qualitative Research
Atelier participant, 2016*

Very well organized. Great speakers with passion. The open conversation and safe space to explore ideas was the best part for me.

*Advanced Qualitative Research
Atelier participant, 2017*

I appreciated the thread that allowed us a peek at what Scientists' research programs look like and their journeys.

*Beginner Qualitative Research
Atelier participant, 2018*



The Wilson Centre's annual Say Something Atelier is a highly sought after and regarded workshop in the education and health professions network. It is well known both locally and internationally. I had the privilege of attending the workshop last year and was very impressed with the quality of facilitation and expertise of the faculty. The workshop was a wonderful blend of theoretical, conceptual, practical and experiential learning. I continue to apply principles learned in the workshops in my presentations like how to maximize the use of visuals and graphics to represent complex ideas. I would highly recommend this atelier to colleagues at any stage of their careers.

Ann Russell, Say Something Atelier participant, 2019

The Say Something Atelier offered a balance between dissemination of new ideas/content and effective experiential opportunities. In particular, the segment on performance was highly engaging and informative, with strategies that I have continued to use since the atelier.

Anonymous, Say Something Atelier participant, 2019

Even though I was a previous Wilson Centre fellow – the Say Something Atelier proved to be invaluable. The problem I have been facing is translating my research into practice or learner curriculums. This is not a problem that is unique to me but widespread in the medical education realm. I think one of the fundamental problems is that as researchers, we have to be able to 'sell' the decision makers on our work so that key stakeholders become excited by it. This is why I think the Wilson Centre's Say Something Atelier was very valuable for the knowledge translation of my research. I felt the amazing speakers and facilitators provided me with the knowledge and tools I need to be successful in promoting active change in curriculum based on my research. I would recommend it to anyone that would like other to really 'listen' to what they have to say.

Dr. Fahad Alam, Say Something Atelier participant, 2019

The Say Something workshop shaped a whole new perspective of what PowerPoint presentation is truly about. I took away great concepts and tools which I'm still using today to create more impactful PowerPoint presentation in delivering the method.

Anonymous, Say Something Atelier participant, 2018

I attended the Say Something Atelier in 2019 and it exceeded my expectations. It helped me hone my presentation skills, both in terms of visuals and communication techniques. I have been able to apply the skills I learned to benefit many subsequent conference presentations. I would strongly recommend this course to other researchers, academics, or anyone else looking to improve the way they deliver presentations.

Sydney McQueen, Say Something Atelier participant, 2019

The Say Something Atelier was very helpful in demonstrating practical tips to improve my presentation skills. From the scientists' presentations to the hands-on activities, the atelier provided insight into the behind-the-scenes thinking process that goes into creating a quality presentation. The small class size allowed students to get to know one another and provided valuable networking opportunities. I hope there will be a part two!

Melanie Hammond Mobilio, Say Something Atelier participant, 2019

Participating in 'Say Something' provided me with not only an understanding of the need for careful preparation, attention to sequencing information, and of course, how to create an impactful presentation, but it also provided me with a series of four checks that I employ into every one of my presentations now – the first three of which are who is my audience, what is my message, and how do I want to convey that message. Now that I employ these, I have been better able to convey my messages with more confidence. As a staff member in the Faculty of Medicine and a PhD candidate, the skills I learned during the Atelier have been put to frequent and impactful use. I would like to thank the 'Say Something' team, and in particular, the expertise of Doug Buller for putting the program together. While the Scientists of the Wilson Centre are known as subject matter experts, Doug is an expert in communication and the increasing success of the Centre and its growing global reputation is undoubtedly, in part, because of him. The fourth and final check I now apply to my presentations after 'Say Something' is simple: "What would Doug do?"

Morag Paton, Say Something Atelier participant, 2015



4. ROUNDS

The Centre offers monthly multi-disciplinary rounds, often in conjunction with other units such as the SickKids Office of Education Scholarship and Centre for Interprofessional Education (CIPE). These rounds serve a research and education purpose. As an educational venue, these rounds provide an opportunity for fellows and junior researchers to present ideas, concepts, and projects in progress for feedback and input from the wider community.

LOCAL TEACHING AND CAPACITY-BUILDING ACTIVITIES

Beyond the programming offered by the Centre, Wilson Centre members lead and participate in a wide range of education activities across TAHSN and the University of Toronto.

UNDERGRADUATE

Through programming offered by the MD program including the Health Science Research (HSR) course, Comprehensive Research Experience for Medical Students (CREMS), the Graduate Diploma program (GDip), and the Students as Teachers program (SAT), Wilson Centre faculty provide expertise and opportunities for medical students to learn about and meaningfully participate in education research.

GRADUATE

In addition to the newly launched HPER PhD program, Wilson Centre Scientists have taught in the Master of Health Professions Education Program at the Ontario Institute for Studies in Education at the University of Toronto, in the Institute of Medical Science (IMS), and at the Rehabilitation Science Institute (RSI).

POSTGRADUATE

Scientists supervise postgraduate trainees as part of research practicums, clinician scholar training, and resident research projects as required by programs of postgraduate education.

FACULTY DEVELOPMENT AND CONTINUING EDUCATION

Wilson Centre Scientists teach in faculty development programs offered by other EDUs and units. Examples include the Practical Ambulatory Care Teaching Tips offered by the Centre for Ambulatory Care Education at Women's College Hospital, the Education Scholars Program, and the Stepping Stones Certificate offered at the Centre for Faculty Development. Scientists also participate in departmental or program-specific faculty development activities including workshops on technical aspects of education practice (e.g., standard setting, assessment creation), on educational theory, and on the development and promotion of scholarship.

PROGRAM/DEPARTMENT-SPECIFIC EDUCATION INITIATIVES

Scientists and members are involved in the design and delivery of education initiatives and events across the various departments and programs of the Faculty of Medicine. Scientists are members of planning committees, invited speakers, and workshop leads that promote evidence-informed education practice and/or scholarship. These often have direct relevance to strategic education priorities for the department or program. Examples include education days for the Departments of Paediatrics, Psychiatry, Medicine, Surgery, and Family and Community Medicine. Scientists also help plan and deliver education program retreats within the MD and post MD programs.

4. RESEARCH

The Wilson Centre is recognized as an international leader in the field of health professions education research. Its generative commitment to research advances theory into and through practice at multiple levels. The quantity, quality, and impact of Wilson Centre research output is outstanding. Since 2015, Wilson Centre research has led to 782 publications, 614 invited presentations, over \$33 million in grant funding, and 164 competitive awards and prizes. Research emanating from the Wilson Centre exhibits both the breadth and depth of our community's contributions to the field. This non-prescriptive, theoretical approach has been established by design and is an explicit goal of the Centre. While research at the Wilson Centre can be categorized into streams of Cognitive, Behavioural and Epidemiological Science, and Interpretive Social Science, these epistemological and methodological orientations have significant overlap. As a community, we believe that the collaborations and conversations across these broad orientations allow for the development of cognitive flexibility. This flexibility allows research at the Wilson Centre to address new and creative questions within the field. Wilson Centre research provides pragmatic support for education at multiple levels by building knowledge that contributes to educational experience, supporting evidence-informed practice, and translating knowledge into teaching and learning practices.



SCOPE, QUALITY AND RELEVANCE OF RESEARCH ACTIVITIES

The Wilson Centre is recognized throughout health professions education research as an international leader in its field. Its Scientists and Researchers hold major grants and research chairs, have published a long list of highly-cited and often ground-breaking publications, have presented invited plenary addresses and symposia at all of the major health professions education conferences, have won multiple national and international prizes for their work, and populate the editorial boards of the top health professions education journals. This leadership and versatility is possible, in part, because the Wilson Centre is not constrained by predetermined theoretical themes or research priorities. Indeed, the modus operandi of the Wilson Centre has long been to gather smart, capable Scientists and Researchers with diverse expertise, support them to follow their academic passions and scientific hunches, and provide an environment in which they can sustain, enrich, and challenge each other's work.

Nonetheless, the research undertaken by the Wilson Centre can be categorized into two complementary streams: Cognitive, Behavioural & Epidemiological Sciences and Critical & Interpretive Social Science (note that the streams in our graduate program were created to mirror this grouping). These streams are methodological and epistemological, relating to disciplinary orientations rather than content. They span the breadth of research possibilities in health professions education and are flexible enough to accommodate new ways of thinking within the field. Moreover, even the boundaries between these streams are quite porous, and Scientists and Researchers frequently collaborate across them. This cognitive flexibility, combined with the theoretical and methodological rigour that the Wilson Centre also promotes, has enabled us both to identify novel research questions and to generate new answers to questions that were previously thought settled within the field.

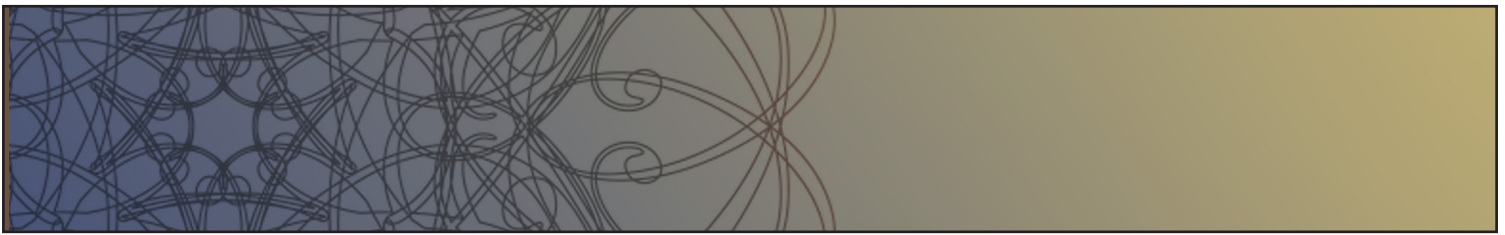
SCIENTISTS PRIMARILY WORKING WITHIN THE COGNITIVE, BEHAVIOURAL & EPIDEMIOLOGICAL SCIENCES

RYAN BRYDGES is Scientist at the Wilson Centre and an Associate Professor in the Department of Medicine. Professor Brydges conducts research in three related domains: (i) clarifying how healthcare trainees and professionals manage their life-long learning through self-regulation, (ii) understanding how to optimize the instructional design of healthcare simulation (and other technology-enhanced learning modalities) for the training and assessment of healthcare professionals, and (iii) identifying best practices for training and assessing health professionals to perform bedside invasive medical procedures (e.g., lumbar puncture, central line insertion, thoracentesis). Examples of questions he asks include how trainees prepare for future learning, how they learn to self-monitor effectively (i.e., to think about their own thinking), how educators and trainees differ in their conceptions of learning, how validity evidence is collected and organized in assessment of health professionals, and how to design training using educational technologies (e.g., iPad apps, web-based simulators) to enhance learning outcomes. He is also known for his expertise in a range of knowledge synthesis methodologies and is frequently sought out for his advice in this area.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR BRYDGES' PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Cheung JJH, Kulasegaram K, Woods NN, Moulton CA, Ringsted CV, Brydges R. Knowing how and knowing why: testing the effect of instruction designed for cognitive integration on procedural skills transfer. *Advances in Health Sciences Education*. 2018 Mar;23(1):61–74. Senior Responsible Author.
2. Brydges R, Stroud L, Wong B, Holmboe E, Imrie K, Hatala R. Core competencies or a competent core? A scoping review and realist synthesis of invasive bedside procedures training in internal medicine. *Academic Medicine*. 2017 Nov;92(11):1632–43. Principal Author.
3. Brydges R, Hatala R, Zendejas B, Erwin PJ, Cook DA. Linking simulation-based educational assessments and patient-related outcomes: a systematic review and meta-analysis. *Academic Medicine*. 2015;90(2):246-56. Principal Author.

Since 2015, Professor Brydges has held \$536,774 in grants as Principal Investigator or Co-Principal Investigator and \$3,493,809 in grants as Co-Investigator or Collaborator.



KULAMAKAN (MAHAN) KULASEGARAM is a Scientist at the Wilson Centre and an Assistant Professor in the Department of Family and Community Medicine. Professor Kulasegaram’s research examines educational assessment as an opportunity to enhance learning and, in particular, transfer of learning. This involves re-examining the entire context of assessment — the objectives, process, tools, learners, and raters — using theoretical perspectives from psychology and educational measurement. This work informs how assessment for learning is conceptualized and practiced at the macro and micro levels of the curriculum. This work connects to his research on the role of educational ‘big’ data, including assessment data, in assessing, evaluating, and improving medical education across the continuum of training. Professor Kulasegaram is known for his expertise in epidemiological and statistical methods as well as in instructional design. He is the inaugural Education Research New Investigator Salary Award recipient from the Department of Family and Community Medicine at the University of Toronto.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR KULASEGARAM’S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Feldman M, Fernando O, Wan M, Martimianakis MA, Kulasegaram K. Testing test-enhanced continuing medical education: a randomized controlled trial. *Academic Medicine*. 2018 Nov;93(11Sup):S30–6. Senior Author.
2. Kulasegaram K, Chaudhary Z, Neville A, Dore K, Woods N, Norman G. Contexts, concepts, and cognition: principles for the transfer of basic science knowledge. *Medical Education*. 2017;51(2):184–95. Principal Author.
3. Kulasegaram K, Rangachari PK. Beyond “formative”: assessments to enrich student learning. *Advances in Physiology Education*. 2018;42(1):5–14. Principal Author.

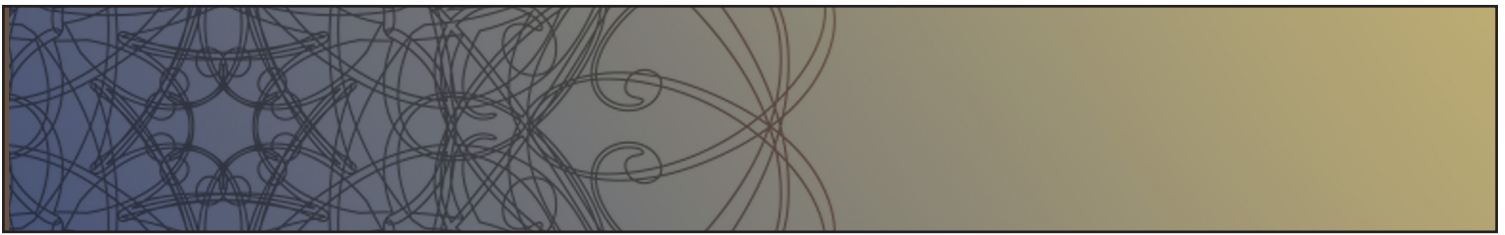
Since 2015, Professor Kulasegaram has held \$461,627 in grants as Principal Investigator or Co-Principal Investigator and \$504,413 in grants as Co-Investigator or Collaborator.

WALTER TAVARES is a Scientist at the Wilson Centre and an Assistant Professor in the Department of Medicine. Professor Tavares’ research examines the optimization of performance-based assessments both in simulated settings and in the workplace, including different ways these can be optimized and/or integrated for the purposes of formative, programmatic, and/or summative assessment; this work also includes studying the roles and cognitive behaviours of observers in the assessment process. In addition, he studies the concept of validity and critically examines shifts in assessment from both theoretical and applied perspectives. Professor Tavares takes an active interest in exploring factors affecting the success of intended educational strategies within Continuing Professional Development; as an Advanced Care Paramedic, he is also interested in studying paramedic education.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR TAVARES’ PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Tavares W, Kuper A, Kulasegaram M, Whitehead C. The compatibility principle: on philosophies in the assessment of clinical competence. *Advances in Health Sciences Education*. November 2019 [ePub ahead of Print]. Principal Author.
2. Tavares W, Sadowski A, Eva KW. Asking for less and getting more: the impact of broadening a rater’s focus in formative assessment. *Academic Medicine*. 2018;93(10):1584–90. Principal Author.
3. Tavares W, Brydges R, Myre P, Prpic J, Turner L, Yelle R, Huiskamp M. Applying Kane’s validity framework to simulation based assessment of clinical competence. *Advances in Health Sciences Education*. 2018;23(2):323–38. Principal Author.

Since 2015, Professor Tavares has held \$126,578 in grants as Principal Investigator or Co-Principal Investigator and \$1,319,148 in grants as Co-Investigator or Collaborator.



CATHARINE WALSH is a Scientist at the Wilson Centre and an Assistant Professor in the Department of Paediatrics. Professor Walsh's research focuses on examining factors that influence the acquisition of complex clinical skills, behaviours and attitudes, including ways to optimize learning within simulation-based environments. She also conducts educational measurement research focused on the assessment of competence and performance of health professionals. Her program of research aims to advance our understanding of how healthcare professionals, from novice to expert, develop and maintain clinical skills necessary for their practice; how to improve education delivery and skills acquisition using technology-enhanced learning modalities such as simulation; and how best to assess learners' competence. Taken together, these lines of inquiry inform the ways in which we can enhance the training and assessment of healthcare professionals in order to improve patient- and family-centered care.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR WALSH'S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Khan R, Plahouras J, Johnston BC, Scaffidi MA, Grover SC, Walsh CM. Virtual reality simulation training for health professions trainees in gastrointestinal endoscopy. *Cochrane Database of Systematic Reviews*. 2018:Aug 17(8):CD008237. Senior Responsible Author.
2. Scaffidi MA, Khan R, Carnahan H, Ling SC, Lightdale JR, Mamula P, Yu JJ, Grover SC, Walsh CM. Can pediatric endoscopists accurately assess their clinical competency? A comparison across skill levels. *Journal of Pediatric Gastroenterology and Nutrition*. 2019;68(3):311–7. Senior Responsible Author.
3. Chang TP, Raymond T, Dewan M, MacKinnon RJ, Whitfill T, Harwayne-Gidansky I, Doughty CB, Frisell K, Kessler DO, Wolfe H, Auerbach MA, Rutledge C, Mitchell DC, Jani P, Walsh CM. The effect of an international competitive leaderboard on self-motivated simulation-based QCPR practice among healthcare professionals. *Resuscitation*. 2019;138:273–81. Senior Responsible Author.

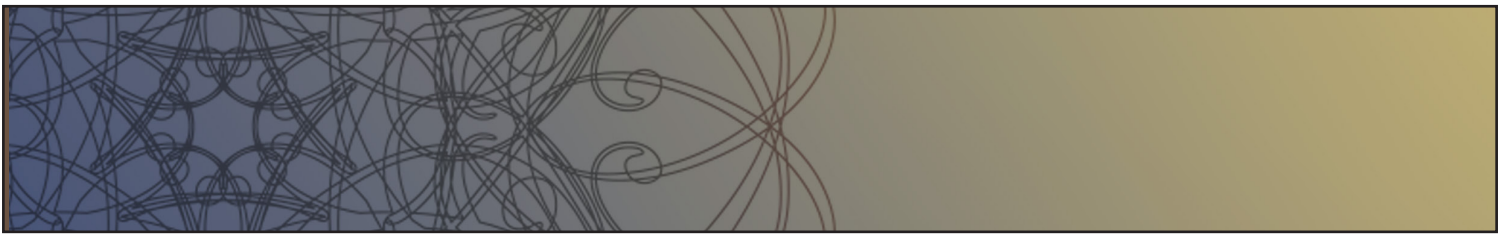
Since 2015, Professor Walsh has held \$233,435 in grants as Principal Investigator or Co-Principal Investigator and \$3,433,913 in grants as Co-Investigator or Collaborator.

NICOLE WOODS is a Scientist and Associate Director at the Wilson Centre and an Associate Professor in the Department of Family and Community Medicine. Professor Woods' research examines the role of basic science knowledge in clinical reasoning and the development of medical expertise. Applying principles of memory and human cognition to education across the health professions, her research program focuses on the mental representation of categories and instructional design that supports cognitive integration of basic and clinical sciences; she is building a theoretical model of knowledge acquisition and integration in the health professions. Although most closely linked to undergraduate education, her work has implications for the development of expertise along the entire spectrum of professional education.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR WOODS' PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Chaudhary Z, Mylopoulos M, Barnett R, Sockalingam S, Hawkins M, O'Brien D, Woods N. Reconsidering basic: Integrating social and behavioral sciences to support learning. *Academic Medicine*. 2019;94(11Sup):S73–8. Senior Responsible Author.
2. Castillo J-M, Park YS, Harris I, Cheung J, Sood L, Clark M, Kulasegaram K, Brydges R, Norman G, Woods N. A critical narrative review of transfer of basic science knowledge in health professions education. *Medical Education*. 2018;52(6):592–604. Senior Responsible Author.
3. Bandiera G, Kuper A, Mylopoulos M, Whitehead C, Ruetalo M, Kulasegaram K, Woods N. Back from basics: integration of science and practice in medical education. *Medical Education*. 2018;52(1):78–85. Senior Responsible Author

Since 2015, Professor Woods has held \$99,415 in grants as Principal Investigator or Co-Principal Investigator and \$693,675 in grants as Co-Investigator or Collaborator.



GEOFFREY NORMAN is a Scientist at the Wilson Centre and a Professor Emeritus in the Department of Clinical Epidemiology & Biostatistics, McMaster University and the Department of Medicine, University of Toronto. Professor Norman's research is primarily located at McMaster University; his appointment to the Wilson Centre is linked to his academic mentorship of Scientists and Fellows.

DAVID ROJAS joined the Wilson Centre as a Scientist in October 2019; he is a new Assistant Professor in the Department of Obstetrics and Gynaecology. Professor Rojas' research focuses on evaluating complex systems; he is particularly interested in studying the construct of "emergence" or "unintended consequences" in educational and healthcare systems.

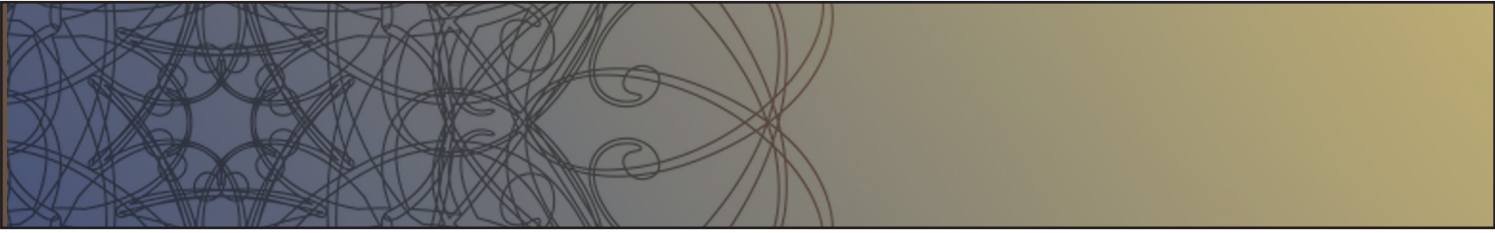
SCIENTISTS PRIMARILY WORKING WITHIN THE CRITICAL & INTERPRETIVE SOCIAL SCIENCES

MATHIEU ALBERT is a Scientist at the Wilson Centre and an Associate Professor in the Department of Psychiatry. Professor Albert's research examines how the changing research policy landscape in Canada has potentially created new boundaries in health research. More specifically, his research explores questions such as: Are interdisciplinary policies in the health research field inadvertently creating new hierarchies among disciplines? What is the impact of these policies on knowledge production and what is seen as legitimate science in health? What strategies do scientific groups deploy to achieve legitimacy in this new research environment? Answering these questions will clarify whether interdisciplinary research policies are holding their promise of creating new, inclusive research environments in health or whether they are surreptitiously producing new hierarchies between scientific groups.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR ALBERT'S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Albert M, Friesen F, Rowland P, Laberge S. Problematizing assumptions about interdisciplinary research: implications for health professions education research. *Advances in Health Sciences Education*. 2019 Aug; DOI: 10.1007/s10459-019-09911-7. [Epub ahead of print]
2. Frickel S, Albert M, Prainsack B, editors. *Investigating interdisciplinary collaboration: theory and practice across disciplines*. New Brunswick, NJ: Rutgers University Press; 2016. Book Co-Editor.
3. Albert M, Paradis E, Kuper A. Interdisciplinary promises versus practices in medicine: the decoupled experiences of social sciences and humanities scholars. *Social Science & Medicine*. 2015;126:17–25. Principal Author.

Since 2015, Professor Albert has held \$206,905 in grants as Principal Investigator or Co-Principal Investigator and \$43,215 in grants as Co-Investigator or Collaborator.



SHIPHRA GINSBURG is a Scientist at the Wilson Centre and a Professor in the Department of Medicine. Professor Ginsburg's research currently focuses on how clinical supervisors conceptualize, assess and communicate about the performance and competence of their learners, with a focus on the language used in workplace-based assessment. She also continues to do work related to her longstanding research program focused on understanding and evaluating professionalism in medicine. Other research interests and areas of collaboration include a series of studies on the effect of the context/environment on evaluation, the evaluation of clinical teachers, and issues around academic publishing and education scholarship.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR GINSBURG'S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Watling CJ, Ginsburg S. Assessment, feedback and the alchemy of learning. *Medical Education*. 2019;53(1):76–85. Co-Principal Author.
2. Cook DA, Kuper A, Hatala R, Ginsburg S. When assessment data are words: validity evidence for qualitative educational assessments. *Academic Medicine*. 2016;91(10):1359–69. Senior Responsible Author.
3. Ginsburg S, van der Vleuten C, Eva KW, Lingard L. Hedging to save face: a linguistic analysis of written comments on in-training evaluation reports. *Advances in Health Sciences Education*. 2016;21(1):175–88. Principal Author.

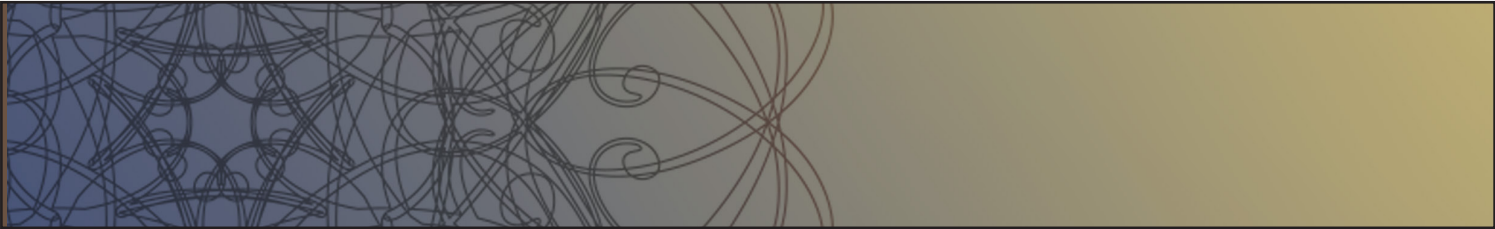
Between 2015 and 2019, Professor Ginsburg held \$363,442 in grants as Principal Investigator or Co-Principal Investigator and \$117,032 in grants as Co-Investigator or Collaborator.

BRIAN HODGES is a Scientist at the Wilson Centre and a Professor in the Department of Psychiatry. Professor Hodges' research focuses on assessment, competence, compassion, and the future of the health professions. This has most recently included analyses of the impact on health professions education of potentially disruptive forces such as artificial intelligence, globalization, and patient engagement.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR HODGES' PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Hodges BD, Paul RP, Ginsburg S. Assessment of professionalism: from where have we come – to where are we going? An update from the Ottawa Consensus Group on the assessment of professionalism. *Medical Teacher*. 2019;41(3):249–55. Principal Author
2. Whitehead C, Wondimagegn D, Baheretibeb Y, Hodges BD. The international partner as invited guest: beyond colonial and import-export models of medical education. *Academic Medicine*. 2018;93(12):1760–3. Senior Responsible Author.
3. Hodges BD. Learning from Dorothy Vaughan: artificial intelligence and the health professions. *Medical Education*. 2018;52(1):11–3. Principal Author.

Since 2015, Professor Hodges has held \$27,917 in grants as Principal Investigator or Co-Principal Investigator and \$404,228 in grants as Co-Investigator or Collaborator.



AYELET KUPER is a Scientist and Associate Director at the Wilson Centre and an Associate Professor in the Department of Medicine. Professor Kuper’s research focuses on the ways in which medical education research’s traditional epistemologies and knowledge production modalities have affected the legitimacy and/or limitations of particular subject areas within mainstream health professions education research and within health professional curricula. Her work provides evidence for the need to broaden current definitions of legitimate medical knowledge and has important implications for teaching and learning about key patient-care-related concepts such as equity, power, culture, justice, and reflexivity. Her focus on questioning normative assumptions has also led to an interest in understanding the reasoning and evidence behind presumed “truths” within health professions education, such as the role of competency-based education and the importance of early point-of-care ultrasound teaching.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR KUPER’S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Ng S, Wright S, Kuper A. The divergence and convergence of critical reflection and critical reflexivity: implications for health professions education. *Academic Medicine* 2019;94(8):1122–8. Senior Responsible Author
2. Boyd VA, Whitehead CR, Thille P, Ginsburg S, Brydges R, Kuper A. Competency-based medical education: the discourse of infallibility. *Medical Education*. 2018;52(1):45–57. Senior Responsible Author
3. Kuper A, Veinot P, Leavitt J, Levitt S, Li A, Goguen J, Schreiber M, Richardson L, Whitehead CR. Epistemology, culture, justice and power: non-bioscientific knowledge for medical training. *Medical Education*. 2017;51(2):158–73. Principal Author

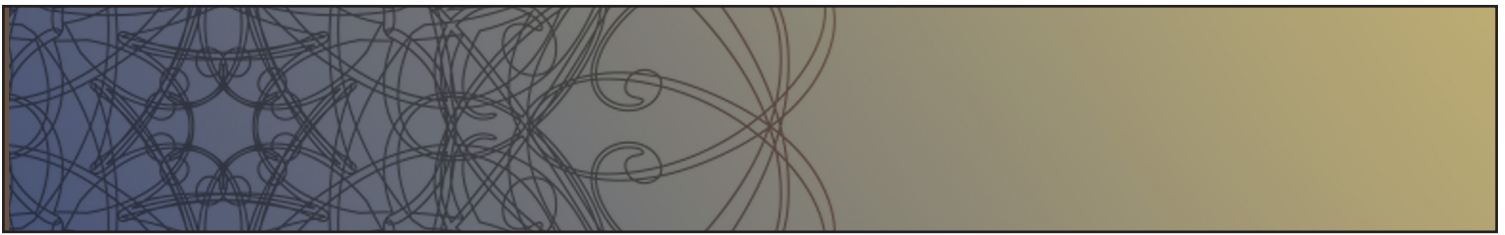
Since 2015, Professor Kuper has held \$364,749 in grants as Principal Investigator or Co-Principal Investigator and \$492,081 in grants as Co-Investigator or Collaborator.

MARIA ATHINA (TINA) MARTIMIANAKIS is a Scientist and Associate Director at the Wilson Centre and an Associate Professor and Director of Medical Education Scholarship in the Department of Paediatrics. Professor Martimianakis’ research focuses on governmentality effects: the ways in which dominant discourses impact professional identity negotiations, particularly the articulation and application of expertise. She thus studies the material effects of discourse as a dimension of the hidden curriculum with the potential to support or hinder educational delivery and learning. Her work also documents knowledge stratification effects. Entry points for her research are pervasive discourses, such as collaboration, humanism, integration, caring, and globalization that influence the value systems that academic health care providers, learners and patients bring to their interactions. As an educator, Professor Martimianakis employs critical and socio-cultural pedagogies to enable clinician educators to incorporate complex negotiations of the social world in their educational planning and implementation.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR MARTIMIANAKIS’ PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Frambach JM, Talaat W, Wasenitz S, Martimianakis MA. The case for plural PBL: an analysis of dominant and marginalized perspectives in the globalization of problem-based learning. *Advances in Health Sciences Education*. October 2019 [ePub ahead of Print]. Senior Responsible Author.
2. Martimianakis MA, Tilburt J, Michalec B, Hafferty FW. Myths and social structure: the unbearable necessity of mythology in medical education. *Medical Education*. 2019 Aug [ePub ahead of Print]. Principal Author.
3. Stergiopoulos E, Fernando O, Martimianakis MA. “Being on both sides”: medical students’ experiences with disability and professional identity construction. *Academic Medicine*. 2018;93(10):1550–9. Senior Responsible Author.

Since 2015, Professor Martimianakis has held \$19,925 in grants as Principal Investigator or Co-Principal Investigator and \$495,402 in grants as Co-Investigator or Collaborator.



MARIA MYLOPOULOS is a Scientist and Associate Director at the Wilson Centre and an Associate Professor in the Department of Paediatrics. Professor Mylopoulos' research explores the development and maintenance of expertise, with a particular focus on how health professionals deal with uncertainty, novelty and complexity in their daily clinical problem solving. The aim of her research is to evolve understanding of the knowledge and capabilities that underpin this facet of expertise as it occurs in real-world contexts using theoretical frameworks of clinical reasoning and adaptive expertise. The ultimate goal of her research is to translate this understanding to educational design that promotes the development of exceptional clinicians who are able to handle the complexities and challenges of the healthcare workplace.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR MYLOPOULOS' PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Mylopoulos M, Kulasegaram K, Weyman K, Bernstein S, Martimianakis MA. Same but different: exploring mechanisms of learning in longitudinal integrated and blocked clerkships. *Academic Medicine*. 2019 Aug [ePub ahead of Print]. Principal Author.
2. Steenhof N, Woods N, Van Gerven PW, Mylopoulos M. Productive failure as an instructional approach to promote future learning. *Advances in Health Sciences Education*. 2019;24(4):739–49. Senior Responsible Author.
3. Mylopoulos M, Kulasegaram K, Woods N. Developing the experts we need: fostering adaptive expertise through education. *Journal of Evaluation in Clinical Practice*. 2018;24(3):674–7. Principal Author.

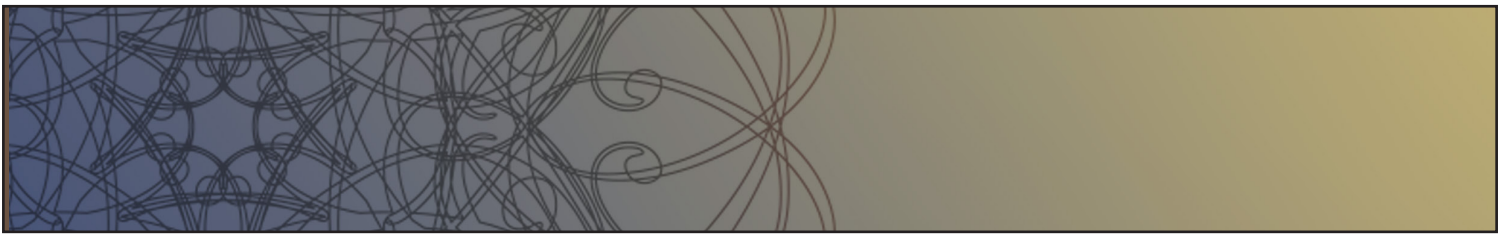
Since 2015, Professor Mylopoulos held \$194,542 in grants as Principal Investigator or Co-Principal Investigator and \$1,183,634 in grants as Co-Investigator or Collaborator.

STELLA NG is a Scientist at the Wilson Centre and an Assistant Professor in the Department of Speech-Language Pathology. Professor Ng's research addresses how health professionals learn to practice well in response to the complexities of people's lives, the health system, and society. When there is no clear-cut answer to be found, she asks, how can health professionals provide competent and compassionate care? She uses interdisciplinary theories of epistemologies of practice, reflection, critical reflection, and reflexivity to explicate what health professionals do in value-conflicted, uncertain, and unstable zones of practice. Informed by this research, she studies and advances critical pedagogy and knowledge mobilization approaches to support the development of compassionate, ethical, and reflective practitioners.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR NG'S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Baker LR, Martimianakis MA, Nasirzadeh Y, Northup E, Gold K, Friesen F, Bhatia A, Ng SL. Compassionate care in the age of evidence-based practice: a critical discourse analysis in the context of chronic pain care. *Academic Medicine*. 2018;93(12):1841–9. Senior Responsible Author.
2. Halman M, Baker LR, Ng SL. Using critical consciousness to inform health professions education. A literature review. *Perspectives on Medical Education*. 2017;6(1):12–20. Senior Responsible Author.
3. Ng SL, Kinsella EA, Friesen F, Hodges B. Reclaiming a theoretical orientation to reflection in medical education research: a critical narrative review. *Medical Education*. 2015;49(5):461–75. Principal Author.

Since 2015, Professor Ng has held \$343,902 in grants as Principal Investigator or Co-Principal Investigator and \$1,014,367 in grants as Co-Investigator or Collaborator.



PAULA ROWLAND is a Scientist at the Wilson Centre and an Assistant Professor in the Department of Occupational Science and Occupational Therapy. Professor Rowland's research explores professional learning within clinical workplaces using sociocultural perspectives of learning as a way to understand and represent professional practices. She is interested in how professional learning, knowledge, and identity intersect in organizational contexts such that certain practices are sustained while others are changed. Her research program encompasses two related streams: a systematic exploration of professional and organizational approaches to breakdowns in practice (e.g., mistakes, unexpected events) and an exploration of programs and initiatives that position patients as sources of knowledge and expertise (e.g., patient engagement programs for quality improvement, patients as educators). She aims to contribute to the practices of healthcare, such that the people, places, and processes of health services organizations do not exacerbate the burdens of illness, but work to contribute to the health and wellbeing of patients and publics.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR ROWLAND'S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Rowland P, Anderson M, Kumagai AK, McMillan S, Sandhu V, Langlois S. Patient involvement in health professionals' education: a meta-narrative review. *Advances in Health Sciences Education*. 2019;24(3):595–617. Principal Author.
2. Rowland P, McMillan S, Martimianakis T, Hodges BD. Learning from patients: constructions of knowledge and legitimacy in hospital based quality improvement programs. *Studies in Continuing Education*. 2018;40(3):337–50. Principal Author.
3. Rowland P, McMillan S, McGillicuddy P, Richards J. What is “the patient perspective” in patient engagement programs? Implicit logics and parallels to feminist theories. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness, and Medicine*. 2016;21(1):76–92. Principal Author.

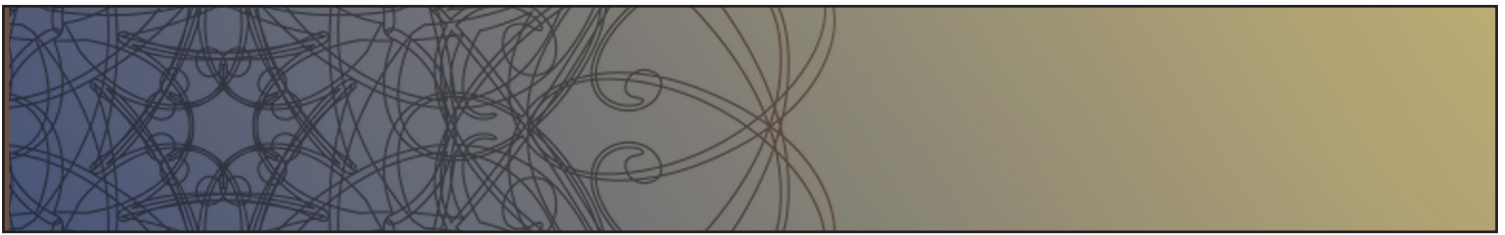
Since 2015, Professor Rowland has held \$106,638 in grants as Principal Investigator or Co-Principal Investigator and \$595,795 in grants as Co-Investigator or Collaborator.

SOPHIE SOKLARIDIS is a Scientist at the Wilson Centre and an Associate Professor in the Departments of Psychiatry and Family and Community Medicine. Professor Soklaridis' research program uses critical social science and qualitative research approaches to explore the inclusion of clients/families in the life of the hospital as advisors, educators and experts. Her approach to research moves beyond current biomedical research priorities to understand the client as a person, to emphasize the importance of considering relational dimensions in health professions educational initiatives and research, and to develop strategies that reflect how the concepts of diversity and social justice can both inform education scholarship and influence the client/family experience of mental health service provisions. The issues of power, privilege, equity, identity, and relationship-centred care are the threads that weave across her research program in mental health and addictions education scholarship and care.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR SOKLARIDIS' PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Soklaridis S, Zahn C, Kuper A, Gillis D, Taylor VH, Whitehead CR. Men's fear of mentoring in the era of #MeToo: what's at stake for academic medicine? *New England Journal of Medicine*. 2018;379(23):2270–4. Principal Author.
2. Soklaridis S, Ravitz P, Adler Nevo G, Lieff S. Relationship-centred care in health: a 20-year scoping review. *Journal of Patient Experience*. 2016;3(1):130–45. Principal Author.
3. Sockalingam S, Tehrani H, Lin E, Lieff S, Harris I, Soklaridis S. Integrating quality improvement and continuing professional development: a model from the mental health system. *Academic Medicine*. 2015;91(4):540–7. Senior Responsible Author.

Since 2015, Professor Soklaridis has held \$129,842 in grants as Principal Investigator or Co-Principal Investigator and \$1,150,506 in grants as Co-Investigator or Collaborator.



CYNTHIA WHITEHEAD is a Scientist and Director at the Wilson Centre and a Professor in the Department of Family and Community Medicine. Professor Whitehead's research focuses on deconstructing 'truths' of health professions education to expand our understandings of possibilities for change. Some of her specific content areas of interest include globalization of medical education, accreditation, equity diversity and inclusion, outcomes-based education, interprofessional education, and the history of medical education. She provides consultations and works collaboratively with researchers and educators in multiple countries in Africa, Asia, South America, North America, and Europe.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR WHITEHEAD'S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Wondimagegn D, Pain C, Baheretibeb Y, Hodges B, Wakma M, Rose M, Sherif A, Pillotis G, Tsegaye A, Whitehead C. Toronto Addis Ababa Academic Collaboration: a relational, partnership model for building educational capacity between a high- and low-income university. *Academic Medicine*. 2018;93(12):1795–1801. Senior Responsible Author.
2. Whyte S, Paradis E, Cartmill C, Kuper A, Boon H, Hart C, Razack S, Pipher M, Whitehead CR. Misalignment of purpose and power in an early Canadian interprofessional education initiative. *Advances in Health Sciences Education*. 2017;22(5):1123–49. Senior Responsible Author.
3. Rangel JC, Cartmill C, Kuper A, Martimianakis MA, Whitehead CR. Setting the standard: medical education's first fifty years. *Medical Education*. 2016;50(1):24–35. Senior Responsible Author.

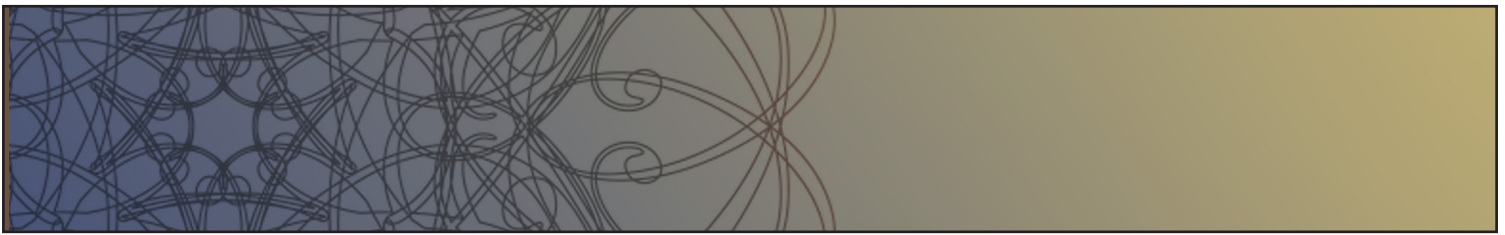
Since 2015, Professor Whitehead has held \$175,985 in grants as Principal Investigator or Co-Principal Investigator and \$1,073,264 in grants as Co-Investigator or Collaborator.

SARAH WRIGHT is a Scientist at the Wilson Centre and an Assistant Professor in the Department of Family and Community Medicine. Professor Wright's research explores the (un)intended consequences of educational action that occurs in the intersections between assessment theory and practice, including how assessment frameworks can limit or support educational goals such as fostering compassionate practitioners or striving for social change. For example, she has combined psychometric and critical approaches to investigate the ways in which admissions policies often work to favour culturally and socially privileged medical students, thereby limiting attempts to improve student diversity. Her research seeks to improve educational practice through achieving understanding of how emerging educational goals manifest within existing structures.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR WRIGHT'S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Wright S, Boyd V, Ginsburg S. The hidden curriculum of compassionate care: can assessment drive compassion? *Academic Medicine*. 2019;94(8):1164–9. Principal Author.
2. Perella A, Milman T, Ginsburg S, Wright S. Navigating tensions of efficiency and caring in clerkship: a qualitative study. *Teaching and Learning in Medicine*. 2019;31(4):378–84. Senior Responsible Author.
3. Wright S, Homer M. Addressing the theory-practice gap in assessment. *Perspectives on Medical Education*. 2017;6:7–9. Principal Author.

Since 2015, Professor Wright has held \$104,736 in grants as Principal Investigator or Co-Principal Investigator and \$195,806 in grants as Co-Investigator or Collaborator.



CAROL-ANNE MOULTON was a Scientist at the Wilson Centre until October 2019, when she transitioned to being a Centre Researcher due to her extensive clinical and administrative commitments; she is an Associate Professor in the Department of Surgery. Professor Moulton’s research focuses on understanding the complexity of surgical judgement, the development of surgical expertise, and underlying causes of surgical error. By understanding these factors, her goal is to translate findings to better inform medical education, practice and policy, and ultimately lead to better patient care.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR MOULTON’S PROGRAM OF RESEARCH SINCE 2015 INCLUDE:

1. Deshauer S, McQueen S, Hammond Mobilio M, Mutabdzic D, Moulton CA. Mental skills in surgery: lessons learned from virtuosos, olympians, and navy seals. *Annals of Surgery*. 2019 Aug [ePub ahead of Print]. Senior Responsible Author.
2. de Montbrun S, Patel P, Hammond Mobilio M, Moulton CA. Am I cut out for this? Transitioning from surgical trainee to attending. *Journal of Surgical Education*. 2018;75(3):606–12. Senior Responsible Author.
3. Patel P, Martimianakis A, Zilbert N, Mui C, Hammond Mobilio M, Kitto S, Moulton CA. Fake it ‘til you make it: pressures to measure up in surgical training. *Academic Medicine*. 2017;93(5):769–74. Senior Responsible Author.

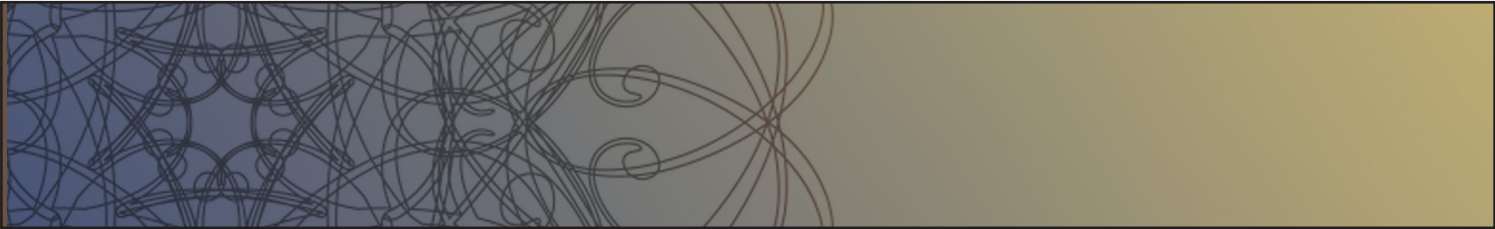
Since 2015, Professor Moulton has held \$577,024 in grants as Principal Investigator or Co-Principal Investigator and \$108,903 in grants as Co-Investigator or Collaborator.

ELISE PARADIS was a Scientist at the Wilson Centre and an Assistant Professor in the Leslie Dan Faculty of Pharmacy until June 2019, when she joined Facebook’s Human Computer Interaction and User Experience research group in Silicon Valley, California. Professor Paradis’ research during her time at the Wilson Centre focused on collaborative healthcare practices and discourses. Her research — inspired by sociological theory on the professions, Pierre Bourdieu’s theory of practice and neo-institutional theory — aimed to transform how teams work together to improve patient outcomes. She uses a range of methods in her research, from content analysis to ethnography, interviews, bibliometrics, and scoping reviews.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR PARADIS’ PROGRAM OF RESEARCH BETWEEN 2015 AND JUNE 2019 INCLUDE:

1. Paradis E, Pipher M, Cartmill C, Rangel JC, Whitehead CR. Articulating the ideal: 50 years of interprofessional collaboration in Medical Education. *Medical Education*. 2017;51(8):861–72. Principal Author.
2. Paradis E, Leslie M, Gropper MA. Interprofessional rhetoric and operational realities: a study of morning interprofessional rounds in four intensive care units. *Advances in Health Sciences Education*. 2016;21(4):735–48. Principal Author.
3. Paradis E, Whitehead CR. Louder than words: power and conflict in interprofessional education articles, 1954-2013. *Medical Education*. 2015;49(4):399–407. Principal Author.

Since 2015, Professor Paradis has held \$888,592 in grants as Principal Investigator or Co-Principal Investigator and \$47,038 in grants as Co-Investigator or Collaborator.



FIONA WEBSTER was a Scientist at the Wilson Centre and an Associate Professor in the Institute of Health Policy, Management & Evaluation until January 2019, when she joined the Arthur and Sonia Labatt Family School of Nursing at Western University in London, Ontario as a tenure-stream faculty member. Professor Webster's research during her time at the Wilson Centre focused on issues such as the hidden curriculum; the sociological organization of knowledge; and the concept of the "good patient". Trained in institutional ethnography under feminist Sociologist Dr. Dorothy Smith, she has worked extensively as an embedded scientist in acute care settings including in Neurology, Orthopedic Surgery, Public Health, and Women's Health.

SIGNIFICANT PUBLICATIONS FROM PROFESSOR WEBSTER'S PROGRAM OF RESEARCH BETWEEN 2015 AND JANUARY 2019 INCLUDE:

1. Rice K, Ryu JE, Whitehead C, Katz J, Webster F. Medical trainees' experiences of treating people with chronic pain: a lost opportunity for medical education. *Academic Medicine*. 2018;93(5):775–80. Senior Responsible Author
2. Ng SL, Baissilion L, Webster F. Blurring the boundaries: using institutional ethnography to inquire into health professions education and practice. *Medical Education*. 2017;51(1):51–60. Senior Responsible Author.
3. Webster F, Rice K, Dainty K, Zwarenstein M, Durant S, Kuper A. Failure to cope: the hidden curriculum of emergency department wait times and the implications for clinical training. *Academic Medicine*. 2015;90(1):56–62. Principal Author.

Since 2015, Professor Webster has held \$16,667 in grants as Principal Investigator or Co-Principal Investigator and \$6,688,908 in grants as Co-Investigator or Collaborator.

NANCY MCNAUGHTON joined the Wilson Centre as Scientist in June 2019; she is an Assistant Professor in the Institute of Health Policy, Management and Evaluation. Professor McNaughton's research uses critical social science perspectives to inform questions about health professional socialization and intersections of power as they relate to equity, access, and constructions of knowledge legitimacy; her research explores education as an embodied cultural and political undertaking that shapes and is shaped by emotion and affect.

JANELLE TAYLOR joined the Wilson Centre as a Scientist in October 2019; she is a Professor in the Department of Anthropology. Professor Taylor's research uses concepts and methods from sociocultural anthropology to study social and cultural aspects of health, illness, and medicine; a thread running through all of her work is a concern to document and understand how ideas, words, and images have material force in the world, how "persons" are socially made (and unmade), and how medicine and health care are involved in all of this.



CENTRE RESEARCHERS

TULIN CIL is a Centre Researcher and an Assistant Professor in the Department of Surgery. Professor Cil's research focuses surgical skills development, the use of social media in surgical education, and gender issues in Surgery. As the site lead for postgraduate surgical education at Women's College Hospital, she continues to develop competency-based objectives for an ambulatory care rotation in General Surgery.

ZAC FEILCHENFELD has been a Centre Researcher since October 2019 and is an Assistant Professor in the Department of Medicine. Professor Feilchenfeld's research focuses on the unintended effects of non-evidence-based assumptions in health professions education. He is also involved in studies of the role of academic advisors in the new competency-based models of medical education, which aligns well with his role as an academic advisor in the Core Internal Medicine Training Program.

CLARE HUTCHINSON is a Centre Researcher and a Lecturer in the Department of Paediatrics. Dr Hutchinson's research focuses on patient-centred care, advocacy, and professional identity formation, particularly within the context of longitudinal integrated clerkships and other clerkship formats. As Clerkship Learning Outcomes Lead for the MD Program, she is taking the lessons learned from the longitudinal integrated clerkship and bringing them to the entire clerkship cohort as part of clerkship renewal.

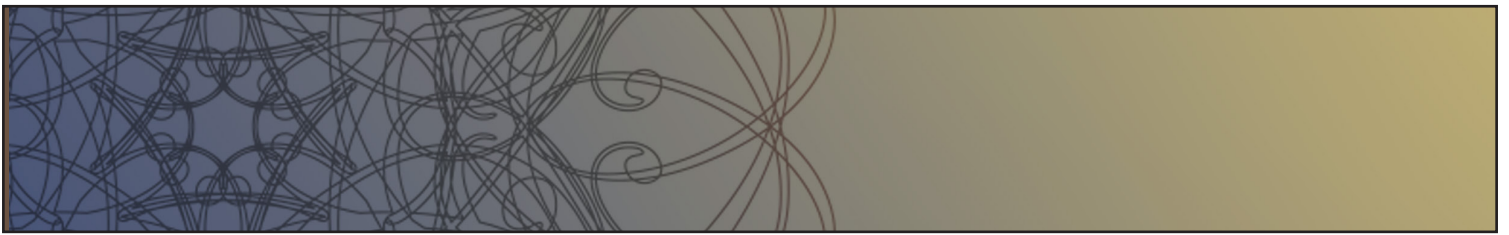
ARNO K KUMAGAI is a Centre Researcher and Professor in the Department of Medicine. Professor Kumagai's research focuses on the use of narratives in medical education, transformative learning, dialogical teaching, and teaching for equity and social justice. As Vice-Chair for Education in the Department of Medicine and the F.M. Hill Chair in Humanism Education at Women's College Hospital, he is able to imbue the pursuit of compassionate care and social justice into multiple areas of clinical training.

MARCUS LAW is a Centre Researcher and an Associate Professor in the Department of Family and Community Medicine. Professor Law's research program focuses on the translation of our understanding of the development of expertise by medical students into effective educational design and on the implementation of theory-informed large-scale curricular redevelopment in medical schools. This work has strongly informed his role as the Director of Foundations, which comprises Years 1 and 2 of the MD Program.

UMBERIN NAJEEB is a Centre Researcher and an Assistant Professor in the Department of Medicine. Professor Najeeb's research focuses on the experiences of International Medical Graduate (IMG) physicians in Canada, with a particular interest in the challenges faced by IMGs during their clinical training. This research dovetails with her role as Faculty Lead for the Department of Medicine's IMG Mentorship Program; the social justice orientation she brings to her research also informs her work as Co-Director of the Department of Medicine's Master Teacher Program.

ROBERT PAUL has been a Centre Researcher since December 2018 and is an Adjunct Lecturer in the Institute of Health Policy, Management and Evaluation. Dr Paul studies the ideological construction underpinning leadership in academic medicine as it relates to funding mechanisms and practices. His areas of research include philanthropy, commerciality, globalization, and institutional identity formation in academic medicine. He has also brought many of these interests to his role as Director of the Centre for Ambulatory Care Education at Women's College Hospital.

DOMINIQUE PIQUETTE is a Centre Researcher and an Assistant Professor in the Interdepartmental Division of Critical Care Medicine. Professor Piquette's current research focuses on better understanding how physicians learn in acute care contexts at the postgraduate and post-certification levels in a competency-based medical education model; she uses both quantitative and qualitative research approaches and conducts research in both real and simulated clinical environments. She is actively engaged in critical care curriculum development, teaching, and evaluation, including as the Associate Director, Education Research and Scholar Development, for the Adult Critical Care Medicine Residency and Clinical Fellowships programs.



LISA RICHARDSON is a Centre Researcher and an Associate Professor in the Department of Medicine; she is the inaugural recipient of the Wilson Centre Investigator Award in Indigenous Medical Education at the University Health Network. Professor Richardson's research focuses on the integration of postcolonial, Indigenous, and feminist perspectives into medical education. Her academic work informs and is informed by her many leadership roles, including as Strategic Advisor in Indigenous Health for the Faculty of Medicine, as Strategic Lead in Indigenous Health at Women's College Hospital, and as Co-Chair of the Indigenous Health Advisory Committee at the Royal College of Physicians and Surgeons of Canada.

LYNFA STROUD is a Centre Researcher and an Associate Professor in the Department of Medicine. Professor Stroud's research focuses on postgraduate assessment, especially the feedback process as well as inherent biases within that process; she is also interested in the impact of the clinical environment on assessment of resident performance and in the perceptions of providers and recipients of multi-source feedback. She is actively studying the implementation of competency-based education into the Core Internal Medicine Residency Program, for which she is the Site Program Director at Sunnybrook Health Sciences Centre.

SANJEEV SOCKALINGAM is a Centre Researcher and a Professor in the Department of Psychiatry. Professor Sockalingam's research focuses on training for managing complexity, alignment of quality improvement and continuing professional development, and understanding factors influencing lifelong learning in practice. This research complements his many leadership roles, including Vice President of Education at the Centre for Addiction and Mental Health, Vice-Chair of Education for the Department of Psychiatry, University of Toronto, and Director of Curriculum Renewal for the Medical Psychiatry Alliance.

GLENDON TAIT has been a Centre Researcher since December 2018 and is an Associate Professor in the Department of Psychiatry. Professor Tait's research focuses on two main areas: programmatic assessment as an approach for assessing and guiding medical student learning; and understanding patient, team, and health system complexity using qualitative and complex adaptive system lenses. His research interests reflect his other academic roles, including that of Director of Student Assessment for the MD Program.

ADRIENNE TAN has been a Centre Researcher since February 2019 and is an Assistant Professor in the Department of Psychiatry. Professor Tan's research focuses on workplace-based learning, particularly in postgraduate medical education. Her academic work links closely to her role as Director of Postgraduate Medical Education at the University Health Network.

DAVID WILJER has been a Centre Researcher since August 2019, when he transitioned from being a Cross-Appointed Researcher, and is an Associate Professor in the Department of Psychiatry. Professor Wiljer's research focus encompasses two linked areas: putting knowledge into action by using health information technologies and knowledge management approaches to promote lifelong learning and continuing professional development (CPD), and exploring the impact of digital technologies on patient partnerships and on high quality care. These research interests intertwine with his current role of Executive Director of Education, Technology & Innovation at the University Health Network.

SUZE BERKHOUT, ALLISON CRAWFORD, NAOMI STEENHOF, and KRISTINA LISK have all joined the Wilson Centre as new Centre Researchers as of 15 January 2020.

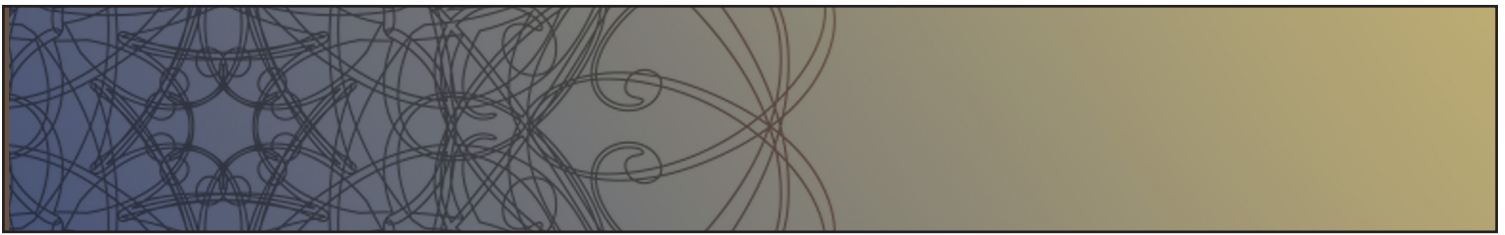


BENCHMARKS OF RESEARCH SUCCESS

In keeping with the Wilson Centre's emphasis on interdisciplinarity and cognitive flexibility, we have been exceedingly careful to avoid prioritizing the legitimacy of any one of the forms of research conducted by Centre members. As such, we have also been mindful of not adopting markers of research success that would advantage certain Scientists and Researchers over others not because of the quality and impact of their work, but because of the patterns and norms for funding, publication, and other metrics within their primary discipline. If a Psychologist values, is valued in their discipline for, and makes a major impact with, a series of peer-reviewed papers, whereas a Sociologist values, is valued in their discipline for, and makes a major impact with, a book from an academic press, then each of these very different metrics is appropriate for one Wilson Centre member but not the other. The Wilson Centre does not rely on impact factors and other citation rankings as benchmarks of success due to the differences between the ranges of impact factors that education and clinical journals are measured with. We therefore do not gather unified metrics related to research output, but rather take a nuanced approach to considering the research output of each of our members. Similarly, neither grant funding sources nor expected grant funding amounts are comparable among members from different disciplinary and methodological paradigms.

That being said, there are benchmarks of success that are fairly common across the field of health professions education research. These include keynote addresses and other major invited talks (these are discussed in more detail in the section below and listed in Appendix 4.3); academic promotion; local, national, and international prizes; chairs and other competitive salary support awards.

1. In keeping with expected time-courses for successful scholars, many of our Scientists and Researchers (with the exception of our most junior members) have undergone academic promotion during the past five years: 4 Scientists and 3 Researchers have been promoted to Associate Professor and 1 Scientist and 1 Researcher have been promoted to Full Professor.
2. As outlined below, members of the Centre have won so many prizes related to research and education that it is hard to use prizes to distinguish between them; the progression is predominantly that of seniority, with more senior faculty members generally having won more and/or more senior and international prizes than their more junior colleagues.
3. Chairs and other sources of external competitive salary support are largely limited to Scientists and are somewhat less common, although certainly not rare. Over the past five years, Wilson Centre Scientists have held (and/or continue to hold) two Canada Research Chairs (one Tier 1 and one Tier 2), two full endowed chairs (the BMO Financial Group Chair in Health Professions Education Research and the Richard and Elizabeth Currie Chair in Health Professions Education Research), two Professorships (a Professorship in Technology-Enabled Education and the Arrell Family Chair in Health Professions Teaching), two Canadian Institutes of Health Research (CIHR) New Investigator Awards, four Phoenix Fellowships from Associated Medical Services (a provincial organization that funds specific areas of healthcare-related research), a Career Development Award from the Canadian Child Health Clinician Scientist Program, and multiple competitive salary support awards from University of Toronto Departments and Division, as well as other local institutions. During this time period, Scientists and Researchers have received a total of 19 salary support awards from local and national sources. They have also accumulated an additional 66 honours, distinctions or awards at the international level, 32 at the national level, and 47 from local sources. (A full list of salary support awards and other honours, distinctions and awards can be found in Appendix 4.4.)
4. Since 2015, Wilson Centre Scientists and Researchers have authored 782 publications, 631 in the field of education research, and 151 in clinical research fields. A full list of the publications by Scientists and Centre Researchers since 2015 can be found in Appendix 4.1.



5. Since 2015, Wilson Centre Scientists and Researchers have accumulated \$33,524,090 in grant funding. \$19,416,819 of funding came from tri-agency (CIHR, Social Sciences and Humanities Research Council (SSHRC), Natural Sciences and Engineering Research Council (NSERC)) funds. Scientists alone accrued \$4,978,694 in funding as principal or co-principal investigators. A full list of operating grants received by Scientists and Centre Researchers since 2015 can be found in Appendix 4.2.
6. Between 2015–2019, Wilson Centre Scientists delivered 442 keynote and invited presentations, and Wilson Centre Researchers delivered an additional 174. Of these 614 presentations, 119 were keynote presentations, 226 were international in scope, 105 were nationally attended, and 283 were local in nature (a full list of keynote and invited presentations can be found in Appendix 4.3).

LEVEL OF ACTIVITY AND SUCCESS IN RESEARCH AND SCHOLARSHIP

The amount, quality, impact, and success of the scholarly output of the Wilson Centre are all, in a word, outstanding. Open any issue of a well-regarded health professions education journal and chances are you'll see more than one article by a Wilson Centre member showcased in the table of contents and multiple Wilson Centre Scientists listed on the Editorial Board. Attend any Canadian, American, or international health professions education conference and you will probably hear one or more Wilson Centre Scientist or Researcher speaking on an invited panel, participating in an invited symposium, or presenting a keynote address on the main stage; you'll probably also hear people talking about all the cutting-edge work they've noticed coming out of a place in Toronto called the Wilson Centre. Look down the list of prize winners for Canadian, North American, and International prizes for health professions education research and you'll probably see the names of more than one Wilson Centre Scientist or Researcher; for some Canadian awards you might see a Wilson Centre winner every other year.

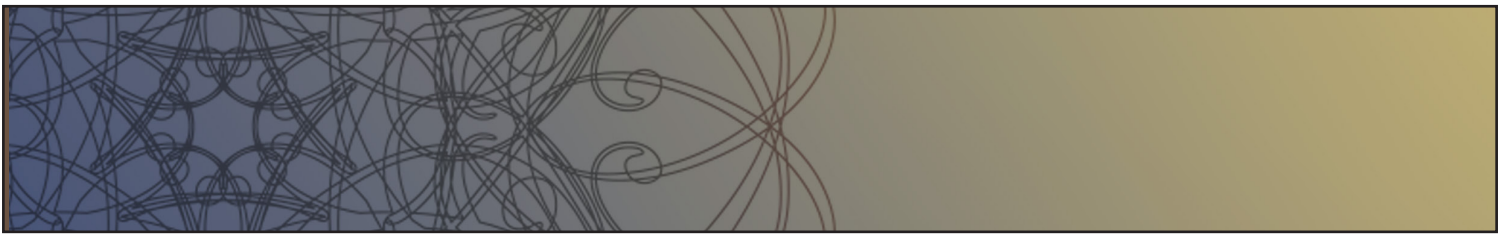
The details of Wilson Centre Scientists' and Centre Researchers' many publications, invited talks, and prizes are described in sections above and can be found in Appendix 4.1, Appendix 4.3, and Appendix 4.4, respectively. While these present compelling evidence of the Centre's success, the following quotes from senior scholars in the field also provide a useful summary:

I [...] knew several of the scientists, at least from the literature, because they are, I wouldn't call it dominating, but they are predominating [...] in the high-profile journals for medical education.

Charlotte Ringsted

I think, like any centre that's trying to do good work, it's demonstrating how to do things well. I review for a lot of journals, I'm an editor on various journals, and people do submit the most dreadful papers. Whereas, I think with the Wilson Centre, I would say there's a guarantee of quality work, that would probably be what... So, the major centres in the world, the Wilson Centre being one, Maastricht, [...], you kind of know it will be decent, you know it will be good, so yeah, quality. [...] I think rigour in house.

Jen Cleland



I think if you add up the number of published papers in the top journals, I think the Wilson Centre would come out very strong. That's one index. I have not done this, but I suspect they would do very well, not just the numbers of articles, but the number of cited articles, and the numbers of articles in the top three health science education journals, like academic medicine, medical education, and advances in health sciences education. If you go to a conference like AMEE [Association for Medical Education in Europe], and you see standing room only for ... More and more Wilson Centre scientists are being asked to do the keynotes, and people are going there to learn something brand new that they had not heard before. Wilson Centre Scientists are shining lights on many important topics [...] I've been in the education scholarship community for 20 years and I go to a meeting like AMEE and everyone knows the Wilson Centre. [...] It just seems to be ... It's just so present.

Ivan Silver

I think it's fabulous how the Centre has evolved. When Brian Hodges took it over, I think it went, as Maxwell would say, "from good to great". Most people in the field would easily say it is now one of the top five Centres of Health Professional Education in the world.

Richard Reznick

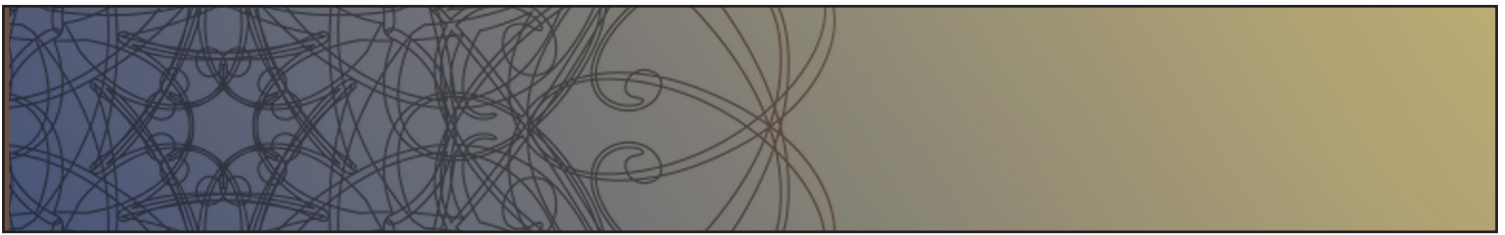
I think the Wilson Centre not only has a local role, it has a big international role to play in leading the way for education research worldwide. It's one of the top three, I think, some would argue it's number one, but I'm prejudiced. [...] In different ways, these other schools have very strong programs, but not the depth that Wilson Centre has.

Ivan Silver

HOW RESEARCH AT THE WILSON CENTRE SUPPORTS LEARNERS, HEALTH PROFESSIONALS, AND FACULTY

The research the Wilson Centre Scientists and Researchers undertake produces knowledge that is directly relevant to the education mission of the Faculty of Medicine and Toronto Academic Health Sciences Network (TAHSN) at large. Across the spectrum of training and lifelong learning in health professions, our impact is felt in direct and indirect ways. Our research activities support education by: 1) building the theoretical and conceptual knowledge for designing, evaluating, and critiquing educational experiences; 2) supporting the development of evidence-informed innovation and practice; and 3) contributing to scholarly teaching and learning practices through knowledge translation activities. A running theme is that many of these activities draw on the research but also the Scientists as consultants, educators, facilitators, and even as leaders. A second theme is that many of these activities also result in scholarly products including publications.

While there are numerous examples of successful Wilson Centre engagement in these activities across the Faculty of Medicine, below we discuss notable examples and analyze the contribution of Wilson Centre scientists and researchers.



RENEWAL OF THE UME/MD PROGRAM FOUNDATIONS CURRICULUM

In 2016, the MD program launched an innovative new pre-clerkship known as the Foundations curriculum. This learning experience is built on the research and evidence conducted by several Wilson Centre scientists in the following areas: development of clinical expertise, integration of foundational knowledge, assessment for learning, self-regulated learning, and development of critical consciousness during medical education.

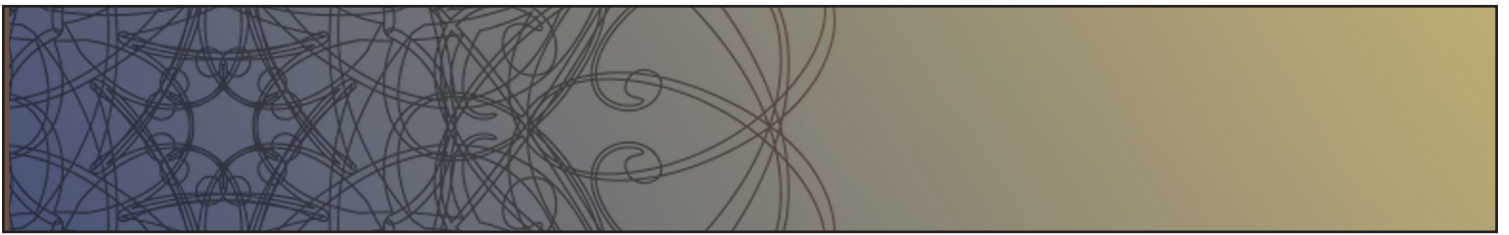
Scientists were invited from the very beginning of the planning process for renewal to articulate the latest evidence and principles of education, often from their own research programs. This evidence was used to facilitate discussions on the overall vision, structure, and pedagogical methods in pre-clerkship training. This input changed the content of the curriculum, the pedagogical techniques and structures, as well as the assessment program. Scientists were involved in all stages of planning: speaking at or leading retreats with faculty and staff to highlight and build the case for change; macro-level planning of the overall curriculum map, learning objectives, and assessment program; meso-level planning of pedagogical structures; and session-level planning including methods for evidence-informed teaching and facilitation practice. As a result, core concepts such as adaptive expertise, cognitive integration, test-enhanced learning, and the social sciences and humanities that are part of Scientists' research programs are embedded in the curriculum. Curriculum planning and description documents heavily cite the papers and presentations of Scientists at the Wilson Centre. Curriculum leaders use the concepts and theories to frame educational decisions and to align curricular activities with the intended goals and vision of MD training.

Furthermore, Scientists have been active in supporting the implementation within the MD program. For example, Scientists have been planning, delivering, and supporting specific faculty development to align our clinical faculty with the goals and theories of the new curriculum. This has also meant continued engagement with faculty as they seek to implement new innovations within the framework of the curriculum. Another area of active engagement has been new ways of evaluating the implementation and outcomes of the curriculum. Instead of relying on traditional, theory-agnostic measures, new evaluation approaches draw heavily on the theories used by Scientists to collect evaluation and quality assurance/quality improvement (QA/QI) data. The work done within the Foundations curriculum is only one small part of engagement with the MD program. Scientists have supported or continue to support ongoing revitalization of undergraduate education at admissions and in clerkship. Several of these initiatives have themselves resulted in publications or other scholarly disseminations. More significantly, the new curriculum has been well received by students and faculty with the first class set to graduate in the spring of 2020.

EDI/PERSON-CENTRED CARE IN POSTGRADUATE AND UNDERGRADUATE LEARNING/HIDDEN CURRICULUM

Wilson Centre Scientists have led the Faculty of Medicine in another significant area: person-centered care and the expansion of medical education to address issues of diversity, equity, and inclusion. Starting with the Person-Centered Care Initiative in the Department of Medicine, Scientists have advocated for new content and new forms of pedagogy that can help physicians in training address barriers to good care for their patients. Significant barriers exist for patients due to the often unexamined and hidden sources of power and privilege that permeate clinical spaces. Often, the most affected are members of marginalized and underprivileged communities. Wilson Centre Scientists have contributed that these effects also impact medical education practices as well as learners at all levels who come from marginalized communities. Education that draws from the humanities and social sciences through a transformative learning lens can help raise awareness and behaviour change to address these issues.

These efforts to expand the content and change practice in medical education have been felt in postgraduate training and in the continued renewal of the MD program curriculum. Learners at both levels are increasingly exposed to the principles of power, privilege, unconscious bias, and cultural humility — concepts that have been heavily studied and written about by Wilson Centre Scientists and Researchers. As a result, greater attention has been paid to these issues in the Faculty of Medicine, including expanded person-centered care initiatives led by Scientists into the Department of Family and Community Medicine, significant profiling of this work across the Faculty of Medicine, and national and international recognition of individual Scientists and Researchers for their contributions.



ALIGNING POST GRADUATE MEDICAL EDUCATION (PGME) WITH CHANGING STANDARDS AND PRACTICES

Additionally, Wilson Centre Scientists support the improvement of education practice to align with changing standards including those of accreditation and best practices. For example, our Scientists are involved in the implementation and ongoing evaluation of competency based medical education (CBME). This major reform of PGME curricula has been supported within various departments but also at the PGME level where Scientists' research is used heavily to inform educational decisions. Scientists offer consultations and sit on committees where they use their research to inform decision making. Specific examples include workplace-based assessment and learning, education on the role of the hidden curriculum, power and privilege, the integration of ethical and clinical reasoning, among other areas. The concepts and ideas of Scientists' work are found in key curricular documents and in the structure of education practice. Scientists are often invited to speak about these issues to diverse audiences including learners, faculty, curriculum leaders, and staff in both closed and open meetings such as annual education days (e.g., Donald Wasylenki Education Day, Gallie Day) and Grand Rounds. Scientists are also called on to educate learners directly through presentations and workshops about specific topics, such as what the hidden curriculum is and how it impacts training. These presentations and workshops help facilitate the translation of evidence to education practice across PGME.

CONTINUING PROFESSIONAL DEVELOPMENT

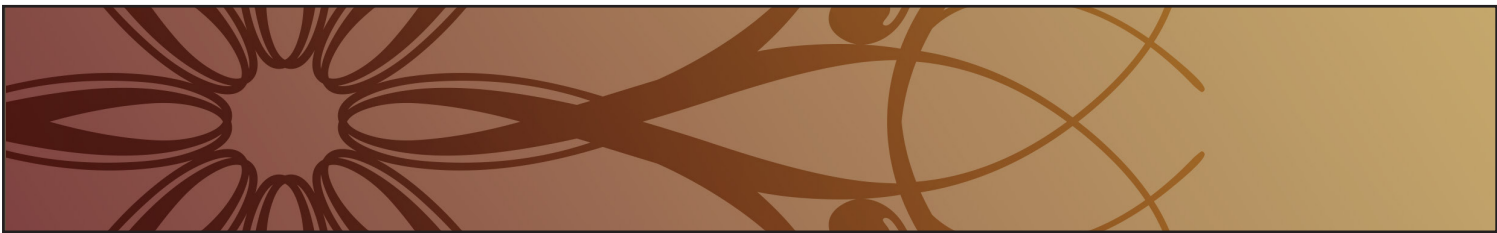
Concepts and theories advanced by Scientists have informed significant CPD initiatives. One notable example has been the Medical Psychiatry Alliance (MPA), which aims to improve integrative mental, physical, and social health by increasing cross-disciplinary and integrative care. While Scientists' work has strongly contributed to Undergraduate Medical Education (UGME) and PGME MPA initiatives, the impact is also felt in Continuing Education and CPD through the Extension for Community Healthcare Outcomes (ECHO) project. This Continuing Education initiative aims to build provider capacity in addressing patients with complex, novel, and challenging mental and physical illnesses. Participants are clinicians across a broad number of professions challenged to bring their clinical cases to experts and use these to build the knowledge and skills required for integrative care. Theories of expertise development and lifelong learning emerging from the Wilson Centre were used to frame the pedagogy of the ECHO initiative. The evaluation of the ECHO was also guided by the same principles and has been successfully published. Another notable example has been the implementation of test-enhanced learning in Canada's largest pediatric continuing education conference led by the Department of Paediatrics and SickKids Hospital. Principles of assessment for learning and test-enhanced learning were successfully implemented in the conference and evaluated to show a demonstrable increase in knowledge retention compared to traditional continuing education. Wilson Centre Scientists' research informed how test-enhanced learning was implemented and evaluated in the context of the conference. The end result was published and recognized by the 2017 Royal College of Physicians and Surgeons of Canada CPD Provider Innovation Award.

5. ORGANIZATION AND FINANCIAL STRUCTURE

The Wilson Centre is well served by its organizational and financial structures. Our dual governance structure has long been recognized as an enabler of success. It allows us to be visible and valued within both the University of Toronto (U of T) and the University Health Network (UHN), while also occupying an in-between space. Staying mindful of both university and hospital values and concerns ensures that the Centre embraces the creative tensions between theory and practice, education and care.

Two developments over the past five years have further bolstered the resilience of our organizational structures. (1) We have deliberately shifted to a more distributed and democratic leadership model within the Wilson Centre. This leadership model reflects both the developmental maturity of the Centre and its growing remit, with the new doctoral program and expanded international partnerships. Aligned with the vision and goals of the centre, this model empowers people to act and innovate. (2) We have played an instrumental role in establishing a new research institute, The Institute for Education Research (TIER), at UHN. This organizational structure redresses the more challenging aspects of dual governance.

Our dual governance structure also offers a measure of financial stability. With careful stewardship of operating funds from U of T and UHN, we have been able to sustain our ongoing work and make modest investments in new initiatives. We have also made encouraging progress in securing supplementary funding and exploring new sources of revenue.

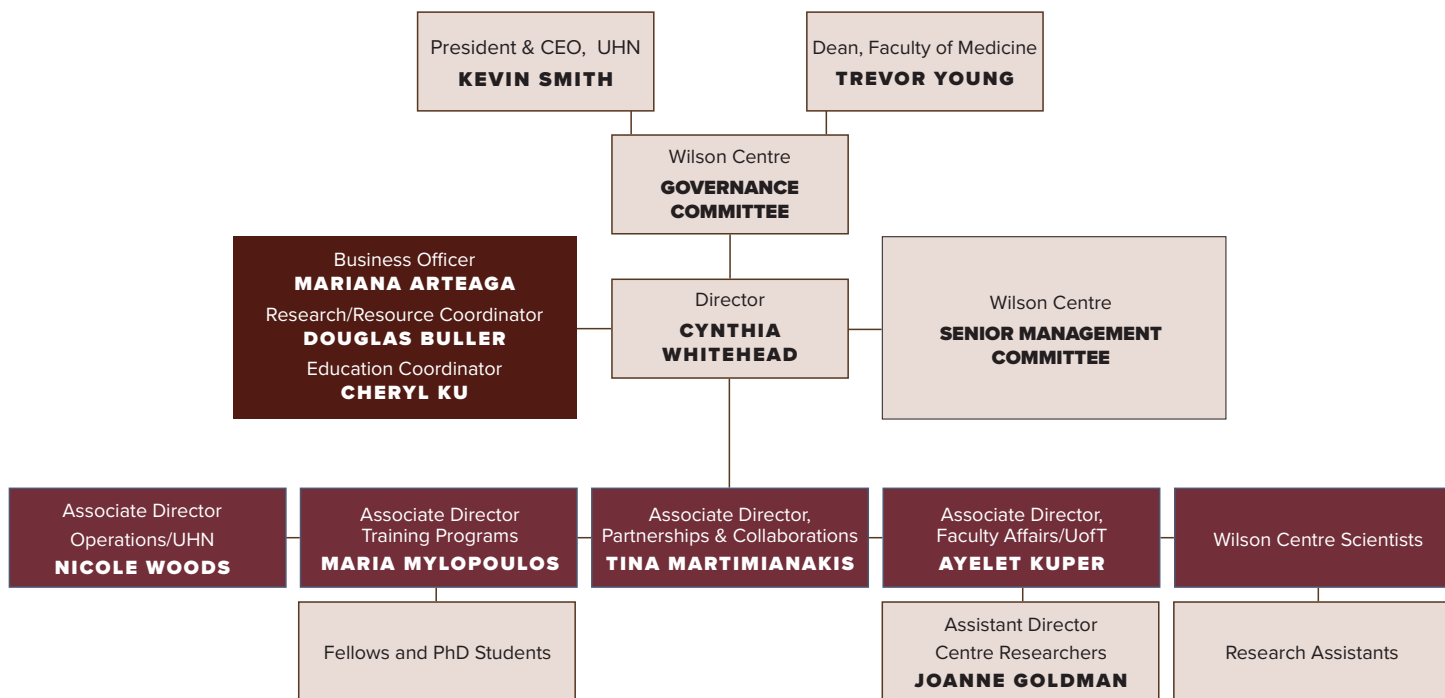


GOVERNANCE

The Wilson Centre is a Category C Extra-Departmental Unit (EDU:C) within the framework of the University of Toronto (see Appendix 5.1). EDUs are designed to be multidisciplinary and multidepartmental, with a goal of fostering research and scholarly interest in a defined research domain. As an EDU:C, the Wilson Centre is not able to offer graduate courses and programs, nor can it make budgetary appointments or administer research funds. As a result, Wilson Centre Scientists have formal appointments within a variety of departments, each with unique accountabilities. As well, the new Wilson Centre PhD stream in health professions education research, while coordinated through the Wilson Centre, is offered through the Institute of Health Policy, Management and Evaluation within the Dalla Lana School of Public Health.

The Wilson Centre has a Director, who is appointed by the Dean of the Faculty of Medicine and the President and CEO of UHN. The Director reports dually to the Dean (or delegate) and to the President and CEO (or delegate). The Director is recruited following policies and procedures of both U of T and UHN, and is appointed for a five-year term, renewable once following a successful academic review.

WILSON CENTRE ORGANIZATIONAL CHART



Direct reporting to Wilson Centre Director: **Faculty** and **Administrative Staff**
December 2 2019



GOVERNANCE COMMITTEE

The Wilson Centre Governance Committee has oversight over strategic directions, faculty and staff resource planning, and financial resource planning (including the annual budget) (see Appendix 5.2). It is co-chaired by the Dean of the Faculty of Medicine (or delegate) and President and CEO of UHN (or delegate) and meets twice a year. Members are appointed for three-year renewable terms. The committee is comprised of the Co-Chairs, two senior academic leaders appointed by the Dean of Medicine, and two senior academic leaders appointed by the President and CEO of UHN. The Wilson Centre Director is an ex-officio member.

Current Wilson Centre Governance Committee members include:

UNIVERSITY HEALTH NETWORK

Brian Hodges (Co-Chair)	Executive Vice President of Education and Chief Medical Officer, UHN
Cliff Nordal	Past Chair, Michener Board of Directors and Michener Education Committee
Ann Russell	Senior Director of Learning, Innovation and Research, The Michener Institute of Education at UHN

UNIVERSITY OF TORONTO

Lynn Wilson (Co-Chair)	Vice Dean, Partnerships, Faculty of Medicine
Arno K. Kumagai	Vice Chair, Education, Department of Medicine
Heather Boon	Vice-Provost, Faculty and Academic Life

SENIOR MANAGEMENT COMMITTEE

The Wilson Centre Senior Management Committee is responsible for overseeing matters related to the day-to-day success of the Wilson Centre (see Appendix 5.3). It meets at least five times per year and is chaired by the Director of the Wilson Centre.

Key functions of the Senior Management Committee are to:

1. Create research leaders with interdisciplinary expertise in healthcare education and practice;
2. Develop, implement, and monitor Wilson Centre policies, practices, goals, and objectives to address the vision, mission, and strategic plan;
3. Foster the development of interdisciplinary research and education programs;
4. Advise the Director on the day-to-day financial and budgetary aspects of the Centre;
5. Advise the Director regarding the Wilson Centre’s Human Resources planning.

The Senior Management Committee is chaired by the Director. Senior Management Committee members are appointed for a 3-year term, renewable, excepting those representing Wilson Centre Administrative Portfolios (Director, Associate Directors, etc.), whose appointments are commensurate with the term of their administrative position and renewed at the discretion of the Chair.



The composition of the Senior Management Committee may include (at the discretion of the Wilson Centre Director):

- Director of the Wilson Centre (Chair)
- Representative of the Faculty of Medicine Deans
- Representative of the Vice President Education at UHN
- Associate Director of Operations at UHN
- Associate Director of Training Programs
- Associate Director of Partnerships and Collaborations
- Associate Director of Faculty Affairs
- One Wilson Centre Scientist at Large
- Representative of the Wilson Centre Researchers
- Representative of the Wilson Centre Fellows
- Wilson Centre Business Officer

Current members of the Senior Management Committee are:

- Cynthia Whitehead, Wilson Centre Director**
- Glen Bandiera, Associate Dean, Postgraduate Medical Education (PGME) [joined January 2020]**
- Niall Byrne, Professor Emeritus**
- Nikki Woods, Wilson Centre Associate Director, Operations/UHN**
- Maria Mylopoulos, Wilson Centre Associate Director, Training Programs**
- Tina Martimianakis, Wilson Centre Associate Director, Partnerships and Collaborations**
- Ayelet Kuper, Wilson Centre Associate Director, Faculty Affairs/U of T**
- Joanne Goldman, Wilson Centre Assistant Director, Centre Researchers**
- Jacquelin Forsey, Wilson Centre Fellows' Representative**
- Mariana Arteaga, Wilson Centre Business Officer**

APPROPRIATENESS OF THE WILSON CENTRE GOVERNANCE AND MANAGEMENT STRUCTURE

Dual governance by the University Faculty of Medicine and the University Health Network was created by careful design in 1996. This key structure ensures continuity in funding and the setting of overall objectives for the Wilson Centre. This dual governance by both a university and an academic hospital provides an ideal space for the Centre to explore and forge links between theory and practice.

The Governance and Senior Management Committees periodically review their terms of reference, with a view to ensuring appropriate representation of key stakeholders and the larger health professions education research community. Both committees reviewed their terms of reference in 2019.



ADMINISTRATIVE STRUCTURE

LEADERSHIP TEAM

In the past five years, we have modified our leadership structure significantly to support our growth in scope. We now have four Associate Director portfolios. The Associate Director of Training Programs supports our new doctoral program in Health Professions Education Research as well as our Fellows. (This role replaces and expands upon the previous Fellowship Director role.) The role of Associate Director of Operations at UHN has expanded to bridge between UHN and The Michener Institute, supporting the creation of The Institute for Education Research (TIER) at UHN. We have created a new position, Associate Director of Partnerships and Collaborations, to support the growth of our international collaborations, such as our work in Ethiopia and Singapore. To provide necessary leadership support for members, there is now an Associate Director of Faculty Affairs.

CURRENT ASSOCIATE DIRECTORS ARE:

Nikki Woods, Associate Director of Operations at UHN

Maria Mylopoulos, Associate Director of Training Programs

Ayelet Kuper, Associate Director of Faculty Affairs

Tina Martimianakis, Associate Director of Partnerships and Collaborations

The Director and four Associate Directors meet informally approximately monthly to review relevant Centre issues related to each leader's portfolio.

Please refer to the Education, Research, and Internal and External Relationships sections of this self-study for further details on the organizational and administrative structures for each of those areas.

OPERATIONS

The Wilson Centre is fortunate to have three exceptional full-time administrative staff. Mariana Arteaga, the Business Officer, supports the overall mission of the Wilson Centre. She designs and implements creative solutions to administrative issues as they arise. She organizes, implements, and maintains the Centre's accounting and procedures related to income and expenditures. Cheryl Ku, Education Coordinator, supports our educational programs including the new health professions education research (HPER) doctoral program and our many educational activities including the ateliers, Reznick Research Day, and the Hodges Symposium. She also assists the Director. Doug Buller is the Centre's Research/Resource Coordinator. In this role, Doug provides internationally-recognized technical and creative support to Scientists and Fellows for preparation of presentations for conferences and keynotes. He also supports the Centre's education technologies, media services, and web design.



APPROPRIATENESS AND EFFECTIVENESS OF THE ADMINISTRATIVE STRUCTURE

The Wilson Centre administrative and leadership teams work closely together. We continuously monitor our roles and functions, and adapt them as appropriate, as illustrated by recent changes to the Associate Director portfolios. We pay explicit attention to emerging trends and issues in the Wilson Centre, Faculty of Medicine, UHN, and beyond. We also take ongoing feedback from members of our community and adapt accordingly. For example, the Associate Director of Faculty Affairs has in the past few years created a more structured approach to identifying Scientists and Researchers eligible for nomination for awards.

A key strength of the Centre's administrative structure is its distributed and democratic leadership model. This structure is well aligned with the vision and goals of the centre and empowers people to act and innovate. The model creates enduring structural and cultural stability. The Wilson Centre draws strength from the commitment, skill, and character of particular people, notably including staff who have been with the Centre since its earliest days, but it also enables multiple people to act, grow, and lead within their roles. The structures are more fortified than they are confounded by multiple organizational links.

POSITION WITHIN UHN

The Wilson Centre is one of nine Centres of Education Excellence operating under the UHN Education portfolio. Each Centre of Excellence maintains its own independent governance, vision/mission, and strategic directions. However, physical proximity and cross-appointments of members between the centres fosters collaboration and sharing of best practices. Many Wilson Centre Researchers and general members are also members one of the other centres of excellence within the UHN family (e.g., the Centre for Interprofessional Education, the Temerty-Chang Telesimulation Centre, and the Ho Ping Kong Centre for Excellence in Education and Practice).

Prior to 2019 there were six distinct Research Institutes at UHN, operating under the UHN Research portfolio. None of these had a particular focus on Education Science. While several Wilson Centre Scientists joined one of these six Institutes, there was a general perception that Education Science was underrepresented and not entirely understood within the six existing Institutes. Under the leadership of Dr Brian Hodges, Executive Vice President of Education, UHN addressed this gap, and in the fall of 2019, UHN launched TIER. This seventh UHN Research Institute joins other well-established institutes dedicated to cancer research, neurosciences, rehabilitation sciences, and other clinical and biomedical sciences. TIER now serves as an administrative home for all scientists, clinician-investigators, research associates, teachers, and trainees engaged in education research at UHN.

Reflective of our local and international reputation as leaders in education science, several members of the Wilson Centre have been appointed to inaugural leadership roles at TIER. Drs Brian Hodges, Ann Russell, and Nikki Woods form the core TIER executive. Drs Maria Mylopoulos and Mathieu Albert have been appointed as TIER Theme Leads. Despite this overlap in leadership, TIER is a separate UHN entity with a broader mandate across the hospital and connections to both the university and college sectors. At the same time, TIER provides another compelling example of the benefits that accrue to the Wilson Centre, UHN, and Faculty of Medicine, both individually and collectively, from multiple cross-cutting organizational links. The majority of Wilson Centre Scientists have applied for Principal Investigator appointments at TIER in order to facilitate administration of research funding through UHN and to explore new opportunities for collaboration with a larger network of educators and researchers. While these intersecting structures no doubt add a layer of complexity and potential confusion for those external to these organizations, there is no doubt as to the many internal benefits that arise from the interwoven networks.

FINANCIAL STRUCTURE

OPERATING BUDGET

Consistent with the dual governance model of the Wilson Centre, the Centre's funding is dually administered through the Faculty of Medicine and UHN. There is clear transparency across both governing organizations, as the Centre submits our budget forecasts and financial reports to finance leads at each organization on a quarterly basis. There is also budgetary oversight of all financial decisions of the Centre through the Wilson Centre Governance Committee. The table below provides a high-level description of the Centre's operating budget over the five years of this self-study, including the annual contributions for both U of T and UHN. The Centre has been able to maintain a stable operating budget over the past five years, which supports our ongoing basic activities.

TABLE 5-1 WILSON CENTRE OPERATING BUDGET 2014–2019

	Operating Base Budget	Salary Recoveries	Salary Commitments	Administrative Stipends	Operating Cost	Carryforward / Deficit
2014–2015						
UHN	\$561,471.00	\$897,606.00	\$(1,316,709.00)	\$(40,000.00)	\$(98,490.00)	\$3,878.00
U of T	\$277,818.00		\$(176,325.00)	\$(40,002.00)	\$(61,357.00)	\$ 134.00
2015–2016						
UHN	\$573,177.00	\$587,243.00	\$(978,943.00)	\$(40,000.00)	\$(109,637.00)	\$31,840.00
U of T	\$269,617.00	\$ 134.00	\$(128,060.00)	\$(46,668.00)	\$(94,950.00)	\$ 73.00
2016–2017						
UHN	\$583,041.00	\$773,109.00	\$(1,179,009.00)	\$(10,000.00)	\$(91,071.00)	\$6,070.00
U of T	\$312,002.00	\$ 73.00	\$(119,246.00)	\$(27,297.00)	\$(151,542.00)	\$13,990.00
2017–2018						
UHN	\$587,018.00	\$817,965.00	\$(1,317,170.00)		\$(81,743.00)	\$6,070.00
U of T	\$286,410.00	\$13,990.00	\$(165,615.00)	\$(30,000.00)	\$(104,321.00)	\$ 464.00
2018–2019						
UHN	\$592,766.00	\$826,496.00	\$(1,326,311.00)		\$(92,926.00)	\$ 25.00
U of T	\$286,410.00	\$464.00	\$(149,141.00)	\$(30,000.00)	\$(103,376.00)	\$4,357.00
2019–2020						
UHN	\$594,501.00	\$772,060.00	\$(1,271,732.00)		\$(90,829.00)	\$ 4,000.00
U of T	\$286,410.00	\$4,357.00	\$(177,713.00)	\$(30,000.00)	\$(73,000.00)	\$10,054.00

NOTE: Carry forward for 2019–2020 is an estimate as year-end is March 31, 2020, and April 30, 2020, for UHN and the U of T, respectively.



ADDITIONAL FUNDING SOURCES

The Wilson Centre is fortunate that the UHN Foundation supports us with two Endowed Chairs and an Endowed Fellowship. Cynthia Whitehead is the current holder of the BMO Financial Group Chair in Health Professions Research at University Health Network. Brian Hodges' term as holder of the Richard and Elizabeth Currie Chair in Health Professions Education Research has just ended, and a search is currently underway for the next Chair holder.

The Currie Fellowship is also supported by a generous gift from Richard and Elizabeth Currie. This award was designed to provide funding for health professional trainees or graduate students to access training at the Wilson Centre. Criteria include academic excellence, leadership potential, and financial consideration. Since 2010, this Fellowship has supported many successful Wilson Centre graduate students and postdoctoral fellows. Since the launch of the Wilson Centre HPER doctoral program, the Currie Fellowship is awarded competitively to a full-time student in this program.

We have had success with modest revenue generation through our ateliers. Please see the education section for further details about the ateliers.

We continue to work closely with the UHN Foundation and the Faculty of Medicine Advancement Office to seek additional philanthropic funds. We are grateful for Jeannine Girard-Pearlman's assistance as we work to secure more funding to support our graduate students. Particularly as education research grants tend to be small in scale compared to grants for clinical trials and biomedical research, there are limits to the ability of Scientists to support their doctoral students from their research grants.

In recognition of the funding constraints at all levels of government, we are considering novel ways to leverage our existing resources and expertise to support new initiatives. Under the leadership of Tina Martimianakis and Robert Paul, the Centre has recently undertaken a process of reviewing options for additional forms of revenue generation for the Centre and have developed a framework for exploration and decision-making. Revenue generation possibilities obviously need to be carefully considered and managed, to ensure that the Centre remains appropriately focused on our core academic and strategic priorities.

APPROPRIATENESS AND EFFECTIVENESS OF ORGANIZATIONAL AND FINANCIAL RESOURCES

Over the past five years, the Wilson Centre has had a sound organizational structure and been in good financial standing. With careful stewardship of existing resources, we have been able to maintain and carefully grow our key priorities. We have been able to support key priorities, with sufficient flexibility to make modest investments in new initiatives including our doctoral program, the Indigenous health education strategy, and the Toronto Addis Ababa Academic Collaboration (TAAAC) partnership.

In the next five years, we will need to continue wise stewardship of our current resources. As financial pressures increase across the public sector, operating budgets at both UHN and U of T must remain balanced reflecting fiscal realities. Our budget has been sufficient to support core functions of the Centre. However, in order to support exciting initiatives and areas of growth we will need to be creative in seeking additional funding sources. We will continue pursuing revenue generation efforts that do not detract from our core work as a Centre and continue to work with the University of Toronto Advancement Office and the UHN Foundation to seek philanthropic sources of additional funding.

We have been well served by our current organizational structure with the dual governance of the U of T and UHN. With the strong ongoing support of both institutions, the Centre is well positioned to continue strategic growth in line with the strategic priorities of both organizations.



CONSULTING

One promising source of revenue that we are actively developing is consulting. We have started to formalize our approach to consulting and continuing education offerings, including personalized learning programs. Our goal is to use consultations to raise additional revenue to support our graduate program and, in the process, provide appropriate compensation to Scientists and Fellows for work that is outside the scope of their employment.

The Wilson Centre offers a variety of individualized educational offerings designed to support the efforts of educational institutions committed to advancing their educational mission through the discovery and application of educational science. Scientists and Researchers can provide expert consultations on a variety of topics and domains. Several of our scientists have provided consultation to organizations such as the College of Physicians and Surgeons of Ontario, Cancer Care Ontario, other health care institutions and medical schools. Increasingly, we are asked to consider more sustained engagement. Sustained requests to visit the Centre for continuing education or to have scientists involved in supporting the activities of other educational organizations have warranted more formalized organization on our part so that they do not overwhelm our core functions.

Over the past year and a half we have engaged in a soft launch of the Consulting arm, to pilot various approaches to negotiating contracts, managing HR details, and developing a sense of how much additional work the Centre can comfortably handle. Administratively, the Wilson Centre has strong relationships with offices across the University and Toronto sector that allow us to respond to potential consulting requests with creative cross-disciplinary and cross-sector configurations of expertise and programming.

We have agreed that the consulting arm of the Wilson Centre must also reinforce the Centre's mission to build capacity in our field for theoretically grounded and evidence-based health professional clinical practice. Potential consulting projects are thus carefully selected to ensure that they are well aligned with our expertise and our mission. Whenever possible, we will partner up with other TASHNe organizations, departments, or the Faculty of Medicine Office of Partnerships and Collaborations to co-develop and deliver the consultations. When we provide collaborative consulting or programming for a fee, our preferred revenue sharing model is to share profits equally and to use these kinds of projects to further strengthen our partnerships with other EDUs and Toronto Academic Health Science Network Education Committee (TAHSNe) organizations.

Two recent examples of consultation projects currently at the stage of negotiation include (1) a three-day course for a group of twenty PhD students and their instructors from the Institute for Health Research and Education at the University of Osnabrück (ILEGRA) and (2) a personalized learning program for a clinician from Singapore who would like to combine clinical shadowing with a course on scale development and interdisciplinary and interprofessional theory.

For the ILEGRA project, we have collaborated with the Centre for Interprofessional Education to develop a course that combines theoretical and methodological training with one-on-one consultations for the students. This course will be personalized to the needs of ILEGRA. The model can be used for other partnered consultations with centers or groups that would like to learn more about how to research interprofessional education and practice and how to support interprofessional learning in the classroom or the workplace.

The personalized learning plan we are currently developing is for a clinical educator who has previously participated in the 2018 Wilson Centre @ HOMER Atelier. (See Section 8 for more information about the Health Outcomes and Medical Education Research Unit (HOMER) program.) He reached out after the course to explore the possibility of spending six months at the Wilson Centre. His goals for the visit include continuing clinical and research education. We thus partnered up with UHN International Centre for Education. The UHN office will organize the clinical shadowing opportunity while the Wilson Centre will host the academic part of the visit and develop a graduate level course on the topic requested by the visiting scholar.



CHALLENGES AND OPPORTUNITIES OVER THE NEXT FIVE YEARS

We anticipate both challenges and opportunities over the next five years. Now that we have successfully launched our PhD program, we will need to carefully monitor the impact it has on our administrative and financial state. There may be opportunities for philanthropic and grant revenues to support our graduate students. We will also be able to draw upon Institute of Health Policy, Management and Evaluation (IHPME) monies (to which our students contribute in terms of funding that flows from the Ministry of Education) for student support. As the number of students in our program grows, we may require additional administrative support for these students.

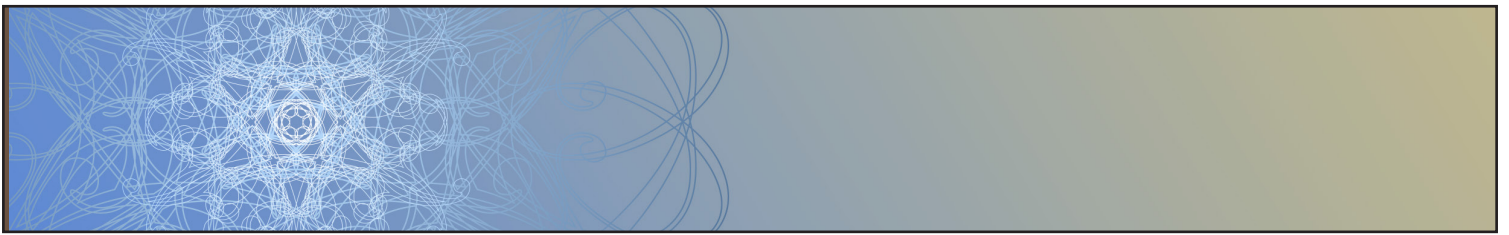
While there are multiple benefits (described above in this section and in the Introduction and Context) to our dual governance structure, inevitably there are also challenges. Not everyone at the Wilson Centre has status at both U of T and UHN, limiting the resources and systems that they can access. For example, Scientists who are not employed at UHN have not been eligible for UHN research development opportunities. This may change as Scientists become part of TIER. Staff who are hired at UHN to support the Wilson Centre similarly do not have official U of T status, which can limit their ability to act on behalf of the Centre on the U of T side.

As an EDU:C the Wilson Centre as an entity does not directly employ people. Nor can we offer U of T faculty appointments. As described above in the Introduction and Context section, this is further complicated by the clinical faculty policy, in which Wilson Centre Scientists are not eligible for tenure and cannot be hired on a long-term basis through the university. Employment of Scientists therefore happens mostly through hospitals, with various clinical departments and programs flowing salary support to the hospitals. This flexibility has allowed for the growth of the Centre, has enabled Scientists to be embedded in programs and departments, and has strengthened connections between the Centre and supporting departments and programs. At the same time, however, this structure is inherently tenuous in that the Centre is reliant on these departments for ongoing Scientist support, a fact that can be problematic at times of fiscal restraint and cutbacks. Scientists have less job security than their tenured colleagues at the university, and in the past Scientists have chosen to leave the Wilson Centre for a tenured position elsewhere. The Centre's need to rely on others for the hiring of Scientists has additional implications. For example, in terms of equity, diversity, and inclusion, ensuring fair pay and increasing the diversity of Scientists is not within the Centre's direct control.

The Wilson Centre has been fortunate to have strong support from U of T and UHN. Over the past five years, the Centre has been able to have modest growth in key areas with strategic redirection of existing funds supplemented by its revenue generation efforts. Over the next five years, the Centre will continue its current approach to fiscal prudence, strategic investments, and creative revenue generation.

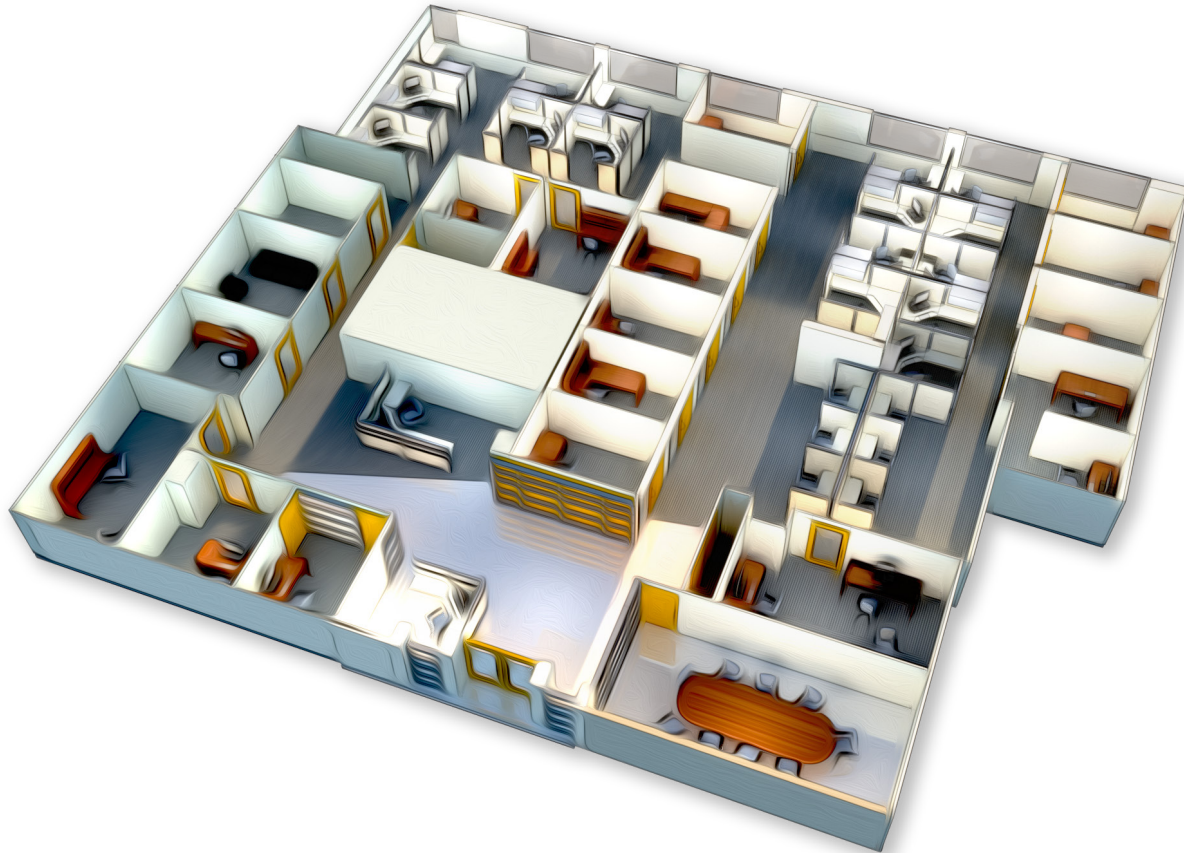
6. RESOURCES AND INFRASTRUCTURE

The Wilson Centre's prime location within an academic teaching hospital has always been integral to its success. It allows us to bring the activities of research into close physical proximity with the activities of education and clinical care. Although the physical and infrastructure needs of our community have expanded over the past five years, especially to accommodate new educational programming, we have been able to meet most of those needs effectively by strategically reorganizing space within the Centre and by accessing spaces outside of the Centre at the University of Toronto (U of T) and affiliated teaching hospitals. There is one notable exception: we lack sufficient physical space and resources for certain forms of data collection and analysis. This increases costs and constrains the potential for some programs of research. Our close alliance with the newly established TIER (The Institute for Education Research) at University Health Network (UHN) offers potential future solutions to this constraint.



ALLOCATED PHYSICAL SPACE

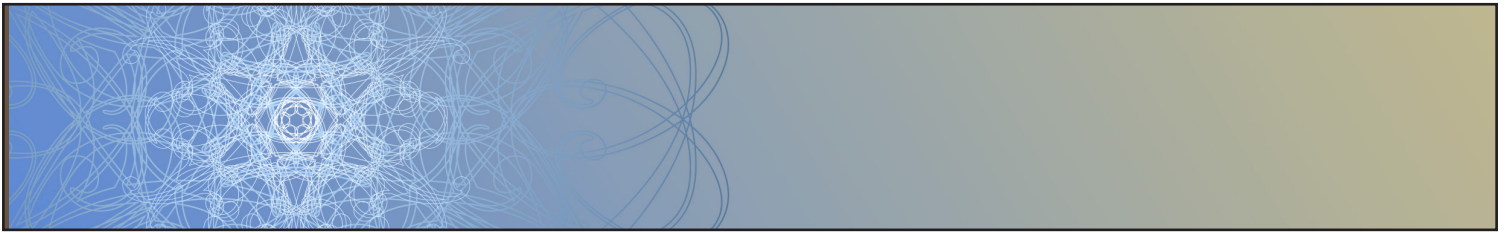
As part of the Memorandum of Understanding (MOU) between the University of Toronto and The University Health Network (see Appendix 6.1), the Wilson Centre is housed in the Toronto General Hospital, the largest UHN campus. The Wilson Centre currently occupies 6000 square feet of space on the first floor of the Eaton Wing, provided as in-kind support from UHN at no cost to The Centre or the University of Toronto.



Situated within a teaching hospital, the Wilson Centre remains unique from other Canadian education research centres located on university campuses. Physical proximity to learners, teachers, other hospital-based researchers, and the activity of patient care is important for achieving the vision and mission of the centre: being located in an academic hospital, close to both our members and the broader community we serve, reflects our commitment to advancing education and practice through research.

Although the centre is located within UHN and operates in collaboration with the Faculty of Medicine, our space is the scientific home for researchers and students from all of the Toronto academic hospitals (Sunnybrook, Unity Health, etc.) and from other faculties at the University of Toronto (e.g., Institute of Health Policy Management and Evaluation (IHPME), Faculty of Pharmacy). The leadership and members use the physical location of the centre as the hub for our growing community of education researchers, clinical collaborators, visiting scholars, and students.

The available infrastructure (physical space, technology, and administrative support) is used to support all aspects of the research cycle: administration and planning, data collection and analyses, dissemination and teaching.



RESEARCH ADMINISTRATION INFRASTRUCTURE

The Wilson Centre staff predominantly support the administration and business operations of the Centre itself but also play a key role in research administration more broadly through UHN Research. This includes managing research accounts, submitting financial reports to funding agencies, and onboarding research personnel. In-house Wilson Centre members are also able to utilize IT support, legal services, and HR services provided by UHN.

The Wilson Centre provides office space, basic equipment, and software for all Wilson Centre Scientists, staff, and fellows. Shared spaces are assigned to Cross-Appointed Scientists, Centre Researchers, and research assistants as needed. We have recently altered the design and organization of the Centre to create additional meeting space, a library/reading room, and touchdown spaces for visiting scholars and Centre researchers. These spaces are available to all members of the centre and are frequently used for business meetings, research team meetings, and other scholarly activities for the research community (e.g., journal clubs, rounds). Our physical space and resources are currently adequate to meet the day-to-day office, meeting and education needs of our community.

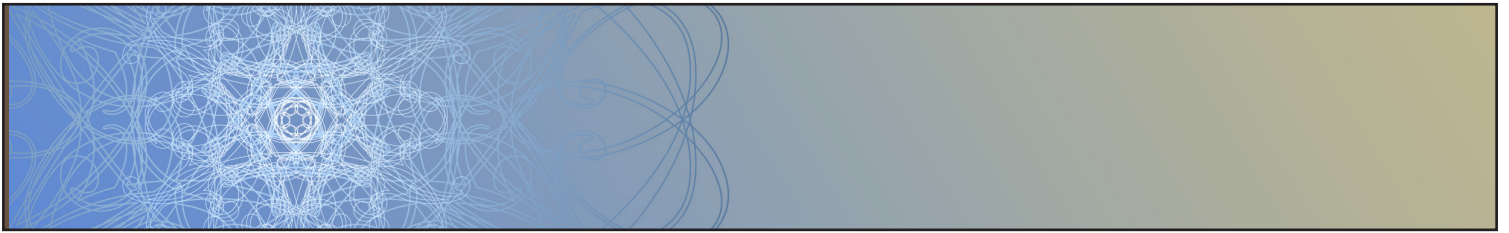
DATA COLLECTION AND ANALYSIS INFRASTRUCTURE

Through flexible use of existing meeting rooms, offices, and storage rooms, the Wilson Centre is able to easily accommodate the collection of focus group and interview data. However, the Centre is home to a number of researchers with more complicated space needs. We are less well equipped to meet our community's needs for research space that is well suited for collecting and analyzing data. We occasionally convert our existing rooms into temporary laboratories, making room for computer stations, small tabletop simulators, small refrigerators, and larger equipment as needed. However, these spaces allow for no more than 1–5 study participants at a time, depending on the configuration of the room and equipment dimensions. The Centre currently has neither the space nor the equipment needed for larger simulation studies, advanced computing, or longitudinal experiments requiring ongoing data collection over weeks or months. Despite the number of active research studies ongoing at any given time, the Centre does not have spaces dedicated exclusively to data collection of any kind. Wilson Centre researchers who cannot conduct studies in-house due to space or equipment limitations must rent space outside of the Centre, usually at an additional cost to the Principal Investigator.

RESEARCH DISSEMINATION AND TEACHING INFRASTRUCTURE

The Wilson Centre has access to many spaces at UHN (e.g., CEO conference room, BMO Education and Conference Centre) and the University of Toronto (e.g., Hart House) for hosting research events and meetings that exceed our in-house capacity. These spaces are available at a reduced cost, subsidized by UHN or U of T as appropriate.

The new graduate program in health professions education research has created the need for classrooms for the first time in the Centre's history. We have rearranged offices and conference rooms within the Wilson Centre to create space for large and small seminars.



THE INSTITUTE FOR EDUCATION RESEARCH (TIER@UHN)

Traditionally, Toronto Academic Health Science Network (TAHSN) hospitals allocate resources and infrastructure to Principal Investigators (PIs) through their appointments at hospital-based research institutes. Scientists and Clinician-Investigators responsible for conducting research inside a hospital are expected to have PI status at the research institute in addition to their clinical and/or staff appointment. PI appointments allow for access to centralized financial services, HR services, the Research Ethics Board, and grant support services. Although the Wilson Centre has been housed at UHN for more than 20 years, most Wilson Centre Scientists were not appointed to the Toronto General Research Institute due to the institute's focus on biomedical, clinical, and health systems research. The launch of The Institute for Education Research (TIER) at UHN in September 2019 has given appointed Scientists and Clinician Investigators from the Wilson Centre access to additional grant writing support and research finance services that are only available to members of UHN research institutes.

Collaboration with TIER might also provide an opportunity to address our need for dedicated laboratory and simulation space. Given the increasing demand for clinical space and resources across UHN, it is unlikely that the Wilson Centre would be able to secure additional space within Toronto General Hospital. As a UHN institute, the mission of TIER is to advance education research across all 5 UHN campuses. The leadership teams of TIER and the Wilson Centre are collectively advocating and fundraising for dedicated education research laboratory space to be built at the UHN St. Patrick campus.

7. ALUMNI AND ADVANCEMENT PROGRAMS

The Wilson Centre has helped to launch and advance the careers of many scholars over the past 23 years, both through its Fellowship program and through its longstanding commitment to building a strong, collaborative, and interdisciplinary community of excellent researchers. Many of these alumni have grown into an active, international community of practice. We communicate regularly with alumni using newsletters. We have also recently initiated new fundraising initiatives.

ALUMNI

Since the inception of the Wilson Centre in 1996, and as of November 2019, 166 students have completed their master's or doctoral programs while also engaged in a Wilson Centre fellowship. The Wilson Centre fellowship is an interdisciplinary program promoting creative synergies between theory, practice, and diverse methodologies while also providing comprehensive mentorship as well as professional and career development. These former fellows have gone on to leadership positions in clinical and academic settings, as well as within professional bodies. The Wilson Centre retains a link to these previous fellows through a monthly newsletter.

If the definition of alumni is enlarged to include former Wilson Centre Scientists and Researchers, the impact of the Wilson Centre is significant as these individuals have been recruited to lead academic programs across Canada and around the world. Together with the former fellows, these alumni are creating an extended and influential community of practice, working collectively to advance and apply knowledge relevant to education and practice in healthcare.

ADVANCEMENT PROGRAMS

In 2016, the Wilson Centre celebrated its twentieth anniversary. In response to a letter informing alumni of this milestone, a fund providing seed money for research projects was established with alumni donations.

The doctoral program in Health Professions Education Research (HPER), established in 2018, was developed and is delivered by the scientists at the Wilson Centre under the auspices of the Institute of Health Policy, Management and Evaluation (IHPME) of the Dalla Lana School of Public Health. The Wilson Centre is now engaged with the advancement office of the IHPME to support fundraising activities for this doctoral program. To date, materials have been developed and a list of potential benefactors has been established.

8. INTERNAL AND EXTERNAL RELATIONSHIPS

Strong partnerships are a hallmark and a priority for the Wilson Centre. We pride ourselves in establishing mindful and mutually beneficial relationships with local, national, and international colleagues. We join forces with others in a variety of ways: by fostering collaborations and networks at an individual level, cultivating communities of practice around shared goals and topical foci, exchanging expertise and resources with collaborating groups, integrating our research with organization-level structures and processes (e.g., curriculum design and renewal), and developing collaborative educational programs (including symposia, intensive workshops, and degree programs), always adapted to local needs and contexts. These partnerships greatly enrich the work of Wilson Centre Scientists, Researchers, and Fellows—including extending the reach and influence of that work. Over the past five years, we have grown these programs and seen their potential for social impact. Perhaps more importantly, we have also attended carefully to their stewardship to ensure that collaborations are in line with the mission of the Wilson Centre and are sustainable. In this section of the report, we provide examples to illustrate our varied collaborations and partnerships, moving from international to local programs and activities. We also illustrate how our partnerships emerge from, and integrate with, our research activities.



INTRODUCTION

The Wilson Centre is committed to building capacity in health professions education research, innovation and scholarship locally, nationally, and internationally. This commitment is realized through individual and institutional working relationships with other scholars, departments, faculties, and hospitals. These relationships begin with the varied roles, affiliations, and backgrounds of our members. Wilson Centre Scientists and Researchers are appointed to different health professions departments and have working relationships with different university and community hospitals. Fellows come to the Wilson Centre from different disciplines and can be enrolled in graduate programs at various universities around the world. The dual governance structure of the Wilson Centre supports collaboration and activities across the university and hospital sectors. Culturally, as elaborated throughout this report, members of the Wilson Centre are committed to cross disciplinary and cross sector collaborations. Thus, the work of relationship building is distributed across people and structures.

I think the Wilson Centre not only has a local role, it has a large international role to play in leading the way for health professional education research worldwide.

Ivan Silver

The Wilson Centre has taken important steps to recognize the value, and the challenges, of this work. To better support relationship building, the position of Strategic Lead International was established in 2015. It was formalized and expanded soon after as a new role encompassing both international and local partnerships: the Associate Director of Partnerships and Collaborations. In this role, Dr Tina Martimianakis oversees the Visiting Scholars Program (described below), chairs a working group committee, and engages in ongoing outreach to formalize collaborations and partnerships with internal and external government, academic, and professional organizations.

Independent of these organized outreach efforts, Scientists, Researchers, Fellows and graduate students participate on university and hospital committees and engage in educational activities across local, national, and international forums. Most of the research and educational activities of our Centre are conducted collaboratively with colleagues across the Toronto Academic Health Science Network (TAHSN) and at other research centres in Canada and abroad. Our explicit commitment to collaborating both with those who generate new educational knowledge and with those who apply it allows Wilson Centre Scientists to contribute to ongoing program development, reform, assessment, and quality improvement projects with diverse partners. It is also consistent with the culture of cross sector and interdisciplinary research for which the Wilson Centre is known.

Another development at the Wilson Centre has been our commitment to building and strengthening relationships with Indigenous communities. Outreach and collaboration between the Wilson Centre and Indigenous communities is led by Dr Lisa Richardson, Strategic Advisor, Indigenous Health. These activities are part of a concerted effort to increase the capacity of the Wilson Centre to encourage and participate in respectful and purposeful education and research that realizes the goals of Truth and Reconciliation. We report on these activities in the introductory section of this report.

In this section, we feature examples of emergent and also well-established relationships that are integral to the recent and future directions of the Wilson Centre.



INTERNATIONAL COLLABORATIONS

The Wilson Centre has built a number of highly successful international collaborations that benefit both the members of our centre and those of partner institutions. Collaborations with other research centres around the world are ongoing and can have various degrees of formality. We provide examples to show the diversity of international collaborations and how they have evolved over time.

SCHOOL OF HEALTH PROFESSIONS EDUCATION AT MAASTRICHT UNIVERSITY

Wilson Centre has developed a longstanding relationship with the School of Health Professions Education (SHE), at Maastricht University. This relationship began with organized social meetings at conferences and has blossomed into longstanding formal and informal collaborations with faculty and students. Academic collaborations between the two research centres have been mutually beneficial. Faculty and students have organized exchanges and visits, co-led symposia and collaborated on conference submissions, co-supervised graduate students, acted as external examiners of thesis defenses, and conducted cross-disciplinary research. As the relationships from these collaborations mature, faculty from SHE have become invited members at the Wilson Centre.

In 2012 I joined a research group on globalization in health professions education, headed by Wilson Centre researchers. For me this was the start of what I see as a very fruitful and mutually beneficial collaboration. In the past years the Wilson Centre hosted me several times as a visiting scholar, during which we co-developed plans for research and plans to co-organize a globalization symposium at my institution, the School of Health Professions Education (SHE), Maastricht University, in September 2015. At the symposium, we were able to bring together different worlds from our networks, represented by researchers, policy makers, project managers, and educators. Other results of our partnership are joint publications, joint supervision of PhD students, exchange visits, and the birth of our local SHE globalization research group, inspired by the Wilson Centre work on globalization. To me personally, the most important result of our partnership, however, is not these specific products, but the different way of thinking that I was encouraged to pursue by my Wilson Centre colleagues. The tools that they have provided me with to translate my critical thoughts into critical research and writing is something I am deeply grateful for, and which I now share with my own students and colleagues. I feel honored to be an invited member of the Wilson Centre and I look forward to continuing our partnership for many years.

Janneke Frambach

THE WILSON CENTRE @ HOMER ATELIER

We also have a formal relationship with the Health Outcomes and Medical Education Research (HOMER) unit of the National Healthcare Group's Education Office in Singapore. HOMER has similar goals as the Wilson Centre: "to inform and transform health professions education by providing the strongest evidence for educational practice." Their faculty and researchers have attended multiple iterations of the Wilson Centre ateliers on Qualitative Methodology and have visited the Wilson Centre multiple times.

Members of HOMER and the Wilson Centre would meet at international conferences to explore shared interests in building capacity in health professions research. These informal meetings have generated a successful international collaboration around the shared development and delivery of the Wilson Centre @ HOMER Atelier in Singapore. This week-long course, offered annually, is currently in its fourth iteration and serves a growing community of scholars in Singapore interested in developing the skills to pursue or use educational science in the organization, delivery, and evaluation of clinical workplace education. The Wilson Centre @ HOMER Atelier provides a high-level faculty development program to health professionals working at the National Healthcare Group as well as other academic hospitals in Singapore. Participant feedback has been consistently positive across all domains and provides a strong endorsement for continuing this partnership. Along with the delivery of the course, participating faculty from the Wilson Centre and HOMER deliver invited rounds attended by 50–100 health care educators and scholars.



The course development and delivery are funded through registration earnings, and both Centres share equally the remaining revenues. This shared funding model has contributed to other educational activities at the Wilson Centre by supporting our graduate program, supplementing travel funds of faculty, and enabling other educational initiatives. Delivering the course at Singapore has raised the profile of HOMER as a go-to centre in Singapore for developing skills in qualitative methodologies relevant to health professional practice. Faculty there have spent considerable effort to cultivate a community of practice. Following the delivery of the atelier, HOMER continues offering participants opportunities to engage in supplemental learning with journal clubs, skill building workshops, and mentorship. Alumni of the atelier are also engaged as facilitators during future iterations of the course.

Under Tina Martimianakis' leadership, HOMER and the Wilson Centre have developed the most comprehensive, and I dare say the best, course on qualitative research for health professions educators in the region! The first edition of our course, Clarifying Methodologies for Health Professions Education, started in 2017 and we are currently planning for the 4th edition in 2020! Much credit goes to the faculty from the Wilson Centre—Ryan Brydges, Mahan Kulasegaram, Nancy McNaughton, Maria Mylopoulos, and Stella Ng—who worked extremely closely with us from HOMER to curate a course that not only inducted clinical educators from different professional and epistemological backgrounds, but also a course that was sensitive to local needs and leveraged on local expertise such that the transformational impact of the course went beyond the temporal boundaries of the course's duration, and the physical boundaries of our course participants' locales of practice.

Issac Wy Lim

Developing and delivering the course together with our colleagues at HOMER has allowed us to strengthen ties between our two scholarly communities and formalize our capacity to contribute to each other's academic mission. Both centres are committed to raising capacity for evidence-based education by continuing the delivery of the course and pursuing additional collaborations as opportunities arise. To date, our faculty have received several invitations from different Singapore academic health science centres and medical schools to spend time in Singapore as Visiting Scholars. These trips have been funded by the invited organizations, a testament to the growing international reputation of our scholars.

New centre-to-centre collaborations have also emerged from the Wilson Centre @ HOMER initiative. For example, past participants of the Singapore atelier have subsequently attended a course (Educating Health Professionals in Interprofessional Care (EHPIC)) offered by the Centre for Interprofessional Education at U of T. They are now collaborating with leaders in that program to explore the possibility of offering faculty development in Singapore related specifically to interprofessional education and practice.



THE TORONTO ADDIS ABABA ACADEMIC COLLABORATION (TAAAC) MASTER OF HEALTH SCIENCES EDUCATION

The Wilson Centre’s commitment to help raise the capacity of the field to engage in high quality health professions education scholarship is epitomized in our involvement in launching and supporting the growth of The Toronto Addis Ababa Academic Collaboration (TAAAC) Master of Health Sciences Education (MHSE). TAAAC’s goal for the MHSE program is to develop the local expertise to support the growth and success of Addis Ababa’s clinical training programs. Participants in the program include faculty from across the health professions, several of whom hold or will hold educational leadership roles at the university. By completing the MHSE, they will also have the skills and knowledge to engage in evidence-based curriculum development, evaluation, and reform.

TAAAC has developed a model of teaching, training, and mentorship that includes both U of T and Addis Ababa University (AAU) faculty. U of T faculty travel to AAU three times a year to deliver modules on education theory, research methods and proposal design, program evaluation, and curriculum. These modules were co-developed. Resources generated by Wilson Centre Scientists were contextualized by the co-teachers for an Ethiopian teaching context. The master’s is co-led by Ethiopian and Canadian Faculty. From the Wilson Centre, leadership has been provided by Dr. Brian Hodges, Dr. Cynthia Whitehead, and now Dr. Sophie Soklaridis, who became the Canadian co-lead of the TAAAC MHSE as of January 2019. In addition to the faculty who travel to deliver modules in Ethiopia, an extended group of Scientists and Researchers are involved in supervising students’ thesis projects. They provide individualized mentorship and resources to the graduate students via teleconference, email, and Skype. Students also receive research guidance and mentorship from Ethiopian Faculty. Graduates from the program are invited to be future facilitators and teachers in the MHSE program.

The support from the Wilson Centre has been central to the successful launch and running of the master’s program in Health Sciences education at AAU, which remains the only such program in sub Saharan Africa. Dr. Cynthia Whitehead is the key person in our success. Her commitment to equity in global health education and her unparalleled scholarship is an inspiration for so many young scholars in our institution. With her support, we are heading towards becoming a leading institution in health sciences education in Africa.

Dawit Wondimagegn

Table 8-1 TAAAC cohorts: Number of students and Wilson Centre teachers/supervisors

Cohort	Number of AAU students in the MHSE program*	Number of Wilson Centre members involved in teaching and supervision
1st cohort 2015–2016	14	15
2nd cohort 2016–2017	10	14
3rd cohort 2017–2018	6	10
4th cohort 2019–2020	13	18

*A table of AAU student research projects is included as Appendix 8.1.

In January of 2019, we welcomed Cohort 4. These 13 students come from various clinical disciplines including pharmacy, radiation technology, dentistry, psychology, psychiatry, and surgery. These interprofessional students learn with, from, and about each other from both AAU and U of T faculty who co-teach the curriculum. These students are supported through mentorship both from their institution and from U of T. Currently, there are four identified mentors from AAU and 17 mentors from U of T who advise and support students throughout the duration of the master’s program. Cohort 4 is expected to graduate in the spring of 2020. These graduates are the current and future leaders of health professions education in their country.



Table 8-2 Current positions of graduates from the first cohort of MHSE students

Name	Position	Area of assignment
Ekram Redwan	Team Leader at Federal Ministry of Health Ethiopia	Department of Health Professional Education
Asseged Samuel	Deputy Director at Federal Ministry Health	Department of Extension Program
Andualem Deneke	Head, Department of Surgical Sciences	Addis Ababa University
Liyouget Abebe	Head, Simulation Center	Stipule's Millennium Medical Collage
Amezene Tadesse	Coordinator, Postgraduate Program in Department of Surgery	Addis Ababa University
Biniam Altamo	Head, Department of Medical Education	Dilla University
Alemayehu Nigussie	Director Undergraduate Program in Radiography	Addis Ababa University

Consistent with the TAAAC model, this master's was designed with the goal of AAU faculty members gradually taking over the teaching of modules. In the first cohort, Canadian teachers were involved in the delivery of most of the content of the six modules, with co-teaching from AAU colleagues. Now, AAU faculty have taken over sole teaching of two modules, are teaching significant portions of another two modules, and are providing some co-teaching in the remaining two modules. While the Wilson Centre looks forward to providing continued support to our AAU colleagues in terms of faculty development, we consider this transition to be very successful. Our AAU colleagues have suggested that once they have achieved self-sufficiency in teaching the MHSE, they will be interested in exploring with us the development of a doctoral program.

OTHER INTERNATIONAL RELATIONSHIPS AND ENGAGEMENT

Members of the Wilson Centre are active participants in the Canadian and international academic community. (For more detail, also see the Research section and Appendices 4.1 and 4.3 of this report.) They are regularly asked to provide invited talks and keynote presentations at other medical schools, and at national and international health professions education forums. They are also invited to provide expert positions on current topics of relevance to the field as panel participants, discussants, and symposia presenters at leading health professions education conferences such as the Association for Medical Education in Europe (AMEE), the Canadian Conference on Medical Education (CCME), the Association of American Medical Colleges, Research in Medical Education (AAMC–RIME) conference, the International Association of Medical Science Educators (IAMSE) conference, the Simulation Summit, and the Ottawa Conference. Wilson Centre Scientists serve as members of conference planning committees, provide peer review for abstracts for all major national and international conferences, and advocate regularly for the inclusion of dedicated research sessions. They are members of the editorial teams of several leading health professions education journals, including *Academic Medicine*, *Medical Education*, *Advances in Health Sciences Education*, *Canadian Journal of Medical Education*, and *Advances in Simulation*. They are also regularly invited to be Guest Editors on special issues. A full list of Wilson Centre Scientist committee membership at the local, national, and international level can be found in Appendix 8.2.



VISITING SCHOLARS PROGRAM

The Wilson Centre Visiting Scholars and International Relations Program is designed to welcome visitors from other institutions who come to the Wilson Centre for as little as a few days or as much as a year. Dozens of visitors from around the world enrich the activities of the Centre annually by presenting in local rounds and journal clubs, sharing ideas, and collaborating on research projects.

Without reservation, I would express that my time spent in the Wilson Centre was a complete success. Personally, I feel that I have developed a number of skills that will be of benefit to me as an educator and researcher. I had the privilege of being afforded some of the insights of a world leading centre in health profession educational research. I hope that I can instill some of this culture in my home institution and foster ongoing collaborations.

Gerry Gormley

In the past 5 years, we have had 90 scholars visit the Wilson Centre from across North America and from countries in Europe, Africa, South America, Asia, and Oceania. The Wilson Centre funds only invited visitors for keynote presentations at special events (approximately two per year). The rest of the visitors come with their own funding. Visitors are offered a desk, access to local administrative support within reason, and access to computer and photocopier.

I would like to express my appreciation and thanks to all the members of the center that made time to meet and share thoughts and ideas. The Wilson Centre is undoubtedly a unique and inspiring center, advocating for excellence not only in research but also in humane relationships and sincere advocacy for the improving medical education."

Anonymous

Each visitor is supported with a local Scientist acting as both mentor and host. Formal proposals for visiting the Centre are reviewed by committee and approved only if there is a clearly outlined mutual education benefit for both the visiting scholar and the host of the visit. The objectives of the visit are co-developed with the Wilson Centre host and the visiting scholar to ensure that they are attainable during the visit and that they are a good fit with the Centre's mandate.

Care is also taken to space the timing of visits so that ongoing benefits of the program are integrated into the regular operations of the Centre. Whenever possible, the Wilson Centre collaborates with clinical departments or other Extra-Departmental Units (EDUs) to co-host the visits. This serves to strengthen collaborations between the Wilson Centre and local educational communities and to expand the networking activities of the visiting scholar. At the end of visits that last more than two weeks, the visiting scholar submits a report that outlines what they achieved during the visit, as well as an evaluation of their experience.

I would like to dedicate the success of my research stay to the work of Business Officer and Administrator Mariana Arteaga. I thank her greatly for a warm welcome and her extraordinary professional overview connecting me with researchers and PhD students and research environments highly relevant to my aim of research stay... From 18 September 2017 to 17 October 2017, I visited the Wilson Centre under the supervision of Dr. Nancy McNaughton... Confronted with the diversity and interdisciplinary theoretical and methodological approaches in medical education at the Wilson Centre, and having the opportunities to engage with the medical educational research environment within the Medical Psychiatry Alliance, I found a highly motivating research environment to identify with and to qualify my own research. These multiple professional encounters with PhD students, researchers, and educational directors have given me an invaluable insight into current and ongoing research in psychiatric education, which have [prepared] the ground for present and future collaboration and knowledge sharing.... I am happy to have gained collaboration on three concrete articles in alignment with my own research. One is with Dr. Nancy McNaughton, one with Dr. Chris Kowalski, and one with PhD students Cristian Rangel and Jean Marie Castillo.

Kamilla Pedersen



Through meetings with 17 stakeholders and 4 workshops, I increased my insights to competency-based medical education (CBME) and related elements substantially. One core topic for the visit was how to build a framework for the preparation and implementation of competency by design (CBD). I got a comprehensive information about the organization of CBD at a national, a provincial, and a university level by studying the steps of the development of EPAs [Entrustable Professional Activities] and related milestones... This experience was far beyond my expectations, and it will make it much easier to fulfill my tasks when implementing CBME in Norway. I also very much appreciate the opportunity to continue to collaborate with several persons at the Wilson Centre. Realizing that I still need a lot more knowledge on both CBME and simulation, long term collaboration and another 2–3 weeks stay at the Wilson Centre in a couple of years will be very helpful. I can sincerely conclude that I obtained all my learning objectives during the visit.

Thomas de Lange

HOW RESEARCH, INNOVATION AND SCHOLARSHIP INTERSECT WITH COLLABORATIONS

Wilson Centre Scientists, Researchers, Fellows, and graduate students often work at the vanguard of the field introducing new ways of thinking and laying the foundation for the study of new phenomena. This happens across topics and disciplines from the cognitive to the socio-political. Opportunities to push the boundaries of the field are often pursued collaboratively and include a combination of research, education, and knowledge implementation activities. We provide four examples of scientific concentrations at the Wilson Centre that include advocacy, capacity building, and the nurturing of local, national, and international research networks.

USING INTEGRATION RESEARCH TO GUIDE AND SUPPORT CURRICULUM RENEWAL

Wilson Centre scientists are called on to inspire and consult on curriculum renewal efforts in undergraduate training in the health professions locally and internationally. A multidisciplinary group of scientists from the Wilson Centre has formed the Integration Research Group. Blending work from cognitive psychology, cognitive science, assessment research, and the social sciences, this group has produced new understanding of how integration operates as a curricular principle. The growing base of evidence and principles from their work has challenged education leaders to rethink curricular activity. This work expands the notion of integration from traditional concerns (e.g., about how long each block should be and how much basic science is needed in clinical training) to more fundamental questions about how best to integrate the knowledges required in clinical reasoning. Wilson Centre scientists have contributed to learner-centered active learning, alignment of assessment with instruction, development of expertise, and mindfulness of the hidden curriculum. In some cases, this has involved a close embedding of a Scientist within some of the educational structures of the program. In other cases it has taken the form of mentorship and consultation at a distance.

Scientists' involvement in curriculum renewal includes an ongoing partnership with the U of T MD program where several scientists contributed to the redesigns of the foundations and clerkship curricula from high-level concept to day-to-day instruction. International work has taken our Scientists to US schools such as Vanderbilt and Jefferson Medical School as well as private education organizations like Aquifer Sciences Inc., among others. Scientists present high-level conceptual ideas to curriculum leaders and teachers, facilitate or lead workshops with frontline teachers, and support the ongoing translation of educational evidence to practice. Furthermore, the activities undertaken have also led to tangible scholarly products including publications, grants, and invited presentations and plenaries at international conferences such as IAMSE. The Scientists involved include Drs Nikki Woods, Maria Mylopoulos, Mahan Kulasegaram, Tina Martimianakis, and Cynthia Whitehead.



PROBLEMATIZING THE GLOBALIZATION OF HEALTH PROFESSIONS EDUCATION

The globalization research group, led by Drs Brian Hodges and Tina Martimianakis, has contributed to problematizing globalization work with research, commentaries, educational programs, and supervision of several graduate students and fellows. Research in this area draws attention to the unintended effects of cross-cultural sharing of knowledge and expertise in health professions education. It also challenges the idea that globalization is naturally occurring and that the movement of health care professionals and curricula across sectors is a form of progress. Members from this network are conducting scholarship that challenges western dominance in setting standards for health professional practice around the world and encourages reflexivity and deliberate integration of diverse voices and perspectives.

The globalization research group collaborates with scholars from all over the world. The group has also organized annual symposia bringing together policy makers, scholars, and educators from around the world to exchange views and disseminate research on topics related to the globalization of health professions. This kind of academic social engagement relates directly to the advocacy roles the Wilson Centre is committed to playing locally and internationally. The Wilson Centre Globalization Symposia aim to create inclusive and reflexive educational practices that honor cultural differences and encourage respectful international exchanges between resource poor and resource rich education sectors. The planning of the symposium is always conducted in partnership with different organizations, and whenever possible we hold it abroad to ensure broad participation from colleagues around the world. When we first launched the globalization symposia, we initiated the partnerships. Now invitations to partner in the delivery of the symposium are presented to us, indicating the growing popularity of the forum. Past partners in Toronto have included the University Health Network, St. Joseph's Hospital, and the Hospital for Sick Children. Past international partners have included Addis Ababa University, Ethiopia; the School of Health Professions Education, Maastricht University, Netherlands; the University of Aberdeen and the Association for the Study of Medical Education (ASME), United Kingdom; and the Department of Social Medicine, National Taiwan University.

The work of the Wilson Globalization research group has created a growing international community of practice oriented to the critical examination of global education initiatives. A special issue and supplement have been published by the Canadian Medical Education Journal, with Dr. Tina Martimianakis as the invited guest editor. Several workshops and conference symposia have also been delivered by the international network of scholars that collaborate on these topics. The globalization symposia have served as a networking forum and have inspired cross cultural research and educational exchanges. These initiatives have given the work of Wilson Centre scientists and Fellows considerable profile.

BUILDING A TIMELY, COLLABORATIVE RESEARCH NETWORK FOR CBME

In the Department of Medicine, the largest department within the Faculty of Medicine, two Wilson Centre scientists responded to calls to form a research network. Set amongst other networks focused on diabetes, multiple sclerosis, and other established clinical foci, Drs Shiphra Ginsburg and Ryan Brydges developed the CBME Research Network as a way forward for the department to conduct research concurrent with the implementation of CBME in its 19 specialty programs. Drs Ayelet Kuper and Walter Tavares also serve as key contributors to the leadership of research projects in the network. As an example of a key project, Drs Ginsburg and Brydges recently joined with Dr Lynfa Stroud (a Wilson Centre Education Researcher and departmental colleague) to propose a successful grant that was funded both by their Department and by the Royal College of Physicians and Surgeons of Canada. Contributors to this project include nine faculty members, five residents, and three colleagues from the University of British Columbia and Western University. This project team studies how the Royal College's "Competence by Design" approach to CBME affects the practices of faculty and residents and how its implementation impacts coaching, feedback processes, co-regulation of learning, and the assessment processes and language used to document the activities. This work is expected to produce theoretical contributions along with improvements in CBME implementation, locally and across internal medicine programs in Canada.



ADVOCATING FOR COMPASSIONATE AND HUMANISTIC APPROACHES TO HEALTH PROFESSIONS EDUCATION AND PRACTICE

The Wilson Centre is engaged in a number of scholarly activities that aim to advance compassionate, equitable, and humanistic models of care. Several scientists have participated in Ontario and North American efforts to bring attention to health care issues that contribute to the erosion of empathy and the increase of burnout among healthcare providers and trainees. Wilson Centre scientists are also increasingly pursuing research that includes patients and other marginalized perspectives, leading to more holistic approaches to care.

Dr. Brian Hodges has been the lead for the Associated Medical Services (AMS) Phoenix Project, which promotes the learning and practice of compassionate care. Several scientists and fellows have contributed with scholarship, peer review, and administrative leadership. Four Scientists of the Wilson Centre—Drs Cynthia Whitehead, Ayelet Kuper, Paula Rowland, and Tina Martimianakis—have received prestigious fellowship awards from the Associated Medical Services foundation to support research and educational scholarship and advocacy in this area. AMS fellowships target individuals with strong leadership abilities whose work contributes to the transformation of health care. Wilson Centre scientists have also contributed to the work of the Arnold P. Gold Foundation through the Mapping the Landscape initiative, which generated a repository of new scholarship to promote humanism in medical training.

COLLABORATION WITH OTHER EDUS, UNIVERSITY DEPARTMENTS AND HOSPITALS

The Wilson Centre leadership has always invested time and energy in fostering relationships across the Faculty of Medicine and its affiliated hospitals. We see these relationships as integral for realizing our mission to advance healthcare education and practice through research and our mission to foster the discovery of theory and new knowledge that is highly relevant to advancing the training and delivery of healthcare at our school and in the field more broadly. Formal and informal relationships with other EDUs and the clinical departments allow members of the Wilson Centre to stay up to date with and contribute to local training needs through knowledge implementation, faculty and learner development, educational innovation, and educational administration and leadership.

The Wilson Centre and the Centre for Interprofessional Education (CIPE) have had a number of collaborations over the past five years. These include research collaborations in the areas of international faculty development, patient engagement and continuing professional development. The two Centres also had a shared Scientist (Wilson Centre)/Associate Director (CIPE) in Dr. Paula Rowland, who has recently shifted to a CIPE Research Advisor. Our most recent endeavor is the creation of a first integrated interprofessional education, practice, and research atelier for an international audience that will be launched in May 2020.

Maria Tassone



Directors or their designates and managers of the EDUs meet regularly to discuss ongoing initiatives unique to each centre and to identify strategic synergies and joint projects that can be pursued in partnership. Members of the Wilson Centre are embedded across TAHSN. The Wilson Centre has a particularly close working relationship with the Centre for Faculty Development (CFD), as detailed in the following extended quotation from CFD Director, Dr Karen Leslie.

[The Wilson Centre and CFD have both] been operating and collaborating for more than fifteen years...

Informally, examples include the sharing of practices in delivering programming to international groups, and discussing the types of data we collect about individuals who attend our respective educational programs. We also promote each other's work on social media and seek out ways to promote our centres to local as well as national and international groups.

Formally, members of the Wilson Centre sit on the CFD's executive council and also on some of the CFD's program committees. Wilson Centre Scientists and Researchers facilitate and co-facilitate a number of CFD workshops and teach in other CFD programs including the Education Scholars Program and Summer Education Institute. [Members of the Wilson Centre and CFD attend and present at each other's rounds] as well as Richard Reznick Research Day.

There are many research and scholarly collaborations between our centres, with Dr. Stella Ng, the director of research for the CFD, being a Wilson Centre Affiliated Scientist and other CFD faculty being members of the Wilson Centre Researcher group. CFD and Wilson Centre scientists and scholars have collaborated on grant submissions, conference presentations, and academic publications. As both centres have roles in capacity building with the local Toronto Academic Health Sciences Network (TAHSN), several years ago we partnered to offer a one day event, 'Spark your Scholarship,' which brought together Education Scientists, Researchers, and Scholars to share areas of expertise and interest in order to foster connections and build additional relationships across the many practice sites in Toronto.

...[W]hile our centres have unique areas of focus for program delivery, capacity building and research, we also complement each other's work at the individual, organization, and systems level and as such I would consider the Wilson Centre to be a highly valued partner in our health professions education work.

Karen Leslie

As mentioned earlier in this report, all scientists are appointed to an academic clinical department. Many scientists, in addition to establishing a high caliber research program, also hold formal educational leadership roles in clinical departments, affiliated hospitals, and the medical school and contribute to teaching, supervision, and mentorship to faculty of medicine educational programs. Education researchers affiliated with the Wilson Centre also carry out scholarship in addition to leadership and training roles. With members of the Wilson Centre appointed across TASHN, maintaining formal and informal relationships across the Faculty of Medicine and affiliated hospitals is part of the ongoing operations of the Centre.

Since its creation in the mid 2000s, the Centre for Ambulatory Care Education (CACE) in Women's College Hospital has had a very close and collaborative working relationship with the Wilson Centre and its scientists. This has taken the form of cross-appointments, mentoring of students and Fellows in both centres, and co-offered, co-developed, and co-hosted talks, workshops, and courses. Over this same period, the Wilson Centre Directors have been, as a whole, all strongly supportive of continuing to encourage, and promoting, a deeply collaborative relationship. As I look to the future for CACE, I am greatly comforted that the Wilson Centre and its respective communities will continue this practice of academic generosity locally and globally and that both centres will benefit and flourish.

Robert Paul



Scientists sit on all major educational committees across TASHN, contribute to setting and implementing strategic educational priorities in their home departments, and engage in ongoing knowledge implementation across the Faculty of Medicine and affiliated hospitals. The Wilson Centre is active in the peer review of local grants and in the Educational Development Fund competition, run by the Faculty of Medicine. Several scientists chair grant competitions in their respective departments and use these opportunities to provide mentorship and feedback to improve the quality of submissions. Joint rounds and educational scholarship offerings are routinely planned with other EDUs and departments. Whenever the Wilson Centre hosts a visitor from another institution, effort is made to link this scholar with educators that might share interests across the Faculty of Medicine.

The DFCM [Department of Family and Community Medicine] has enjoyed a longstanding, collaborative and highly productive relationship with the Wilson Centre since its inception. These relationships foster valuable opportunities for networking and serve to further the academic mission of the DFCM and the Faculty of Medicine at the local, national, and international level. Currently, four of the Wilson Centre Scientists hold appointments in our department. They serve in leadership positions at the Wilson Centre, supervise graduate students, and actively participate in and/or mentor DFCM faculty members in their education scholarship activities. A number of DFCM faculty members hold memberships or cross-appointments in the Wilson Centre and several have served on Wilson Centre committees.

I would like to make special note of the contributions of Wilson Centre scientists who are not appointed in our department, for their support and participation in DFCM education scholarship activities. For example, over the past five years, they have contributed to three of our Celebration of Education Scholarship faculty development events as presenters and panelists. I believe that these collaborations have been mutually beneficial for the DFCM and the Wilson Centre and have served to strengthen our relationship over time. One of our most recent collaborations has been to co-host events that bring education scholars from outside of our faculty to the U of T. These events provide an opportunity for both the DFCM and the Wilson Centre to further strengthen the academic mission of our university and provide a lovely opportunity for cross pollination of ideas.

Risa Freeman

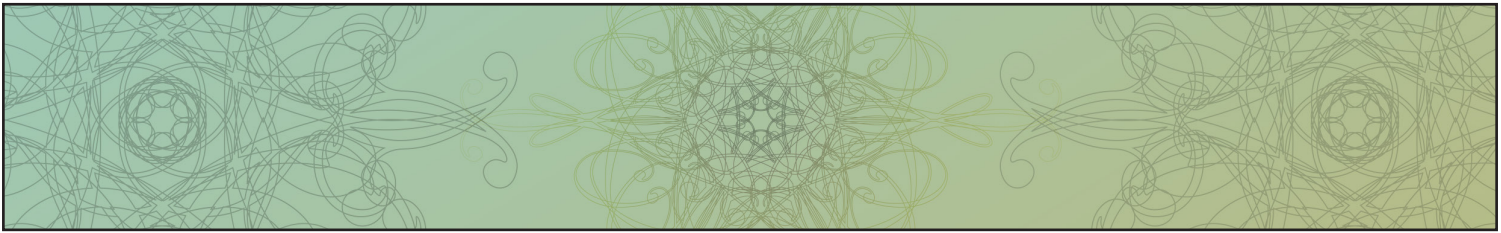
FUTURE DIRECTIONS

As we look ahead, we aim to build upon the successes of our international partnerships while taking care to ensure that they are aligned with, rather than detracting from, other Wilson Centre priorities, including the career development of faculty and learners and the success of the health professions education research (HPER) graduate program. The graduate program will require significant resources and care while it is becoming established. Balancing these core priorities with long-term international commitments will therefore be an ongoing aim and challenge for the Wilson Centre.

As our graduate program grows, the relational and organizational infrastructure that we currently have in place to pursue academic collaborations will be extended to our graduate students in the form of international exchanges, capacity to include international expertise on graduate committees, and support to pursue research projects that include data collection in other sectors and countries. Strong relationships with medical education hubs in Canada and around the world offer a starting point for our graduate students to consider how their work can be enhanced by our national and international network of scientific collaborators. We are also working to develop a dedicated fund that would allow us to support academic sabbaticals for our Scientists and contribute to the travel and accommodations costs associated with spending extended time at another educational research centre.

9. RECOMMENDATIONS FROM PREVIOUS REVIEWS

Since its establishment in 1997, the Wilson Centre has undergone five reviews. These include external reviews in 2002, 2008, and 2015 and internal reviews in 2013 and 2017. We underscore two themes that are apparent across the reviews. First: Reviewers have consistently encouraged the Wilson Centre to stay its course, refining its practices and strategic priorities rather than revising its guiding purpose or principles. These refinements have been steered by three significant leaders, each of whom has brought a different leadership style uniquely suited to the needs of the Wilson Centre at particular stages of its development. Second: Reviewers have recurrently recommended that the Wilson Centre consider transitioning to a graduate degree-granting status. This was the primary recommendation of the most recent external review (2015). The Wilson Centre has acted on this recommendation, effectively launching a PhD program in 2018. This required skillful distributed leadership, strengthened collegiality and collaboration between scientists, persistent negotiation and advocacy, and the adoption of new teaching responsibilities, all of which have renewed and strengthened the collective ethos of the Wilson Centre.



HISTORICAL SUMMARY OF REVIEWS

Since its establishment in 1997, the Wilson Centre has undergone five reviews. These include external reviews in 2002, 2008, and 2015 and internal reviews in 2013 and 2017. **Table 9-1** presents a synopsis of the five reviews and a listing of their key recommendations. (See Appendices 9.1 through 9.7 for the four most recent reviews and associated documents.)

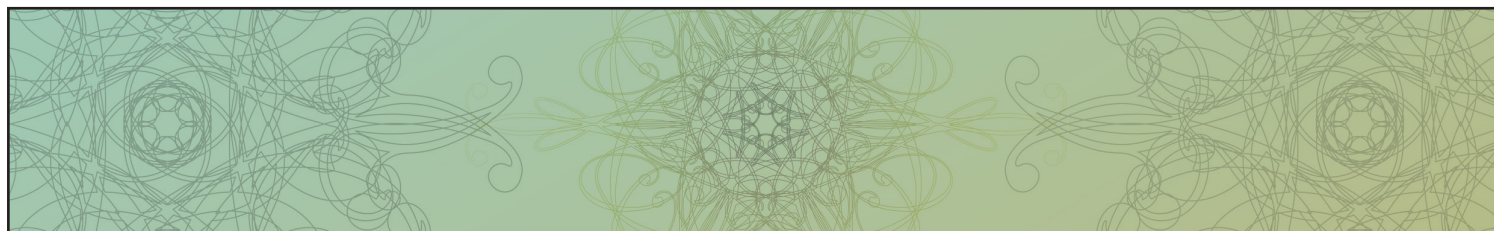
Drawing upon these reviews, this section on the history of the Wilson Centre is intended to (1) summarize the contributions and evolution of its leaders and leadership and (2) examine the actions taken in response to the two most recent reviews undertaken at the Wilson Centre: in 2015 (a one-day external review) and 2017 (a strategic refresh plan). While our focus is on the Centre’s directors, there is no gainsaying the fact that individual scientists continuously demonstrate their leadership capacities by organizing and conducting their own and collaborative research activities.

We highlight two significant themes that emerge over the 5 reviews:

1. Anticipation and realization of the graduate program and
2. Validation that the Wilson Centre is doing fine and should not undertake any fundamental changes.
In other words: Leave well enough alone.

Table 9-1 Recommendations from previous Wilson Centre reviews (2002–2019)

REVIEWERS	RECOMMENDATIONS
2002	
Dr Gordon Page University of British Columbia	1. Develop focused research themes.
Dr James O. Woolliscroft University of Michigan	2. Grow the Wilson Centre fellowship in term of numbers and breadth of disciplines enrolled.
	3. Build academic leadership and infrastructure such as actively seeking endowments.
	4. Renew the exiting research facilities.
	5. Engage in benchmarking against international standards.
2008	
Dr Robyn Tamblyn McGill University	6. Identify champions for further expansion of basic science education research through the faculty development program.
Dr Bernard Charlin Université de Montréal	7. Create its own degree programs.
	8. Sustain exceptional research climate by recruiting and retaining scientists.
	9. Establish a unifying governance structure for a distributed network approach that formalizes the positive collegial relationships.
	10. Pursue endowed chairs.
2013	
Dr Charlotte Ringsted Wilson Centre Director	11. Strengthen education to advance the field of research in healthcare education and practice.
	12. Strengthen research and promote translation of new knowledge by broadening research collaborations and synergies.
	13. Enhance the environment to nurture and support a creative, engaged and informed research community.
	14. Develop and implement a recruitment, retention and career advancement program.
	15. Increase fundraising efforts to help achieve the Wilson Centre’s vision.

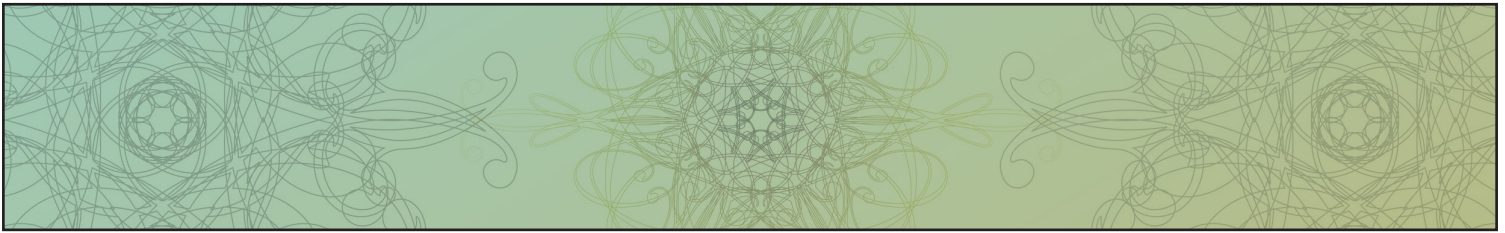


REVIEWERS	RECOMMENDATIONS
2015	
<p>Dr Stan Hamstra Accreditation Council for Graduate Medical Education</p> <p>Dr Salvatore Spadafora University of Toronto</p>	<ol style="list-style-type: none"> 16. Transition to graduate degree-granting status. 17. Sustain and enhance the positive culture and high morale of the Centre. 18. Ensure service–science Balance. 19. Maintain enthusiasm and high regard for stakeholders and governance. 20. Plan for succession and openness of leadership and administration. 21. Retain current Fellowship Program and excellent mentoring. 22. Find out more about retention and recruitment issues (survey senior scientists who leave). 23. Continue to work towards a graduate program. 24. Emphasize opportunities for innovation and scholarship based on local education issues. 25. Emphasize the potential for increasing ties to OISE/UT as well as other units at U of T. 26. Clarify communication about Terms of Reference, policies and procedures. 27. The Director should be knowledgeable about the U of T administrative culture and processes.
2017	
<p>Dr Donald Cole University of Toronto</p> <p>Dr Niall Byrne The Wilson Centre</p>	<ol style="list-style-type: none"> 28. Expand, diversify knowledge production. 29. Create opportunities to enhance scholars’ development. 30. Encourage engagements with emphasis on Indigenous scholars. 31. Sustain local, national and international collaborations. 32. Develop improved analytics of Centre’s activities and achievements. 33. Intensify funding initiatives.

A SHORT HISTORY OF LEADERS AND LEADERSHIP AT THE WILSON CENTRE

It is instructive to look back to the Wilson Centre’s first 5–year review that occurred in 2002. This focused mainly on the leadership of the Wilson Centre and on establishing material and human resources (faculty and support staff) that would enable the maturation of the Wilson Centre as a sustainable and successful enterprise. The review team concluded that the success of the enterprise was evidenced by its achievement of all objectives set out in the mission statement. The reviewers noted that the Centre contributed significantly to the visions of both of its sponsors—the University of Toronto, Faculty of Medicine, and the University Health Network—and concluded that it was “an unqualified success.”

Much of the credit for these achievements was attributed by the reviewers to the leadership ability of the Wilson Centre’s first Director, Dr. Richard Reznick, who, despite some substantive differences with the Centre’s scientists about the scope and direction of research, had their full support. (Dr. Reznick advocated that instead of small, multiple research steps, the Centre should focus on major research issues that capture big grants with the triple benefits of fostering collaboration among the scientists, attracting new scientists, and ultimately stabilizing the Centre’s budget. Scientists preferred to pursue independent programs of research, with collaborations growing from those programs.) In these early days of the Wilson Centre, crucial intellectual and financial support was provided by Dr Arnold Aberman, Dean of the Faculty of Medicine, and Dr Alan Hudson, President of University Health Network. Their joint contribution to the establishment of the Wilson Centre and to its acceptance at both the university and hospital levels provided governance essential to the Centre’s initial steps.



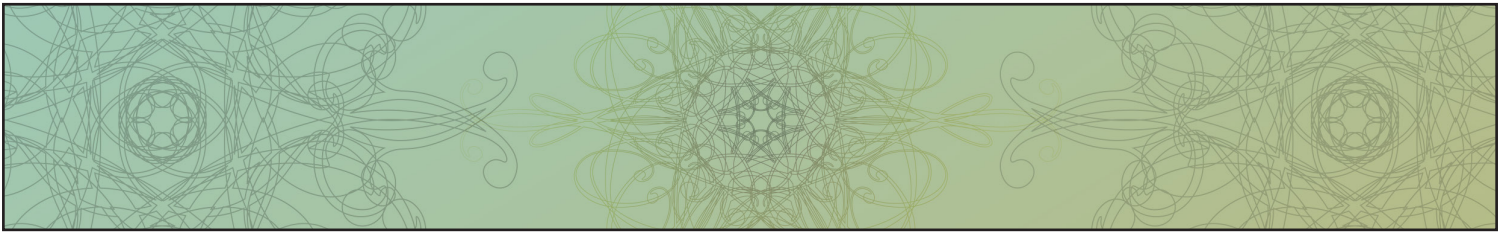
It is also interesting to recognize, in hindsight, the practical role undertaken by Dr. Reznick (1996–2002) to get the Centre up and running and successful (see Appendix 9.8). While he was consultative and accessible in that role, the initial structuring of the Centre required a balance of transformative and transactional management approaches (Van Wart, 2013) in which the leader's role was paramount and authoritative in making decisions about matters such as the aggregation of talent, the building of infrastructure, the establishing of scholarly events, and the creation of the Surgical Skills Centre. Looking back, it is evident that he was the right leader with the right mandate to get the Centre on a productive footing.

With Dr. Hodges's term as Director (2003–2011), the Wilson Centre's leadership needs were in a state of transition primarily because its reputation had been established, locally and abroad, and various scientists were entrenched in their own and collaborative research endeavours. Given the state of development of the Centre, Dr. Hodges, using a transformational leadership approach (Van Wart, 2013), was instrumental in broadening its scope in two significant ways. Firstly, he actively promoted a wider view of what was acceptable as legitimate knowledge in the health professions field. Using his own research and teaching approach as an example, he enabled his colleagues to appreciate and use the theories of Michel Foucault to guide how research questions were formulated, how such questions got answered, and what conclusions one could draw from the findings. This transition was not simply a matter of trading traditional research methodologies for (inadequately labelled) "qualitative research." It was a means to establish the place of theory in all research methods and to foster potential for producing new knowledges. Secondly, he encouraged scientists and researchers to think globally about their work and its implications across nations and cultures and to engage more fully in joint international and inter-medical-school collaborations.

Both Drs. Reznick and Hodges have received many awards for their research and leadership qualities. It is particularly noteworthy that each of them won what many consider to be the top global medical education award: The Karolinska Institutet Prize for Research in Medical Education. It is also to be noted that Dr. Lorelei Lingard, a former scientist of the Wilson Centre, and Dr. Geoffrey Norman, a current scientist at the Centre, have won this coveted prize. These prizes are a strong indicator that the Wilson Centre is the world's leading medical education research organization.

Dr. Whitehead assumed the role of Director in 2015 and is currently being evaluated by this review. At the time of her starting the directorship, the Centre was in a state of flux with the unexpected and premature departure of Dr. Ringsted (2013–2014). To Dr Whitehead's credit she quickly managed to get the Centre on track again by taking a distributed and democratic (Woods, 2004), rather than a top down leadership approach, appointing a number of associate directors with specific portfolios, actively engaging each of the scientists in decision making, and reinvigorating the Senior Management Committee. Moreover, she enlarged the national and international collaborative programs, always building strong and equitable partnerships such that international partners maintain their local authority and ultimately assume independent leadership.

At the research and scholarly level, Dr Whitehead has pioneered theory-based historical scholarship in health professions education research, enabling this method of knowledge production to be widely used and accepted, and she successfully began an Indigenous scholarship program by appointing Dr. Lisa Richardson as the lead and creating space and funding to move this innovation forward. But more than anything else, she oversaw and orchestrated the creation of the PhD degree, ensuring the long-term viability of researchers and research not just for the Centre but for the country at large and the health professions education research community globally. The establishment of these academic programs represent the most forward-minded and innovative initiatives undertaken by the Centre in its short history.



ACTIONS PURSUANT TO RECENT REVIEWS

Both the 2015 Review (see Appendix 9.2) and the 2017 Strategic Refresh Plan (see Appendix 9.1 and Appendix 9.9) emphasised the transition of the Centre to a graduate degree-granting status. To successfully incorporate and administer the PhD program required increased collegiality and collaboration between the scientists; new teaching, supervision, and research responsibilities; and an ethos reflective of a bona fide academic department. The PhD program, led by Dr. Mylopoulos and described elsewhere in this document, was launched in 2018. It was the culmination of a long process of planning and commitment. It already has changed the culture of the Centre in sharing ownership of the program and a strong sense of the Wilson community, hitherto not quite as obvious. There is little doubt that the PhD program will continue to be a major influence on the priorities and activities of the Wilson Centre.

Most of the remaining recommendations of the 2015 review were essentially housekeeping actions directed at minor adjustments, such as “clarify communication about terms of reference, policies and procedures,” and “sustain and enhance the positive culture and high morale of the Centre.” These recommendations have been enacted or otherwise resolved. For example, the terms of reference for all of the Centre’s committees have been reviewed and revised where necessary. The recommendation to increase ties to the Ontario Institute for Studies in Education (OISE) and other units at the University of Toronto was made redundant by the decision to house the PhD program with the Institute of Health Policy, Management and Evaluation (IHPME).

With respect to the 2017 Strategic Refresh Plan, three new priorities were identified:

1. “Encourage engagements with emphasis on Indigenous scholars.”

As noted above, Dr. Lisa Richardson was appointed as Lead of Indigenous Scholarship with a broad mandate to undertake and coordinate research and teaching activities. She was provided with a foundational budget and office space. In addition, a library was set up in the Centre which will house, among other collections, appropriate Indigenous books and literature.

2. “Sustain local, national and international collaborations.”

Actions regarding this recommendation are fully described in Section 8 of this report. In summary, the Centre continues to actively pursue local, national, and international collaborations designed to enrich its educational and research programs and to advance health professions education and research. Moreover, in line with the recommendation to “develop improved analytics of Centre’s activities and achievements,” mechanisms for tracking these collaborations, reports, and related documents are now being collected for analysis.

3. “Intensify funding activities.”

Again, the first priority is to put the PhD program on a sound financial basis. Dr. Jeannine Girard-Pearlman has been relentlessly pursuing various donors to fund this program and its students. When this is accomplished, the focus will switch to finding funds for the local, national and international programs to ensure that Wilson Centre scientists have opportunities to develop their research skills sets elsewhere.

In summary, the Wilson Centre was well served by the reviews, especially by the consistent pattern of evaluative recommendations which may be appropriately summarized as: “Keep doing what you have been doing and planning, while making minor adjustments to maintain your development momentum.”

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10. FUTURE DIRECTIONS

As it moves forward over the next five years, the Wilson Centre will continue to attend to the key initiatives that are currently in the process of development. Its commitment to education will involve the continued building of its doctoral program in health professions education research to ensure its sustainability. The Wilson Centre's commitment to science will be characterized by continued theoretical and methodological innovation, and enhanced engagement with issues of equity, diversity, and inclusion, including an Indigenous health education focus. The Wilson Centre's commitment to its people and community will be maintained through a supportive and collegial culture. Acknowledging the contributions of its joint governing institutions, the Wilson Centre is committed to seeking additional sources of revenue to ensure its financial and resource stability. Finally, the Wilson Centre will remain committed to nurturing its existing diverse formal and informal relationships and expanding its networks in new directions.

The process of this self-study has helped to bring a clearer focus to areas requiring improvement, and it has helped us to identify promising initiatives with potential to support or enhance research and education at the Wilson Centre. In this section of the report, we consider these opportunities in a series of key areas: education, science, people, resource stability, and relationships.

At the Wilson Centre, we are always keen to identify emerging opportunities. At the same time, this self-study process has, above all, reinforced the importance of remaining true to our core values and focusing our resources (human and financial) on key priorities. Setting realistic goals is especially important at this moment in the Centre's development. We have recently undertaken significant new commitments—most notably, launching our PhD program and advancing the Indigenous health education strategy—that will require active development and support while they are still taking root.

To ensure the success of these initiatives, they will remain our primary focus for the foreseeable future. We found that the self-study process assisted our community in honing our path forward rather than suggesting the need to embark upon new journeys entirely. A similar conclusion has been reached by past reviews of the centre. Reviews have consistently encouraged the Wilson Centre to remain true to its core mandates: creating new knowledge about education and educating the next generations of scientists and scholars in the field of health professions education research. This encouragement is apparent in the current Strategic Refresh Plan (appendix 9.1) and across past strategic plans throughout the history of the centre (Section 9).

The task of setting out future directions runs somewhat at odds with a key strength of the Wilson Centre: our openness to an emergent, rather than a prescriptive, approach to developing new ideas and directions. We focus, therefore, on strengthening the structures that allow us to recognize, cultivate, and ultimately mobilize such emergent ideas. By fostering a strong sense of community and encouraging cross-disciplinary and cross-profession conversations, we believe that education and research at the Centre will continue to thrive and to grow. We have begun conversations about how to measure and track the long-term impact of the Wilson Centre on the field of health professions education and on the success of its students.



EDUCATION

The Wilson Centre has made recent commitments to education that will require a significant ongoing focus over the next five years. As we continue to build our doctoral program in health professions education research (HPER), we need to ensure stability and sustainability in terms of graduate student funding, faculty teaching, and supervision. We will need to monitor our space requirements as we reach a steady state of 20–25 graduate students. Going forward, we may also need to reconsider the current mix of our educational offerings: while we recognize the importance of contributing to diverse educational programming, there may come a point where we need to ensure that priority areas are identified. Balancing education contributions and education research contributions will inevitably remain a productive tension to be managed by individuals and the Centre community. How, for example, will the current Fellowship evolve over time as the PhD program grows? Will our atelier offerings possibly shift in future years? How will we balance existing local, national, and international relationships while remaining open to future exciting possibilities? Paying attention to issues like these will allow us to make wise choices about future initiatives.

SCIENCE

Rigorous knowledge creation will continue to be our core work as a theory-driven research centre. We expect to continue to push boundaries and engage in ongoing theoretical and methodological innovation. This boundary-pushing includes asking questions that are timely and potentially uncomfortable, seeking innovative ways to answer those questions, and using theory to orient our interpretation of findings. The Centre's strong commitment to curiosity-driven research and academic freedom remains a foundational value.

The process of this self-study report has revealed that there is significant commitment to equity, diversity and inclusion (EDI) work among scientists, researchers, and fellows at the Wilson Centre. Many were quick to volunteer examples of how their research is relevant to these topics. This focus, however, remains quite new and emergent for the Wilson Centre as a whole. For example, at a programmatic level, we have only begun to build initiatives related to Indigenous health education, and we anticipate that this will be one important aspect of our growth over the next five years. We know that to do this work in culturally appropriate ways, we will need to engage with Indigenous colleagues and communities as well as continuing to strengthen connections with others across the University of Toronto (U of T), the Toronto Academic Health Science Network (TAHSN), and beyond.

The Centre has, for the most part, deliberately avoided predetermined theoretical themes or research priorities. (The recent Indigenous health education focus is an exception.) On principle, we value academic freedom and curiosity-driven research. These core values underpin our approach to education science. At the same time, various groupings have developed whereby people's interests coalesce around a topic or theme. Often, these themes reflect our members' collective attunement to societal and healthcare trends. Globalization, integration, competency-based medical education, and simulation are but a few examples of topics that have brought researchers (within the Centre and beyond) together in loose networks. Through these networks, we have learned strategies for enabling and cultivating, rather than specifying and mapping out, thematic foci.

Several new areas of shared interest are emerging. Patient voice, equity, and accreditation are a few areas that appear to be coming to the fore. Another example is Artificial Intelligence (AI). Collaborations are being built with TIER and other Centres of Excellence to enable AI-related education research. There is a new Wilson TIER journal club, and several Scientists have developed AI curricular materials. Other timely healthcare issues that will also likely command the attention of members of our community, including climate change, wellness, and technological integration.



PEOPLE

A strength of the Wilson Centre is its tight-knit and supportive community. In the next five years, we know we need to maintain this culture of collegiality and continue to recognize the importance of our Scientists, Researchers, Fellows, Graduate Students, and Staff.

In the reports of members (see Member Report, Sections 11 and 12) Scientists and Researchers have identified the importance of paying attention to the epistemological and methodological mix of our members, as maintaining theoretical diversity is highly valued. They also note that absence of tenure and limited sabbatical options constrain career development. This is a structural issue beyond the control of the Wilson Centre; while continuing to advocate for tenure, we also need to look for alternate forms of support for professional advancement. Going forward, whether or not tenure or sabbaticals become an option, we will continue to seek ways to support career development, career advancement, and leadership opportunities for our Scientists and Researchers, within the Centre, across U of T/TAHSN, and beyond. For example, some of our Scientists have been able to negotiate mini-sabbaticals with their programs and departments. One fundraising priority in the next five years is to establish a competitive fund to provide financial assistance for career development opportunities.

The learners' report identifies two areas for potential improvement of our learning environment (as it has been experienced over the past five years). We should take care not to reproduce a “divide” between sociological and cognitive perspectives (see Learner Report, Section 13). We should also increase transparency about Wilson Centre operations, especially related to leadership opportunities. So far, our learners appreciate recent changes to increase transparency about Centre operations and learner leadership opportunities. For example, we have established explicit, usually student-led, processes for inviting Fellows to join committees, and we have adopted clear criteria for funding one student per year to attend a coveted international meeting. As our learner group evolves with the growth of our doctoral program, we will need to be vigilant to ensure that all of our learners are able to be successful and engaged members of the Centre.

Many have recognized that the success, character, and strengths of the Wilson Centre are strongly associated with a core group of exceptional individuals who have been an integral part of the Centre since it was first established. We acknowledge the critical roles that Staff play, not only in supporting the learners, scientists, and researchers, but also in contributing to the academic mandate of the Centre. In the past five years, Doug Buller's creation and leadership of the highly successful Say Something Atelier is one compelling example. We recognize the contributions of members of our community who do not fit neatly into one of the standard categories for academic centres. Niall Byrne's and Jeannine Girard-Pearlman's exceptional contributions to multiple facets of the Centre, for example, have greatly enriched our community.

Our aim is to ensure that the Wilson Centre attracts, supports, and inspires talented people now and in the future. As one important strategy, we will continue to ensure that we are not overly constrained by traditional role descriptions, and that we include, recognize, provide career advancement opportunities for, and honour the expertise of all who participate in our community.

FINANCIAL AND RESOURCE STABILITY

It is obvious that one foundational future priority is ensuring that the Centre has financial and organizational stability. We acknowledge the consistent and ongoing strong support of our joint governing institutions, the Faculty of Medicine and University Health Network (UHN), in this regard. We recognize that, particularly in times of fiscal restraint, we cannot rely upon others to find us additional resources. Going forward, we will continue to seek opportunities for revenue generation. This work will build upon successes in the past five years, during which we have generated revenue from ateliers and from the creation of Wilson Centre Consulting. We will also continue to work with the UHN Foundation and U of T Faculty of Medicine Office of Advancement.



INTERNAL AND EXTERNAL RELATIONSHIPS

Across most sections of this self-study, the importance of internal and external relationships is highlighted. Clearly, the strength and relevance of the Centre can be seen through our multiple and diverse formal and informal relationships. Going forward, a key priority will be to continue to nurture and build our many established relationships while expanding our networks in deliberate ways. These networks enable knowledge translation, establish supportive communities for scholarly educators, and facilitate resource sharing, increasing the impact of our work.

Locally, we intend to continue fostering our networks across TAHSN and U of T. This includes collaboration with other education category C Extra-Departmental Units (EDU:Cs) including the Centre for Faculty Development (CFD) and the Centre for Interprofessional Education (CIPE). We will also continue to prioritize maintaining and strengthening our connections with the many education research groups across TAHSN hospitals, including the Applied Education Research Operative (AERO) at Unity Health Toronto, the HoPingKong Centre for Excellence in Education and Practice (CEEP) at Toronto Western, the Sunnybrook Education Research Unit, and the Centre for Ambulatory Care Education (CACE) at Women's College Hospital. Toronto is recognized internationally as a hub for health professions education scholarship. This Toronto strength comes in part from the collaboration across U of T and TAHSN education units, departments, and programs. Our close collaborative relationships and interrelated mandates enable us to share expertise and manage resource needs while remaining grounded in our own specific foci. The recent launch of The Institute for Education Research (TIER) provides exciting new opportunities to further expand local networks over the next five years.

Nationally and internationally, we will also carefully cultivate key relationships. For example, we will strengthen existing relationships with organizations including the Royal College of Physicians and Surgeons of Canada (RCPSC) and the College of Family Physicians Canada (CFPC). We also intend to strengthen and expand our connections to other Canadian research and education centres. Internationally, we plan to continue to build existing international collaborations such as the Toronto Addis Ababa Academic Collaboration (TAAAC) and the Health Outcomes and Medical Education Research (HOMER) unit, while exploring possibilities for new partnerships. As part of this work, we hope to consider ways to provide more opportunities for our learners to participate in international exchanges and partnerships.

While the Wilson Centre's core strength lies in the creation of education science and the preparation of education scholars, researchers, and scientists, our many networks and relationships are critical to bringing cutting-edge education science into practice. Translating education science into practice is potentially much more straightforward than effective knowledge translation in other scientific domains. One recent example is the engagement of Wilson Centre Scientists in the MD program's curriculum renewal. Wilson Centre scientists have also partnered with educators, leaders, and patients to inform UHN's strategic priorities related to education, compassionate care, and quality and safety. These partnerships have included joint research and scholarship activities, in addition to strategic planning at various levels of the organization. For example, Wilson Centre Scientists and Researchers have worked with the Patient Experience portfolio at UHN to develop, refine, evaluate, and share knowledge about practices of patient engagement and patient-centred care.

Examples of this kind epitomize the work of the Wilson Centre and the practical value of theoretical research. Others have been highlighted throughout this self-study report. In the next five years, we will continue to collaborate widely to ensure that new education science findings are disseminated and implemented. In this way, the science and education of the Wilson Centre can make ongoing meaningful contributions to improving health professions education and healthcare practice. This translational work will continue to drive our science forward.

11. REPORT OF MEMBERS: SCIENTISTS

Wilson Centre scientists are committed to academic excellence and to advancing knowledge relevant to health professions education. The diversity of disciplinary and multidisciplinary approaches that characterize Scientists sets a stage for enhanced scientific creativity. Coupled with a culture of excellence, this allows a collective creativity and an ethos of critical thinking in the application of theory-informed research that challenges the ideas that predominate in the field of health professions education research. The distributed leadership of the Wilson Centre allows Scientists to make contributions to shaping the field as individuals and as a collective unit for future excellence.



DESCRIPTION OF CATEGORY: SCIENTIST MEMBERS

Wilson Centre Scientists are integral to advancing the academic mission of the Wilson Centre. There are two categories of Scientists: Centre Scientists and Cross-Appointed Scientists (refer to Section 2 and Appendix 2.2 for a description of Wilson Centre membership categories). As Scientists, these membership categories reflect the same level of academic excellence. Further, both categories reflect role descriptions that include devoted time to a theory-driven program of research that advances knowledge relevant to health professions education. The difference between the two categories is predominantly related to where the Scientist locates a primary academic “home” and associated accountabilities.

Centre Scientists hold roles that have been created through written agreements between the Wilson Centre and University of Toronto (U of T) or Toronto Academic Health Sciences Network (TAHSN) programs and departments. Centre Scientists are provided with office space at the Wilson Centre as well as shared administrative resources. As part of this arrangement, Centre Scientists are expected to play an active role in teaching, mentorship, and supervision of Fellows and students; attending Wilson Centre Scientist meetings and; sharing administrative responsibilities related to the advancement of the Wilson Centre’s academic mission.

Cross-Appointed Scientists normally have a primary research appointment within the broader U of T or TAHSN. Cross-Appointed Scientists do not have a formal employment relationship with the Wilson Centre and are not expected to assume administrative responsibilities related to the operational functions of the Wilson Centre. However, these Cross-Appointed Scientists participate in close research collaborations with Core Scientists, attend Scientist meetings; co-supervise Wilson Centre Fellows and students in accordance with the School of Graduate Studies guidelines; teach as Faculty in the Wilson Centre Doctoral Program and ateliers; and participate in the leadership of any of the core activities of the Wilson Centre.

In practice, the Centre Scientists and Cross-Appointed Scientists do not distinguish themselves from one another. Instead, they each identify as Wilson Centre Scientists. For the purposes of this self-study report, we will reflect the views and vision of Wilson Centre Scientists as a unified category of membership.

At the time of this report, there are twenty Wilson Centre Scientists. The programs of research of each Scientist has been described elsewhere in this self-study report and will not be reiterated here. We will summarize to say that our Wilson Centre Scientists reflect a range of professional backgrounds, areas of study, methodological traditions, and academic disciplines. What they hold in common is a high standard of academic rigour, international reputations as leaders within their respective fields, and positions of both influence and impact within various organizations.

SCIENTIST PERSPECTIVES ON THE WILSON CENTRE

Views and vision of Scientist members were collected through a combination of group conversations, individual interviews, and emailed responses to questions about the nature and meaning of Scientists’ relationships with the Wilson Centre.

While the questions were not structured around the core practices of the Wilson Centre (as described in the Executive Summary of this self-study report), the resultant responses were clearly aligned in ways that related to each of these practices. This finding suggests that the core practices are both well recognized and well appreciated within the Scientist membership category.



CORE PRACTICE #1: ENHANCE A RANGE OF DISCIPLINARY AND MULTI-DISCIPLINARY APPROACHES

The recognition, appreciation, and nurturing of a range of disciplinary and multi-disciplinary approaches to research is a much-valued aspect of Wilson Centre membership. As these two Scientists commented:

Crossing traditional departmental structures and disciplinary boundaries, the Wilson Centre leverages unique perspectives on health professions education to create a stimulating research environment rich with opportunity for discussion and collaboration. This interdisciplinarity also challenges us as Scientists to think critically and push boundaries to advance the field of health professions education.

Catharine Walsh

The Wilson Centre is the perfect place where basic and applied science meet and cross-pollinate.

Mathieu Albert

This range of disciplinary and multi-disciplinary approaches has several layers of impact for the Wilson Centre Scientists. First, developing and continuing to stretch the ability to speak across multiple paradigms translates into greater creativity within one's own research program. As the following Scientist commented, research questions, new implications, and new areas of study emerge through the intersections that are fostered at the Wilson Centre:

Being at the Wilson Centre is a special privilege because the work I do is informed by inter and transdisciplinary exchange with colleagues who approach the phenomenon of inquiry through other perspectives. They give me new concepts, theories, and language to describe the work and together, our co-created understanding helps to inform the field.

Anonymous 1

Further, being able to speak about one's own research both within and across these paradigms translates into a better ability to speak about one's research outside of the academic arena, translating into greater research impact for this Scientist:

Through (skills developed at the Wilson Centre), I am able to better integrate multiple perspectives when I listen to and converse with colleagues, I am able to have more productive discussions and arguments about the science and evidence generated in our field, and I – hopefully - am better able to connect with a wider audience through oral and written presentations of my work.

Ryan Brydges

Finally, being associated with the Wilson Centre as a Scientist also sets the conditions to create even more collaborations and inter-disciplinary connections. Given the international reputation of the Wilson Centre, Scientists are immediately recognized as high-caliber researchers within the field of health professions education when they introduce themselves at various national and international conferences. These introductions have led to productive research relationships that many of the Scientists felt would not have been possible without the support and reputation of the Wilson Centre. A Scientist summarizes this theme concisely:

The Wilson Centre is a tightly knit local community with a strong reputation that enables one to join and build broader communities nationally and internationally.

Stella Ng



CORE PRACTICE #2: ENGAGING IN THEORY INFORMED APPROACHES TO RESEARCH

Scientists describe the Wilson Centre as an inspiring place to both explore and contribute to theory-informed research. In addition to the opportunity to explore a breadth of theory – an opportunity that is fostered through the multidisciplinary environment – Scientists also report the opportunity to delve deeply into a specific theoretical area. The expertise of Scientists in their own theoretical domains is already well reflected in other sections of this report. In this section, we will highlight how members' relationship with the Wilson Centre has contributed to these possibilities.

First, Scientists report a shared expectation of excellence amongst the Scientists. It is this “combination of critical thinkers who are equally dedicated to excellent work” that inspires a sense of collective creativity. In belonging to this community of academics, individual Scientists feel both supported and inspired to “dig deep and bring their best”, challenging their own ideas and the ideas that currently predominate in the field.

Another Scientist commented:

Through my involvement with a diverse group of scholars, I have been inspired to explore theoretical issues related to health professions education research and questions of methodology.

Anonymous 2

The level of theoretical conversation that is possible at the Wilson Centre stands out as a unique feature of this community, where one Scientist commented:


The Wilson Centre's thriving community of practice serves to foster translation of new knowledge by promoting creative synergies between diverse theoretical perspectives, and between theory and practice.

Catharine Walsh

It is this connection to theory that ensures the research produced by Wilson Centre Scientists has wide applicability beyond each individual study site. This commitment to theory-informed and theory-producing research is part of what makes Wilson Centre Scientists so successful. Further, through the description of the Scientist roles and the requirement of time dedicated to a research program, the Wilson Centre also advocates for the protection of time and intellectual space that is required for this level of academic work. The explicit description of a Scientist role as having time dedicated to leading a research program was seen as important enabler of this kind of deep scholarship. Scientists very much value this dual commitment to high quality work and to the protection of the time and space required for that level of work. The Scientists argue that the display of this dual commitment is one of the ways their membership with the Wilson Centre “sets the conditions for our best work”.

CORE PRACTICE #3: ENSURING EFFECTIVE DISTRIBUTED AND DEMOCRATIC LEADERSHIP

The past five years have brought forward several important, impactful, and highly visible displays of leadership and support for the vision and mission of the Wilson Centre. Scientists expressed their excitement and support for the launch of the new PhD program, recognizing the enormous effort and leadership that was required to bring that program into fruition. The establishment of that program is perceived as an enormous “vote of confidence in the role and reputation of the Wilson Centre” in the field of health professions of education. Scientists also perceive the launch of The Institute of Education Research (TIER) at University Health Network (UHN) as another display of institutional support, indicating a strong future for the Wilson Centre in these intersections between teaching, learning, and practice. As another display of the democratic and distributed leadership that shapes the Wilson Centre, Scientists have been integrally involved in shaping the vision of TIER and are among the first cohort of cross-appointed scientists at this research institute.



With the launch of TIER, I see new leadership opportunities along some really interesting and important streams of activity. And I really value the connection to a hospital network. I think this is really going to open up how we think about education and how we think about the future of health care. I am inspired by the role the Wilson Centre has had in shaping this Institute and am excited to be part of this work.

Paula Rowland

Scientists believe these programs will certainly lead to more leadership opportunities, providing a much-needed ladder for career advancement and growth.

While the PhD program and the launch of TIER reflect the most recent culmination of longstanding leadership activities, Scientists also recognize that these accomplishments build upon a long history of democratic and distributed leadership throughout the Centre. Specific examples of support for Scientist leadership included: support to lead or co-lead various ateliers, support to take on leadership roles in international programs, and support to take on various strategic roles within U of T and/or TAHSN. Together, these kinds of opportunities and displays of support reflect the core practices of leadership that help shape the Wilson Centre currently, but also shape future possibilities for leadership development among the Scientists themselves. This is a highly valued aspect of membership within the Wilson Centre.

CORE PRACTICE #4: AWARD AND PROMOTE EXCELLENCE

This core practice of awarding and promoting excellence is visible in Scientist comments along three main categories:

1. Individual excellence
2. Collective excellence
3. Future excellence through a focus on students and Fellows

A commitment to individual excellence has already been displayed in the comments about support for individual Scientists, the importance and reach of the Wilson Centre's reputation and the kinds of opportunities that affords to each Scientist, and the value of having an institutional commitment to a dedicated amount of time to lead a program of research. This commitment to individual excellence – achieved through community and collegiality – is nicely encapsulated in the following quote:

The Wilson Centre provides a community and a sense of belonging. I am a 'lone scientist' in a hospital. Having a group of scientists who come together at the Wilson Centre is incredibly valuable to me and pushes me to be a better scientist.

Anonymous 3

A commitment to collective excellence is reflected in comments about the collegiality within the Wilson Centre, where:

The respect and collegiality among scientists, leadership, and fellows makes this relationship to the Wilson Centre meaningful. It makes you feel that there is a support system that is there to help you achieve your goals.

David Rojas

The respect and collegiality are reciprocated such that Scientists perceive the “research network of the Wilson Centre – one that is based on principles of teamwork – where the ultimate goal seems to always be the benefit of the Centre instead of just individual benefit”. As one Scientist quotes:

“A rising tide lifts all boats”. The Wilson Centre provides the opportunity to elevate each other and increase our collective contribution to health professions education research and practice.

Walter Tavares



The effect is that individual excellence and collective excellence reinforce one another for the members of the Wilson Centre. Scientists have recognized and continue to appreciate the practices of alerting one another about potential awards, supporting one another's award nominations, offering advice on grant applications, serving as "critical friends" to support manuscript writing, and taking the opportunities to recognize and support one another's work in public venues.

Finally, the Scientists also comment on the commitment to future excellence. As is reflected in the various awards achieved by the Scientists, the individual commitment and capacity for mentorship and teaching among the Scientists is exemplary. In this section of the report, we focus on the role of the Wilson Centre in helping the Scientist achieve this excellence. For example, Scientists recognized the efforts and support of the Wilson Centre to help them achieve academic promotions and full status in the School of Graduate Studies:

Wilson Centre Scientists supported me through the academic promotions process, and that support was invaluable. Individuals identified me for awards and others provided me with their promotions package. I attribute this support as a main reason for being promoted to Associate Professor.

Sophie Soklaridis

While this support is certainly helpful for the individual Scientist, supporting scientists to achieve academic promotion also ensures the sustainability of the academic mission by increasing the number of scientists who are qualified to supervise PhD students. Another practice that was noticed by the Scientists was the intentionality that was put towards inviting junior members of Faculty to participate on graduate student committees.

[Participating on graduate student committees] helps build my familiarity with the University policies and also provides me an opportunity to continue to develop my mentorship and supervision skills.

Paula Rowland

The PhD program and the Fellowship program are perceived as setting the stage for a vibrant future in health professions education and the Scientists recognize how their membership in the Wilson Centre helps them contribute to this future excellence by creating supportive environments for students:

The Wilson Centre's fellowship and PhD programs enable my graduate students to receive rigorous training in the science of health professions education, intensive mentorship and exposure to diverse theoretical perspective and methodologies, positioning them to emerge as leaders in health professions education research.

Catharine Walsh



VISION FOR THE FUTURE

WHAT TO KEEP

Taken together, the current comments from Scientists and the observation of a low turn over suggest a high degree of satisfaction amongst the Scientists. This is also reflected in a very low level of turnover amongst the Scientists, with only three leaving in the last five years. Of those Scientists, one changed membership categories at the Wilson Centre (from Scientist to Researcher), reflecting a shift in her other commitments and leadership responsibilities. The other Scientist left academia to pursue a career in the private sector. The final Scientist left for a tenure-track job at another university. Consistent with themes from other reviews and self-study reports at the Wilson Centre, a culture of collegiality persists and the Wilson Centre should work to maintain this culture.

As part of this culture of collegiality, many of the Wilson Centre Scientists note the value of having such a tight knit community. Indeed, many of the Scientists are able to reflect on their own time as a Fellow with the Wilson Centre. For those Scientists that have taken the path from Wilson Centre Fellow to Wilson Centre Scientist, there has often been a circuitous route. Following their Fellowship, these Scientists worked in other organizations, developed other networks, connected with other professions, and otherwise expanded their academic networks. In returning to the Centre as Scientists, these individuals brought with them these extended networks. This is also a feature that the Wilson Centre should strive to keep. In training and graduating Fellows that become leaders in health professions education research, it can be anticipated that many graduated Fellows will find their way back to the Wilson Centre. The high caliber of Fellows is what helps the Wilson Centre thrive. What complements this continuity is the ever-expanding networks that the Scientists bring with them as they develop their own programs of research, following the trajectory from Fellow to Scientist. These ever-expanding networks – and the support to continue to nurture these networks as Scientists – is part of how the Wilson Centre continues to grow. Scientists should continue to be encouraged to develop their networks, develop collaborations, and expand their boundaries all the while having the foundation of the Wilson Centre as their academic home.

WHAT THERE COULD BE EVEN MORE OF

As has been mentioned in other reports and other reviews, the presence of both sabbatical and the possibility of tenure would do much to support the ongoing creativity and productivity of the Scientists. Further, given the core practice of enhancing disciplinary and multidisciplinary approaches, the Scientists advise keeping a careful eye on the diversity of professions, as well as the diversity of methodological, epistemological, and philosophical approaches that fuel the various Scientists programs of research. As one Scientist noted, “we have lost a great deal of effective experimentalist researchers at our Centre and across the field more broadly”. There is a desire to ensure the field – and the Wilson Centre - do not lose out on the various perspectives that the broad range of health professions education research may deliver. To actualize the promise of multidisciplinary approaches requires intention and an ability to cultivate disciplinary diversity in a meaningful way. Scientists would like to see those practices of disciplinary diversity continue, being ever mindful of the inevitable shifts that will happen across research domains and research programs that could potentially manifest as disciplinary lacunae within the Centre.

SUMMARY

In summary, this report from the Scientist members reaffirms the Wilson Centre’s declared vision and mission. Further, these comments reflect how membership in the Wilson Centre has helped Scientists achieve these individual and collective aims of: fostering the discovery of theory and new knowledge, promoting creative synergies between diverse theoretical perspectives, and cultivating future leaders in healthcare education and practice.

12. REPORT OF MEMBERS: RESEARCHERS

Wilson Centre Researchers play an important role in advancing the Wilson Centre mission through collaborations with Scientists and participation in Wilson Centre events. From various clinical, disciplinary, graduate and professional backgrounds, the heterogeneity of Researchers reflects the commitment of the Wilson Centre to increase diversity within health professions education research. This diversity allows for the sharing of theoretical, methodological and conceptual perspectives within the Wilson Centre community and in the broader health professions education community. Researchers are regularly active in Wilson Centre educational programs, events and committees. Wilson Centre Researchers collaborate with Scientists and other members of the Researcher group, leveraging their collective roles to apply theoretically-informed research approaches to support educational practice and change. The relationship between the Wilson Centre and Researchers is a reciprocal one: the Wilson Centre enriches the experience of Researchers, and Researchers bring expertise that strengthens the Wilson Centre's activities.



DESCRIPTION OF CATEGORY: RESEARCHER MEMBERS

The Wilson Centre currently has 15 Centre Researchers and 20 Cross-Appointed Researchers. The Researcher categories were created to address the two types of researcher university appointments. Centre Researchers have their primary research appointment within the Wilson Centre and are expected to assume appropriate administrative responsibilities related to the functioning of the Wilson Centre, whereas Cross-Appointed Researchers have their primary research appointment within the broader University of Toronto (U of T)/Toronto Academic Health Science Network (TAHSN) academic community, and are not expected to assume administrative responsibilities related to the functioning of the Wilson Centre. Members of both groups have specified research responsibilities in conjunction with educational, administrative, or clinical responsibilities; may serve as principal investigators or co-investigators in programs of research that advance knowledge relevant to health professions education; and play an important role in advancing the academic mission of the Wilson Centre through research collaborations with Scientists and participation in Wilson Centre events. For the purposes of this report, we refer to both groups as ‘Researchers’.

DIVERSITY OF RESEARCHERS

The Researcher group reflects the Wilson Centre’s commitment to increase diversity of representation of voices in health professions education research as well as disciplinary and interdisciplinary approaches to answering research questions. The Researcher group consists of individuals with varied clinical (e.g. medicine, dentistry, rehabilitation), disciplinary (e.g. sociology, humanities, management) and graduate (master’s and doctorate) professional backgrounds. The group includes Researchers who are at early stages of their academic appointments through to Researchers with senior leadership roles such as directors or vice deans of education programs. The Researchers represent a wide range of departments and institutions (e.g. Family and Community Medicine, Surgery, Centre for Addiction and Mental Health, Pediatrics, Critical Care) across TAHSN and U of T, with affiliations across the continuum of medical and health professional learning (undergraduate, postgraduate, faculty development). The Researchers’ diversity is similarly represented in their research studies and programs, including topic areas such as assessment, feedback, international medical graduates, simulation, digital education, curriculum renewal, academic leadership, gender issues in medical education, and patient-centred care.

Some Researchers have become affiliated with the Wilson Centre following their training as Wilson Centre Fellows whereas others have connected through exposure to Wilson Centre activities and/or collaborations with its Scientists or other Researchers. The number and diversity of Researchers is also a tribute to the Wilson Centre leadership’s role in advocating for health professions education scholarship broadly, and, in some cases, on behalf of individual Researchers. The diversity described above sets the stage for the sharing of diverse theoretical, methodological and conceptual perspectives across clinical, professional and organizational contexts and boundaries, and a rich array of research collaborations. These opportunities contribute to the Wilson Centre’s aim for cross-cutting and in-depth research in health professions education that has a significant impact on practice.

[The Wilson Centre is] A critically important space in my intellectual life.

Arno Kumagai

I greatly appreciate the willingness of scientists and fellows at the Wilson Centre to collaborate with other health professions educators such as myself. Those opportunities are important to advancing education research at my Faculty.

Laura Dempster



RESEARCHERS EMBEDDED IN WILSON CENTRE ACTIVITIES AND LEADERSHIP

The Researcher group is integral to the Wilson Centre's mission, activities and operations as apparent by the Centre's efforts to include them in its communications and activities and as members of its committees.

The Researchers are on the Wilson Centre listserv and receive the monthly newsletter, notifications of Wilson Centre rounds and special guest speakers, and Wilson Centre events. Researchers regularly attend and present their work at Richard Reznick Research Day and Brian Hodges Symposium; participate in programs such as the Wilson Centre social theory reading group and the Bayfield meeting; and teach at the Fellows sessions and Wilson Centre ateliers. These opportunities are valuable for professional development, networking, and knowledge translation. Beginning in 2018, the Wilson Centre has also organized a dedicated Researcher Event, linked to the Hodges Symposium, to strengthen the connections between the Wilson Centre and the Researcher community. In 2018, a number of Researchers and Scientists spoke about their collaboration experiences with the aim of encouraging further such research partnerships. In 2019, four Wilson Centre Scientists spoke about major initiatives occurring in the Wilson Centre (consultations, graduate program, membership categories, The Institute for Education Research (TIER) at the University Health Network (UHN)) in order to inform Researchers about these initiatives with the hope of engaging them in various capacities that are relevant to their roles and interests.

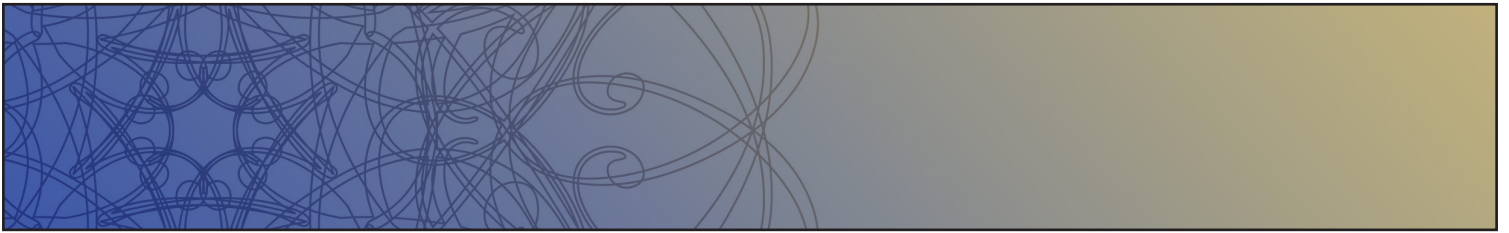
Each Wilson Centre committee, including Senior Management, has researcher representation. This organizational structure supports the ongoing integration of the Researchers into the Wilson Centre and regular interactions between Researchers, Scientists and Fellows. Researchers on the Senior Management committee ensures that the group's interests and needs are represented and accounted for in the day to day operations and decision making of the Wilson Centre. The distribution of Researchers across Wilson Centre committees allows the Wilson Centre to draw upon the expertise and experience of these individuals. For example, Researchers on the annual Hodges Symposium and Reznick Research Day committees allow for a wider range of perspectives to inform the planning of each day, such as the patient engagement panel at the 2019 program, and Researchers on the Wilson Centre graduate program selection committee can bring their clinical and research expertise to inform discussions about applicants.

PARTNERSHIPS AND COLLABORATIONS

Partnerships and collaborations between Researchers and Scientists and within the Researcher group are critical to the Wilson Centre commitment to award and promote excellence in research funding, execution, publications, research supervision and teaching, and for its research to impact education practice.

There are many instances of collaborations between Wilson Centre Researchers and Scientists. These collaborations are enabled through various organizational structures. Some collaborations evolve from prior fellowship-supervisor relationships. Others occur as a result of the positioning of Wilson Centre Scientists within other spaces, such as the Department of Family and Community Medicine and Centre for Faculty Development. Furthermore, others occur due to networking and alignments of areas of expertise and interest.

In some cases, these collaborations are on large and long-term initiatives and goals. For example, Drs. Marcus Law and Maria Mylopoulos collaborate closely on the evidence-based design and implementation of the MD Program Curriculum, including ongoing research and evaluation; Drs. Risa Freeman and Mahan Kulasegaram collaborate on building education scholarship capacity in Department of Family and Community Medicine and in the joint mentorship of newly engaged faculty as well as the evaluation of this work. Projects include new curriculum implementation and evaluation on a theoretical basis to exploratory work on Big Data to link education to clinical outcomes; Drs. Lynfa Stroud and Ryan Brydges have leveraged her expertise in the systems of clinical education and healthcare delivery, his expertise in knowledge synthesis and research design, and their mutual expertise in mixed methods research to complete several collaborative education research projects



that have been recognized as innovative, and have resulted in many peer-reviewed grants and publications. In other cases, Researchers and Scientists collaborate on specific research projects or papers. For example, Dr. Joanne Goldman collaborated with Dr. Ayelet Kuper and other research team members on a research project and a scoping review that have brought a theoretical perspective to quality improvement education. There are also many instances of collaborations between Researchers, such as a project by Drs. Susan Glover Takahashi, Jana Lazor and Karen Leslie on a model of evolving relationships and roles in faculty development and curriculum development during curriculum renewal and innovation. These collaborations enable multiple impacts, including the opportunity for Scientists to support theoretically-informed approaches to education research, for frontline educators to inform research questions and priorities, and for theoretically informed and evidence-based research findings to contribute to educational practice and support educational change.

The collaborations extend beyond research projects to a multitude of other types of collaborations. For example, relationships between Researchers and the Wilson Centre allow for joint hosting of guest speakers and special events, such as the hosting of Dr. Tanya Horsley by the Wilson Centre and PostMD Education in 2019; joint mentorship and supervision of Fellows such as the Wilson Centre–HoPingKong Centre for Excellence in Education and Practice joint postdoctoral fellowship; support for each other’s graduate students and health professional learners; and ongoing informal mentorship from Scientists for Researchers.

As an applied researcher, I highly value the theoretical perspective that the Wilson Centre scientists bring to their work and their accompanying ability to trigger new insights and perspectives in my own thinking.

Joyce Nyhof-Young

It is also good to get to know the young scholars and learn about their work. An example of the benefit of this is that I have met (name) 3 or 4 times over the past few years, two of those times at social events we spoke on different areas of research. Now (name) and I are collaborating...

Susan Glover-Takahashi



PROFILES OF THREE RESEARCHERS THAT EXEMPLIFY THE ABOVE THEMES

DR. CLARE HUTCHINSON

Dr. Clare Hutchinson began her journey with the Wilson Centre as a Fellow in 2009 and upon completion of her master's in Health Professions Education and appointment as an academic pediatrician at North York General Hospital, became a Centre Researcher. Clare describes her relationship with the Wilson Centre as 'reciprocally beneficial'; the Wilson Centre has enriched her work as a researcher, educator and clinician, and she, in turn, has brought her professional expertise and experience to support and strengthen the Wilson Centre's mission and activities.

In 2015, when Clare was appointed the longitudinal integrated clerkship (LIC) physician lead at North York General Hospital, she recognized the opportunity to bring a research lens to the implementation of this new curriculum. While she had trained as a master's Fellow at the Wilson Centre, she attributes her ability to then lead a research program to the continued mentorship that she received from Wilson Centre scientists who were also members of her research team. Clare credits the conceptualization of rich research questions about physician identity formation and integrated learning, the use of a theoretically informed approach, and successes with disseminating study findings, to her collaboration with the Wilson Centre scientists. This research project has not only had important implications for medical curriculum changes but has also led to further professional opportunities for Clare which have widened her impact on the field and practice of education more broadly. These include invited talks about her education scholarship and education research review work for pediatric rheumatology journals. In addition, Clare is beginning a new role as the clerkship learning outcomes lead at U of T with the aim of harmonizing the learning outcomes for the clerkship courses to align with entrusted professional activities and exit competencies.

Clare appreciates the opportunity to 'give back' to the Wilson Centre, with the Centre embracing the diversity and expertise that Researchers bring to the Wilson Centre's work. Clare's 'hands on' experience as a pediatric education lead and community pediatrician allows her to bring a frontline perspective to research focused discussions at the Wilson Centre. Clare's involvement has included being a panel member about competency-based assessment at Reznick Research Day in 2016, a presenter on her experiences as a Researcher at the 2018 Researcher annual event and a Currie Fellowship Committee member.

Clare highly values the opportunities to bring her medical, curricular, research, and theoretical lenses to her varied education and academic activities, and sees the Wilson Centre as playing a key role in this success.



DR. SANJEEV SOCKALINGAM

As a clinician-scientist and VP Education at the Centre for Addiction and Mental Health and Professor of Psychiatry at the University of Toronto, Dr. Sanjeev Sockalingam has found his Centre Researcher role within the Wilson Centre as an invaluable community of practice in his overall career development. Sanjeev became a Centre Researcher in 2015 following his appointment as Director of Curriculum Renewal in the MD Program. After completing a master's in Health Professions Education at the University of Illinois Chicago, he was keen to grow his education research career and seek a collaborative network of scientists to further establish his program of research in health professions education. Through close collaboration with Wilson Centre scientists, such as Dr. Maria Mylopoulos, he was able to further develop his research skills and integrate new theoretical paradigms into his research in lifelong learning and preparation of clinicians for complex clinical settings, such as integrated mental health care. In addition, several fellows and graduate students he has supervised have benefited from this strong community of scientists and range of perspectives, further enriching their training and career development.

The Wilson Centre has provided Sanjeev with key collaborators and research partnerships to advance several system initiatives with a scholarly lens. For example, the Medical Psychiatry Alliance was a systems approach to creating capacity for integrated medical psychiatry care from undergraduate medical education to continuing professional development. The ability to learn from Scientists within the Wilson Centre community enriched the perspectives and skill sets to approach this systems-based education program. It has resulted in formative experiences and critical lenses that he uses in his current setting and approach to build education research capacity within Psychiatry and his hospital. Moreover, the Wilson Centre remains a strong collaborator and support for emerging clinician-educators and medical education researchers for individuals he mentors. Through this affiliation, he has been fortunate to create a robust network of education researchers and scholars and helped cultivate the careers of emerging clinician-educators.

DR. DOMINIQUE PIQUETTE

Dr. Dominique Piquette first joined the Wilson Centre community as a research fellow in 2007. Over the next eight years, she benefited from the supervision, mentorship, and support of many past and current Wilson Centre scientists, including Dr. Vicki Leblanc, Dr. Glenn Regehr, Dr. Maria Mylopoulos, Dr. Carol-anne Moulton, and Dr. Charlotte Ringsted. After completing her master and PhD degrees in medical education, Dr. Piquette developed a program of research focused on the impact of systemic changes (e.g. Competency Based Medical Education, duty hours limitation, person-focused end-of-life care) on medical education in critical care medicine.

Since her transition from research trainee to independent researcher, the Wilson Centre community has continued to play an essential role in Dr. Piquette's professional development. Clinicians engaged in medical education research often face challenges that differ from those encountered by their colleague clinician scientists. In addition to the heavy clinical workload, time pressure, and scarcity of research funding, medical education clinician researchers and educators often feel isolated within their specialty-based research community and lack opportunities for mentorship, life-long learning, and leadership roles. Dr. Piquette has therefore greatly benefited from her ongoing involvement with the Wilson Centre as a Centre Researcher. This appointment has enabled the development of long-term research collaborations with other centre scientists (such as Dr. Ryan Brydges, Dr. Nancy McNaughton, Dr. Walter Tavares, and Dr. Catharine Walsh) and direct contributions to different Wilson Centre committees, including the Brian Hodges Symposium and Richard Reznick Research Day organization committees, the Currie Chair Search committee, and the HPER PhD admissions committee. Most importantly, Dr. Piquette greatly values the validation, motivation, and inspiration resulting from her interactions with Wilson Centre members, trainees, and visiting professors, which foster the pursuit of challenging research endeavors and the development of a true sense of community and belonging.

13. REPORT OF THE LEARNERS

Learners reflect the diversity of the larger Wilson Centre community, coming from clinical, nonclinical backgrounds, various disciplines and departments, and at various levels of education (master's, PhD, postdoctoral). The Wilson Centre provides an ethos of mentorship and a community of support in a bidirectional relationship, where scientists are invested in mentoring the next generation of health professions education researchers, and learners are committed to active participation in the community. This supportive community is characterized by innovation, rigour, excellence and interdisciplinarity. This allows learners to acquire knowledge from the field of health professions education research (HPER) beyond the scope of their individual research. This includes epistemological and theoretical foundations, exposure to diverse methodologies, and feedback from multiple perspectives. The distributed leadership of the Wilson Centre further welcomes the participation of learners in various committees and administrative activities.



ABOUT LEARNERS AT THE WILSON CENTRE

Learners at the Wilson Centre are a diverse group of graduate students from a variety of clinical and nonclinical backgrounds. This group includes both Fellows (master's, PhD and postdoctoral students from an array of departments and disciplines) and students in the Wilson Centre's own PhD program through the Institute for Health Policy, Management and Evaluation (IHPME). Currently there are 17 Fellows and 10 PhD students learning at the centre.

Learners arrive at the Wilson Centre with vastly different academic backgrounds and bring with them distinct expectations and aims. The Wilson Centre explicitly welcomes and encourages this diversity, and in doing so creates a uniquely interdisciplinary and collaborative learning environment.

In preparing this report, we sought to capture this diversity. Views of the learners were collected through large group conversations, individual interviews, and emailed testimonials. Further views from two previous cohorts of learners were synthesized from fellows' annual reports. Discussions were guided by the education and research values espoused by the Wilson Centre and described earlier in the report. We group our findings into four core practices that are central to the collective experience of Wilson Centre learners.

All current learners had an opportunity to review and comment upon this report. The process of writing and revision was led by the current Fellow's Representative. To focus the report, we have chosen to highlight the perspectives of three learners at different stages of their work. Their perspectives are featured because their experiences effectively highlight themes that resonated across our discussions. While these three learners are featured in their own words, the accompanying descriptions are written in a collective voice.

JEFFREY CHEUNG

Jeffrey Cheung successfully defended his PhD in August 2019 through the Institute of Medical Science (IMS) at the University of Toronto (U of T). Previously, he completed a HSc in Neuroscience and an MSc in Medical Science. His research explores how clinical instruction for simulation-based procedural skills can be designed to support trainees' ability to transfer their learning to novel contexts. He uses experimental designs to compare the impact of various strategies for integrating conceptual knowing (i.e., theory) and procedural knowledge (i.e. practice or know-how) on assessments of trainees' ability to transfer. He has been a Fellow at the Wilson Centre throughout his doctoral work, supervised by Ryan Brydges and Carol-anne Moulton. In December 2019, he took a position as Assistant Professor in the Department of Medical Education at the University of Illinois at Chicago College of Medicine.

VICTORIA BOYD

Victoria Boyd is a PhD student in the first cohort of the health professions education research program at IHPME, in collaboration with the Wilson Centre, U of T. She completed a Master of Professional Communication from Ryerson University and an Honours Bachelor of Arts in English and Sociology from U of T. Informed by critical theory and critical pedagogy, Victoria's doctoral research will explore if and how teaching health professionals to enact critically reflective practice influences practice outcomes and patient experiences for students and older adults in school and home care contexts. Victoria is in the second year of her PhD under the supervision of Nicole Woods and Stella Ng.

ARIEL LEFKOWITZ

Ariel Lefkowitz obtained his MD, CM (Master of Surgery) degree at McGill University before completing internal medicine residency at the University of Toronto, followed by a year as Chief Medical Resident at Mount Sinai Hospital and a fellowship in General Internal Medicine. He is a second year master's student at the Ontario Institute for Studies in Education (OISE) at U of T, and is currently practicing internal medicine as a clinical associate at Sunnybrook and Mount Sinai Hospital. His Research Fellowship at the Wilson Centre, supervised by Ayelet Kuper, aims to improve critical consciousness in physicians by using narratives created by patients to reveal the patient perspective.



CORE PRACTICE # 1: PROVIDING MENTORSHIP AND A SUPPORTIVE COMMUNITY FOR GRADUATE LEARNERS

The Wilson Centre is a world leader in HPER. It is a given here that learners will be exposed to the highest caliber of innovation and expertise during their tenure here. However, when asked about the value of the Wilson Centre, every single learner began with the community and mentorship. Graduate studies can be an isolating experience, but as a learner at the Wilson Centre, you have an automatic, built-in community. This community confers both formal structured support and equally valuable intangible support from fellow students, administrative staff, and scientists.

Learners at the Wilson Centre commit to participating in certain groups and activities during our time here. These activities are opportunities to learn from others and present our own work. Through journal clubs, round-tables, and research rounds, learners expand their knowledge of the field beyond the scope of their work, engage in challenging discussions of methodology and rigour, and receive thoughtful feedback on both their research and presentation skills.

There are many other ways that the fellowship supports the attainment of my academic goals. For example, regular opportunities to present my work in progress at HPER Roundtable, lab meetings, and the fellowship seminar series pushes me to translate my ideas into coherent arguments and construct appropriate and aligned study designs. These opportunities, along with feedback from scientists and peers, have been central in advancing my research. Further, opportunities to participate in and lead journal clubs further support the development of my research capacities by encouraging me to engage with research outside my area, challenge my own perspectives, and refine my teaching and moderation skills.

Victoria Boyd

Beyond the structured support provided by these organized groups and events, the values of community and mentorship lie at the core of the Wilson Centre. This ethos extends from the administrative staff, through the learners and up to the director.

The past 5 years as a Wilson Centre Fellow have been eye-opening and life changing. As a trainee, I was exposed to a diversity of research approaches used to study health professions education and was privileged to work with an extremely supportive community of scientists, administrators, health professionals, and educators. The community consists of world-renowned scholars, who also happen to be some of the kindest and most generous educators and mentors I have had the good fortune of learning from.

Jeffrey Cheung

Learners emphasized that the scientists are invested in their success as fellows at the Wilson Centre. The fellowship literally opens the door to experts that continually demonstrate their genuine desire to mentor the next generation of health professions education researchers. The learners commit to participating as active members of the community, and in return are rewarded with a commitment from the scientists to support their academic and career aspirations.

I think that the fellowship is an important facilitator to scientists and not-yet-scientists to be able to work physically side by side. The culture of open doors and collaboration is really strong, and not just token. I think that's important.

Ariel Lefkowitz



CORE PRACTICE #2: CONDUCTING HIGH-QUALITY HPER AND CULTIVATING THIS SAME RESEARCH EXCELLENCE IN LEARNERS

I believe the Wilson Centre Fellowship represents the highest quality educational experience any graduate trainee could ask for. The research diversity, rigour, and support from the Wilson Centre has, in many respects, defined me as a researcher.

Jeffrey Cheung

Excellence in HPER is a value that is espoused by every member at the Wilson Centre. It can be seen in measurable ways like publication records, grant capture, and awards. It can be seen in the success of the learners who have completed fellowships and gone on to illustrious research careers at the centre and around the world. Finally, it can be seen in the quality of the supervision and guidance provided to learners at the centre. Through their experiences at the centre, fellows learn how to ask the right questions and rigorously investigate the answers. With a strong focus on theoretically-informed work, research at the centre aims to build strong programs of work to support innovations in the field. The Wilson Centre is closing the gap between research and practice, which can be seen in the work of both fellows and scientists.

I believe that the emphasis on explicitly articulating the assumptions underlying our research, along with continued attention to conducting theory-informed research that advances knowledge and improves education, prepares us to conduct high-quality and impactful research.

Victoria Boyd

For students arriving to HPER from more practically-oriented research traditions, it can be challenging to enter a community with such a strong focus on theory. Many learners express that they feel overwhelmed in the first few months at the centre. However, the fellowship seminar series and the PhD courses are designed to introduce learners to the epistemologies and theories foundational to the field early and often. This education is further supported by reading groups that delve deep into theoretical works from cognitive psychology to Foucault. While each learner ultimately employs theory in their own way, the fellowship helps to build a foundation of theoretical knowledge that ultimately allows us to engage meaningfully in the broad scope of work being done in the evolving field of health professions education.

The fellowship has helped me develop my ideas and translate them into publications. I feel like the fellowship is setting me up for academic scholarship in the future, helping me develop my theoretical groundwork and research skills, and that's important for my career.

Ariel Lefkowitz



CORE PRACTICE #3: INTERDISCIPLINARITY

The experience has equipped me with new and exciting ways of viewing the world of science, healthcare, and education; and given me a broad understanding and appreciation for the plethora of research that contributes to the multidisciplinary field that is health professions education.

Jeffrey Cheung

The field of health professions education is built on interdisciplinarity, and the experience of the learners at the Wilson Centre truly embodies this value. Interdisciplinarity at the Wilson Centre is more than simply bringing experts from different fields into a shared space; it is the innovation made possible by the sharing, borrowing, collaborating, and evolving of knowledge and expertise.

I see researchers and read papers by collaborators where the people working together have different perspectives and disciplines and orientations toward research and I find that valuable. I'm very much a jack-of-all-trades and like to combine things to greater value, so it's been inspiring to see how that's enacted in real life, and even surprising that it really is the case that people whose interests are disparate can work together in different ways. I've drawn on a wider range of ideas in my research as a result.

Ariel Lefkowitz

The interdisciplinarity of the Wilson Centre benefits the learners on multiple fronts. First, it creates a welcoming environment where learners of many different academic backgrounds from geography to English literature to neuroscience can find a research home. In this environment fellows can build upon their existing knowledge within the context of HPER and feel that their expertise is welcome and valued by the community. Because the centre is the research home to both clinicians and nonclinicians, it helps to ensure that the research being done never strays too far into the practical or theoretical but strives to remain balanced between the two. While maintaining this balance, the centre manages to avoid a feeling of hierarchy between clinical and nonclinical learners and scientists. Learners feel that there are purposeful attempts to ensure the inclusion of both types of fellows and both perspectives.

While the requirements of the fellowship may appear too demanding for fellows who must balance their research with clinical duties, fellows largely find the centre to be accommodating. This flexibility is uncommon in academic programs and offers a diverse group of learners the opportunity to become involved.

Beyond providing a welcoming home for fellows, the interdisciplinarity of the Wilson Centre provides an unparalleled learning environment in which to hone research expertise. Within the centre learners are exposed to a wide variety of expertise. A fellow can approach different scientists with the same question and learn to see the world through different lenses. More than the professional diversity seen at the Wilson Centre, it is the theoretical diversity that is so unique and so essential to the quality of the research and the learning experience.

Faculty and fellows come from diverse backgrounds and draw on disciplines from the social sciences, humanities, and the biomedical and natural sciences in their research, yet we all share a common goal of aiming to advance the quality of health care by improving how we educate health professionals. Such interdisciplinarity means that we may approach the same problem from a variety of different perspectives; such moments are welcomed rather than shied away from as they are recognized as productive learning opportunities, not to mention sources of lively debate in the lunchroom and at journal clubs! Engaging with others who see the world differently has pushed me to continually identify my assumptions and challenge my perspectives in my research, which has been central to my academic growth.

Victoria Boyd



CORE PRACTICE #4: DISTRIBUTED LEADERSHIP

Many of the leadership decisions at the Wilson Centre have included the voices of all its stakeholders, including its trainees – the Fellows. I have had the honour of representing the interests of the Fellows on various committees, which dealt with impactful concerns such as hiring the centre Director, formulating the centre’s Strategic Plan, and developing the fellowship seminar series curriculum. Opportunities for Fellows to provide input to the leadership through governance activities are numerous; Fellow involvement is encouraged and often even part of mandatory policies implemented by the leadership.

Jeffrey Cheung

Distributed leadership and transparency are demonstrably important to the Wilson Centre. Learners are not only encouraged to participate on various committees, their representation is a requirement. Most of the committees at the Wilson Centre have one or two spots reserved for fellows, including the senior management committee. This policy ensures that the interests of the learners are represented in the leadership of the centre. It also offers a valuable opportunity for learners to understand how organizations operate and gain the kind of experience that will benefit them in finding employment after graduate training.

I remember feeling this sense of community in a more formal way when I was invited to join the Wilson Centre Visitors and Partnerships Program Committee during my first few weeks at the Wilson Centre in September 2018. I remember appreciating that the Centre valued having fellow representatives on all of their administrative committees. I’ve also thoroughly enjoyed getting a sneak peek at the talented students and faculty that come to the Centre as visiting scholars!

Victoria Boyd

As a centre of both research and education, it is important that the voice of the learners is heard. Despite the challenges inherent in this model of leadership, the Wilson Centre aspires to be the kind of institution that is run by and for its members. Fellows are not only required to sit on committees; they are encouraged to actively participate.

The voice of the learners is also represented through the annual fellows’ report. This report is generated by the fellows as a group at the annual retreat that is funded by the centre. The report aims to reflect the views of every fellow for that academic year and speak to both the positive and negative aspects of the fellowship. Two previous fellowship reports were consulted in writing this report. Both reports contained numerous suggestions for areas of improvement for the centre. For fellows who have been at the centre for over three years, it is apparent that these reports were influential in shaping policy and procedures at the centre. Although there remain areas for improvement, the Wilson Centre explicitly seeks out and listens to the voices of its learners.



VISION FOR THE FUTURE

In looking back at the last five years, it is apparent that the Wilson Centre has continued to grow and evolve to meet the changing needs of the learners. The current learners appreciate the work that is ongoing and hope that the centre continues to move in a positive direction towards further inclusivity and transparency.

In the past, learners have expressed the feeling that there was an epistemological divide within the Wilson Centre that was impeding the educational experience of learners and acting as a barrier to collaboration. In the past couple of years, there has been a shift in this division away from a disruptive dichotomy and towards a productive debate. This has been achieved by ensuring that different perspectives are regularly given voice in research rounds and annual research days, and in celebrating high-quality research regardless of the epistemological stance. While learners still feel this division, for example between cognitive and sociological perspectives, it is evident to learners that the Wilson Centre scientists and administration are willing to do the work to bridge the divide and that it is an ongoing process. As this process continues, the learners' experience at the centre will undoubtedly be enhanced further.

Learners at the Wilson Centre have also expressed the wish that the Wilson Centre continue to build on initiatives to increase transparency of centre operations. Based on the efforts already made in this area to represent and include learners fairly in the governance of the centre, this recommendation centres more on making opportunities explicit. More explicit sharing of information about opportunities ensures a sense of fairness within the centre and encourages a feeling of community. This work is clearly ongoing at the centre, and with each passing year there are more mechanisms in place to ensure that learners have the information they require to be successful and engaged members of the Wilson Centre community. The learners are grateful for these efforts and hope that transparency continues to be a priority for the Wilson Centre.

CONCLUDING THOUGHTS

Being a learner at the Wilson Centre is such a privilege. A privilege to learn from leading experts in the field of HPER. A privilege to collaborate with scientists and learners from a wide range of disciplines. A privilege to be part of a warm and welcoming research community that supports learners in every stage of the career. Completing a degree of fellowship at the Wilson centre prepares learners for successful research endeavours and opens countless doors.

As my time as a Research Fellow comes to an end, I realize more and more how my current postgraduate success is a result of my experiences from this very special place called the Wilson Centre. Without it, I would be a much lesser version of the researcher and person I am today.