



McGill

Centre for Medical Education

Annual Report: January 1 to December 31, 2017

Centre for Medical Education Annual Report

January 1 to December 31, 2017



Faculty of Medicine
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The Centre for Medical Education promotes innovation and excellence in health sciences education through research and scholarship, leadership and mentorship, and dissemination of best practices. The 15 Core Faculty (including 3 Research Scientists) and 38 Centre Members have had a very productive and successful year and we hope to acknowledge some of their accomplishments in this report.

The Centre Director, Dr. Yvonne Steinert, had the privilege of being on a sabbatical leave during most of 2017, and we thank Dr. Donald Boudreau for his leadership as Acting Director. During Dr. Steinert's absence, the Centre was moved to another location for a period of 9 months; this required a substantial period of adjustment for all members and staff, both physically and mentally. The relocation to the temporary office space also had a significant impact on the level of activity and engagement at the Centre.

RESEARCH AND PUBLICATIONS

Grants and Research Awards Received

A focus on research and scholarship in health professions education remains a key priority for the Centre for Medical Education. This past year, Core Faculty and Centre Members held 64 grants in medical education (as outlined in **Appendix I**) totaling \$14,296,125, of which 23 were new research grants, totaling \$699,210. Research themes continued to focus on professional identity formation, faculty development, teaching and learning (with a focus on clinical reasoning and decision-making), simulation-based education, assessment of learners and faculty members, program evaluation, and knowledge translation.

The Centre has also been able to support Core Faculty and Centre Members' educational innovations and research through several initiatives: The Class of '77 Medical Education Innovation Grants Program, the Centre for Medical Education Innovation and Research Seed Fund, the Emerging Scholar in Medical Education, and the Jonathan Campbell Meakins & Family Memorial Fellowship. The Class of '77 Medical Education Innovation Grant was awarded to: 1) Dr. Tim Dubé and Dr. Carlos Gomez-Garibello for their proposal on *The Development of a Roadmap Supporting CBME Implementation in Postgraduate Medical Education: An Evidence-Informed Evaluation Approach*; and 2) Ms. Susanne Mak for her research on *Stakeholders' Perspectives towards the McGill OT Mentoring Program*. The Medical Education Innovation and Research Seed Fund was awarded to two teams: 1) Dr. Maryam Wagner and her colleagues for a research project entitled: *Social Media as an Innovative Tool for Gathering Data: Potentials and Possibilities*; and 2) Dr. Valérie Dory, with her colleagues, for a research project entitled *Rater Cognition in Longitudinal Work-Based Assessment: The Impact of Sharing Information Regarding Residents' Previous Performance*.

The Centre also received a generous donation to support an *Emerging Scholar in the Centre for Medical Education*. For the inaugural year, Dr. Ning-Zi Sun was selected for her educational commitment, expertise and work related to the use of flipped classrooms in residency training – evaluating the feasibility and acceptability of this format as the main instructional format applied to a two-year long AHD curriculum; and a project centered around the concept of 'patient ownership' – a term that has been traditionally used to embody a number of professionalism attributes, such as responsibility, accountability, and devotion to patient care.



Additional grants to highlight this year included: 1) a grant from the Arnold Gold Foundation which was awarded to Dr. Deborah Danoff and her colleagues, for a project on *Professional Identity Formation in Medicine: How does Humanistic Healthcare Education with a Focus on Patient Centeredness Help to Shape that Identity?*; 2) a grant from the Social Science Humanities Research Council (SSHRC) that was awarded to Dr. Valérie Dory and colleagues, for a study on *Assessor Cognition in Longitudinal Performance-Based Assessment: The Impact of Sharing Information Regarding Learners' Previous Performance*; 3) funding from the Royal College of Physicians and Surgeons of Canada (RCPSC) to Dr. Evelyn Constantin and colleagues in PGME, for a project on *Responding to Capacity Building Needs to Implement Competency by Design (CBD)*; 4) a RCPSC Strategic Grant that was awarded to Dr. Lily Nguyen and her colleagues for a project on *Mission-Aligned Research in Competency-Based Medical Education*; 5) a grant from the Canadian Association for Medical Education Foundation Wooster Family Grant in Medical Education that was awarded to Dr. Robert Sternszus and colleagues, for their work entitled *From Resident-as-Teacher to Resident-as-Role Model: Enriching a Resident Teaching Skills Curriculum*; and 6) a grant from the Canadian Institutes for Health Research Project (CIHR) that was awarded to Dr. Aliko Thomas and her colleagues for the *Evolution of Evidence-Based Practice: Evaluating the Contribution of Individual and Contextual Factors to Optimize Patient Care*.

Lastly, to ensure that our research and scholarly activities are in line with the Faculty's Research and Ethics Office (IRB), the co-chairs of the McGill Research in Medical Education (McRIME) committee, Drs. Donald Boudreau and Peter Nugus, reviewed 7 research projects prior to IRB submissions. Topics included: *Development of Patient Ownership during Clerkship – A Qualitative Study*; *Using Flipped Classroom Format for Academic Half-Day – A study of its Impact on Learner Behavioural Engagement*; *Medical Students' Professionalism Dilemmas, Resistance and Moral Distress: A Cross-Cultural Study*; *Reverse Educational Distance: Exploring a Novel Concept for Residents-as-Teachers Curricula*; and *The CanNorMent Study: A Collaborative Investigation of Physician-Mentors' Experiences and Perspectives on Group-Based Mentorship Programs at Three Medical Schools in Norway and Canada*.

In addition, to enhance our Core Faculty Members' knowledge and understanding of research principles and practices, three research capacity building workshops were developed and facilitated by Dr. Maryam Wagner on *Mixed Methods Research*. Each workshop delivered integral information to augment their knowledge and application of mixed methods research, and guide their design of research. Members were engaged through plenaries, discussions and various activities.

Publications

This year, Core Faculty and Centre Members published a total of 91 articles and 7 book chapters in a variety of medical education and specialty journals (as outlined in **Appendix II**). This includes publications on topics relating to simulation, competency-based medical education, technologies to enhance teaching and learning, assessment, professional identity formation, faculty development, and clinical reasoning.

Presentations of Scholarly Work

Core Faculty and Centre Members also presented their work in a number of national and international venues. More specifically, they gave over 160 presentations at local, national and international conferences and events, of which 35 were keynote or invited plenary presentations in universities and/or medical schools in Brazil, Canada, Chile, Finland, Germany, the Netherlands, the United Kingdom, and the United States.



TEACHING AND LEARNING

Initiatives and Innovations

This past year, the Centre was involved in a number of educational initiatives that we are proud to highlight.

Dr. Ilana Bank organized and provided instructions to international leaders on a *Disaster Simulation Workshop* at the 2017 Simulation Summit in Montreal. In addition, she continues to provide the 'Arrival to Disposition' simulations sessions that take a patient from their arrival in the Emergency Department through their trajectory in the hospital to their final disposition. The disaster sessions focus on improving quality of care if a disaster were to arrive in our community that needs healthcare resources.

Dr. Lorraine Bell, Chair of the newly created *Joint Adult-Pediatric MUHC Task Force on Pediatric Transition to Adult Care*, leads this task force to propose ways to make McGill and the MUHC a recognized leader and innovator in the emerging field of transition. They have broad interdisciplinary representation from internal medicine, family medicine, pediatrics and the community, including patients and parents.

Dr. Mylène Dandavino is a co-lead in the creation of a UGME elective in Quality Improvement and Patient Safety, the first of its kind in North America.

Dr. Ronald Gottesman has been exploring new avenues in Artificial Intelligence guided learning. In partnership with Dr. Susanne Lajoie and Dr. Jeffrey Wiseman using BIOWORLD, he is developing a tool to assess 'diagnostic reasoning' in the complex planning of transition from pediatric to adult care. This is novel and aligns well with the current CBD paradigm.

Dr. Annette Majnemer, in her role as Vice-Dean Education in the Faculty of Medicine, engaged all stakeholder groups in the Faculty (i.e. learners, teachers, clinicians, researchers, administrators, academic leaders representing health professions education and basic science education) in the development and refinement of the Faculty's Education Strategic Plan. She worked closely with the oversight committee, Steering Educational Excellence (SEE), to design an implementation plan for the first year, and began the process in recruiting Associate Deans for Health Professions Education and Biomedical Science Education to co-lead several of the initiatives of the strategic plan.

Dr. Geoffroy Noel developed an international anatomy exchange between three countries (Haiti, Rwanda and Canada), which was reported in the *Annals of Global Health*.

Dr. Joyce Pickering, alongside Dr. Yvonne Steinert, hosted the 3rd course on Teaching in the Clinical Setting: A Practicum Course for 13 visiting physician-teachers from Gifu University, Japan. During their educational visit, members of the delegation met with leaders from the McGill University Health Centre (MUHC), to learn and develop clinical education that will eventually benefit Gifu, as well as the rest of Japan.



Dr. Aliko Thomas created a new initiative at SPOT: a teaching café where faculty come together and discuss issues that are important to them, and for which they wish to exchange and brainstorm with colleagues in a relaxed and collegial atmosphere.

Dr. Maryam Wagner led the development and facilitation of four faculty development workshops: *Teaching, Learning and Assessment* at the Ingram School of Nursing. These workshops included Faculty and instructors at McGill, as well as clinical educators from CIUSSS du Centre-Ouest-de-l'Île-de-Montreal, the MUHC and the Jewish General Hospital. Each workshop comprised mini-plenaries and activities, were sequential in nature, and aimed to build upon each other.

Educational Programs

Under the leadership of Dr. Michelle Elizov, we welcomed 1 resident for a medical education elective. This learner spent one month learning about medical education by participating in weekly meetings and individual meetings with Core Faculty and Centre Members. This program will be improved in the upcoming academic year to reflect the needs of the students and their supervisors. *The Foundations in Medical Education* will be created for residents at any level, as well as clerkship students in their 3rd or 4th year of the undergraduate medical curriculum at McGill. The elective will be offered on an annual basis in Period 6 of the rotation schedule, which generally falls between November-December of the calendar year. This 4-week structured elective is intended to expose students and residents to the field of medical education, through interactive lectures, group discussions, individual and group projects, and participation in the activities in the Centre for Medical Education. Learners will develop essential knowledge and skills in curriculum design, teaching and learning, assessment, program evaluation, and educational research and scholarship.

The Master of Arts (MA) program in Educational Psychology (Health Professions Stream), which currently includes 5 students, is currently under review by members of the Faculty of Education and the Faculty of Medicine. The Faculty of Medicine continues to develop, in collaboration with colleagues in the Faculty of Education, a foundational certificate in health professions education that will include the following courses: Learning, Cognition and Motivation; Introduction to Curriculum and Program Development; Introduction to Assessment and Evaluation; Introduction to Scholarship in HPE, and; Introduction to Educational Leadership.

Preliminary consultations regarding a New Certificate Program in Health Professions Education took place with several members from the Faculties of Medicine and Education, who have been involved in the development of graduate degrees. It is the Centre's intention to launch the first Certificate Program, Fundamentals of Health Professions Education, in the next calendar year; in addition to a combination of certificate programs that can lead to a Master's degree in HPE.

Alongside the Faculty Development Office, the Centre offered two Medical Education Rounds (MER) in the past year. As Vice-Dean Education, Dr. Annette Majnemer presented *The Faculty's Education Strategic Plan: Let's 'C'! Connect, Collaborate, Create*; and Dr. Aliko Thomas delivered an MER on *Mapping Landscapes and Minding Gaps: The Road Towards Evidence Informed Health Professions Education*;

**INVOLVEMENT IN THE COMMUNITY**

Dr. Lorraine Bell continues her work by volunteering time as the Chair of the Pediatric Nephrology Specialty Examination Board for the Royal College of Physicians and Surgeons of Canada. She is also involved with the Royal College in developing the EPAs for Nephrology.

Dr. Donald Boudreau was invited to the School of Medicine Sydney (SoMS) of the University of Notre Dame Australia (UNDA) between October to December, where he facilitated faculty development workshop; gave lectures in *Re-Imagining Medical Education*, *The Evolving Concept of Professionalism in Medicine*, and *Characteristics of 'Communities of Practice' Engaged in HPE research*; participated in a series of meetings and faculty development on several campuses; and participated in an informal gathering of educational leaders from several medical institutions.

Dr. Mylène Dandavino is currently spearheading the development of a smartphone application to support the clinical activities of the Carowanis Camp's medical team, a camp for diabetic children.

Dr. Thomas Hutchison continues his collaborations with *Films that Transform: In Dialogue with Others on the Journey*, a film series that provides a forum for the general public to meet with medical students and other members of the McGill medical community to view and discuss films that will encourage viewers to explore the meaning of healing and 'wellness' in daily life.

Dr. Susanne Lajoie organized the LEADS (Learning Environments Across Disciplines) annual meeting, which consisted of meetings and workshops for 45 researchers (professors, students and members from industry in Montreal and abroad).

Dr. Geoffroy Noel has collaborated with seven universities in Finland, Japan, Taiwan and the United States, on a program entitled *Preparing Future Leaders in Healthcare through Internationalization of Medical Education: The Skype Project*.

Dr. Ruth Russell is one of 25 CAP (Child and Adolescent Psychologist) Consultation Liaison Psychiatry Specialists from several centres across North America, and one of three in Canada. She continues her work as a member of the Pathways in Clinical Care (PaCC) Group: A Workgroup of the American Academy of Child and Adolescent Psychiatry (AACAP) Physically Ill Child Committee, to address the widespread need to leverage standardized, integrated care models in hospital-based settings, with medically/surgically ill children experiencing mental health challenges and their families.

Dr. Linda Snell continues working as the Senior Clinician Educator at the RCPSC, expanding her education 'reach' and allows for networking with colleagues across Canada and internationally. She also participated in over 150 KeyLIME podcasts, publication of a 10-paper series in *Med Teacher* on CBME under the auspices of the ICBME Collaborators group, and is Chair of the Latin American Conference on Residency Education.

Dr. Claire Trottier organized a group of foundations across Canada to advocate for renewed fundamental science funding from the federal government. She brought together 9 foundations, successfully published an op-ed in *MacLeans* magazine, and visited with two Deputy Ministers in Ottawa.



Dr. Nicole Ventura was co-chair of the Commemorative Service Committee, organizing and coordinating McGill University's first interprofessional Commemorative Service in honour of our Body Donors. This was an opportunity to give back to the community and thank the selfless individuals who donated their bodies to McGill for health professions education and their families for supporting their decision to do so.

MILESTONES

Several of our Core and Centre Members were successful in receiving academic promotions within their own disciplines: Dr. Liliane Asseraf-Pasin was appointed the Acting Director of the Physical Therapy Program; Dr. Ilana Bank was appointed as the Pediatric Director of Specialty Education at the Steinberg Centre for Simulation and Interactive Learning, as well as the Director of the Montreal Children's Hospital Pediatric Simulation Institute; Dr. Lorraine Bell was appointed the Chair of the newly created Joint Adult-Pediatric MUHC Task Force on Pediatric Transition to Adult Care; Dr. Michelle Elizov was appointed Assistant Dean in Faculty Development; Dr. Ronald Gottesman was appointed the inaugural Wendy Macdonald Endowed Chair in Pediatric Medical Education; Dr. Kevin Lachapelle was appointed the Interim Director of the Steinberg Centre for Simulation and Interactive Learning; Dr. Susanne Mak was appointed Part-time Assistant Professor and Associate Director (OT) at the School of Physical and Occupational Therapy; Dr. Lily Nguyen was appointed as Lead for the Competency-Based Medical Education Program in the Department of Otolaryngology-Head and Neck Surgery; Ms. Norma Ponzoni was appointed to the rank of Assistant Professor in the Ingram School of Nursing; Dr. Saleem Razack was promoted to the academic rank of Professor in the Department of Pediatrics, and was also appointed as the CanMEDS Educator at the Royal College of Physicians and Surgeons of Canada; Dr. Linda Snell was appointed the Kimitaka Kaga Visiting Professor in Medical Education at the International Research Centre for Medical Education at the University of Tokyo, Japan; Dr. Yvonne Steinert was appointed the Frank Wilson Visiting Professorship at the School of Medicine and Academy of Educators in the University of North Carolina, and was also appointed the Visiting Fellow at the Centre for Advanced Studies in the Ludwig Maximilian University of Munich, Germany; and Dr. Robert Sternszus was appointed the Director of the Pediatrics Residency Program

We also thank our colleagues who have moved on to other opportunities (Dr. Rajesh Aggarwal, Ms. Elaine Doucette, Dr. Susan Law, Dr. Pierre-Paul Tellier, Ms. Naz Torabi).

HONOURS, AWARDS AND PRIZES

We are pleased to congratulate the following Core Faculty and Centre Members for their achievements in the past year: Dr. Ilana Bank received an Award from the Royal College for Best Presentation for "A Trauma Patient's Journey: from Arrival to Disposition"; Dr. Miriam Boillat received the 2017 Ian McWhinney Family Medicine Education Award from the College of Family Physicians of Canada; Drs. Richard and Sylvia Cruess were celebrated at the McGill University Health Centre for their outstanding contributions to the advancement of patient care, teaching and research at the MUHC; Dr. Annette Majnemer was honoured by the Canadian Association of Occupational Therapists with the 2017 Fellowship Award, established to recognize and honour the outstanding contributions and service made by an occupational therapist over an extended period of time; Dr. Fraser Moore received the McGill University Osler Teaching Award and the McGill Neurology co-Teacher of the Year award; Dr. Linda Snell



received the McGill University Lifetime Achievement Award for Leadership in Education; Dr. Yvonne Steinert received 2017 CFPC Lifetime Achievement Award in Family Medicine Research from the College of Family Physicians of Canada; Dr. Robert Sternszus was selected as the 2017 recipient of the CAME Wooster Family Grant in Medical Education; and Dr. Meredith Young received the CAME Meridith Marks Young Educator Award. Lastly, Dr. Ilana Bank was honoured by the Faculty of Medicine's Faculty Honour List for Educational Excellence, in recognition of her outstanding contributions to education in the areas of teaching, educational leadership and innovation, faculty development and scholarly activity.

ACKNOWLEDGEMENTS

In closing, we would like to acknowledge the following Core Faculty and Centre Members for their administrative contributions to the Centre: Drs. Miriam Boillat and Linda Snell, who co-chair the Medical Education Awards Committee; Drs. Michelle Elizov, Stuart Lubarsky and Robert Sternszus for their contributions to the Foundations in Medical Education Program; and Drs. Donald Boudreau and Peter Nugus for their guidance and leadership as co-chairs of the Centre's Committee on Research in Medical Education (McRIME). I would also like to acknowledge Ms. Audrey Lew for her management of the Centre, and Ms. Claudia Regier and Ms. Meron Teferra for their administrative coordination of all Centre tasks and activities. I also take this opportunity to thank Dr. Donald Boudreau for his leadership during my sabbatical and a period of transition at the Centre. Lastly, we gratefully acknowledge Dean David Eidelman, Vice-Dean Annette Majnemer, Dr. Leah Moss and Ms. Pascale Mongrain for their ongoing support and help in achieving our collective goals and objectives.



Appendices

Appendix I – Grants in Medical Education

Appendix II – Publications in Medical Education

Appendix III – Visitors to the Centre

Appendix IV – Honours, Awards and Prizes

Appendix V – Faculty, Centre for Medical Education

**APPENDIX I – GRANTS IN MEDICAL EDUCATION**

1. Arnaert, A., **Ponzoni, N.**, Verdon, C. & Melançon-Laître, Y. The development of clinical algorithms as an educational intervention to support clinical reasoning in primary care nurse practitioners (Réseau de recherché en interventions en sciences infirmières du Québec (RRISIQ), 2015-2017, \$15,000)
2. Arnaert A, **Ponzoni N**, Soubeiga D, Sia D, Tchouaket E, Kargougou R, Prosper DA, Guiella G, Yentema O, Schauer A. STREAMS: Strengthening the relationship between primary care nurses and community health workers using technology-enabled home visits for preventative screening and monitoring of pregnant women living in the rural eastern region of Burkina Faso. (Grand Challenges Canada Stars in Reproductive, Maternal, Newborn and Child Health, 2016 – 2017, \$100,000)
3. **Asseraf-Pasin L**. Improving access to practice for English-speaking internationally-trained physical therapists (Part II) (McGill Retention Program, 2015-2018, \$147,500).
4. Azevedo R, **Lajoie S**, Hall N, Asghar A, Venkatesh V, Charles E, Labonté F, Chapdelaine C, Marqui R, Winne P, Laferrière T. Transforming teacher training and improving students' academic achievement with advanced digital technologies. (Partnership Development Grant —Social Sciences and Humanities Research Council of Canada, 2013-2018, \$192,660)
5. **Bank I**. Use of mannequins of varying ages mimicking real life in order to improve simulation-based pediatric education for trainees (MUHC Equipment Grant Competition, January 2017, \$14, 035).
6. Beaulieu MD, Boivin A, Dumez V, Éthier J-F, Kaczorowski J, Légaré F, LeBlanc A, Mâsse B, Pluye P, Rahme E, Vanasse A, **Thomas A**. Component of health and social services systems research, knowledge translation and implementation (The Quebec SPOR SUPPORT Unit Funded by: CIHR-FRQS-MSSS, 2015-2019, \$50,000)
7. Bould MD, Boet S, Cheng A, **Bhanji F**, Langevin M, Gilfoyle E, Duff J, Lobos AT, Kotsakis A. Consolidating tools for outcomes in resuscitation (CONTOUR). (Patient Safety Institute, 2015-2018, \$248,500)
8. Carnevale FA, Collin-Vezina D, **Macdonald ME**, Morris M, Talwar V, Van Praagh S. Advancing Indigenous pedagogy on childhood: Identifying priorities for professional education (SSHRC Knowledge Synthesis Grant, 2016-2017, \$24,821)
9. Chamberland M, Setrakian J, St-Onge C, Plaisance M, **Thomas A**, Varpio L. Auto-explication et raisonnement structuré: Développement, implantation et évaluation d'une activité d'apprentissage innovante dans le cadre du renouveau curriculaire pré doctoral en médecine (Fonds de Développement Pédagogique –Soutien de Recherche en Pédagogie Médicale, 2017-2018, \$24,575)
10. **Constantin E, Dubé T, Gomez-Garibello C, Aalamian A**. Responding to capacity building needs to implement Competence by Design (CBD). (CBD Residency Implementation Award by the Royal College of Physicians and Surgeons of Canada, 2017-2018, \$25,000)
11. **Dandavino M**, Korah N, **Gomez-Garibello C**, Kaspy K, Li P. Did the move of the Montreal Children's Hospital impact quality of education and patient care services? (Wendy MacDonald fund for educational research, 2016-2017, \$3,049.20)
12. **Danoff D, Boudreau D, Thomas A, Steinert Y**. Professional identity formation in medicine: How does humanistic healthcare education with a focus on patient centeredness help to shape that identity? (Mapping the Landscape, Journeying Together. The Arnold P. Gold Foundation, 2015-2017, \$6,000)



13. **Dory V, Gomez-Garibello C, Young M, Cummings B, Cruess SC, Cruess RL.** Advancing longitudinal work based assessment systems: Assessing progress in clerkship. (Medical Council of Canada, 2016-2017, \$18,640)
14. **Dory V, Gomez-Garibello C, Danoff D, Cummings BA,** Plotnick LH, **Young ME.** Rater cognition in longitudinal work-based assessment: The impact of sharing information regarding residents' previous performance (Center for Medical Education Innovation and Research Seed Fund, 2017, \$9,363)
15. **Dory V, Gomez-Garibello C, Danoff D,** Plotnick L, **Young M, Cummings BA,** Orjuela-Laverde M. Assessor cognition in longitudinal performance-based assessment: The impact of sharing information regarding learners' previous performance (Social Sciences and Humanities Research Council, 2017, \$44,325)
16. **Dubé T, Gomez-Garibello C, Constantin E, Wagner M, Aalamian A.** The Development of a roadmap supporting CBME implementation in postgraduate medical education: An evidence-informed evaluation approach. (Class of '77 MedEd Innovation Grants Program – McGill University, 2017, \$4,000)
17. Fishman J, Wright D, **Macdonald ME.** In search of a nursing standpoint: Investigating nurses' values regarding assisted death (CIHR Catalyst Grant, 2016-2018, \$100,000)
18. **Gomez-Garibello C, Dory V, Young ME, Sternszus R, Aalamian A, Cruess R, Cruess S, Ruano-Cea E, Andonian S.** Developing a rubric to assess residents' work-placed based teaching as an Entrustable Professional Activity (EPA) (Royal College of Physicians and Surgeons of Canada: Research for assessment within competency-based education, 2016-2018, \$17,500)
19. **Gomez-Garibello C, Dory V, Snell L, Wiseman J,** Duffy M, **Aalamian A, Steinert Y.** E as in entrustment and emotions: Exploring the association between emotions and entrustment in clinical settings. (Centre for Medical Education Innovation and Research Seed Fund, 2016-2018, \$6,200)
20. Harley J, **Lajoie S,** Grace A, Poitras E. Fostering historical reasoning, hope, empathy, emotional engagement and queer history awareness with a mobile augmented reality app (Social Science and Humanities Research Council of Canada (SSHRC), Partnership Development Grant, 2016-2018, \$75,000)
21. Kairy D, **Thomas A,** Ahmed S, Camden C, Halle M-C, Lamontagne M-E, Montpetit-Tourangeau K, Shikako-Thomas K, Anaby D, Bussièrès A, Rochette A. Développement d'un programme de formation sur les méthodes en transfert des connaissances dans le domaine de la santé (Canadian Institutes of Health Research - Patient Centered Research Strategy Support Units, 2017-2018, \$50,040)
22. **Lajoie S.** Advanced technologies for learning in authentic settings: Supporting teaching and learning in technology rich problem solving environments (Canadian Research Chair Program, 2011-2018, \$1,400,000)
23. **Lajoie S.** Advanced Technologies for Learning in Authentic Settings Facility (Canadian Fund for Innovation-Leadership Opportunities Fund, 2012-2017, \$1,000,000)
24. **Lajoie S.** Supporting multimodal assessment of pilots' performance (CAE, 2017-2018, \$88,200)
25. **Lajoie S,** Azevedo R, **Lachapelle K,** Muis K, **Wiseman J,** Hmelo-Silver C, Leighton J, Shute V, Pekrun R, Frasson C, Calvos R, Lester J, Jang E, Stupinsky R, Molenaar P, Kee K, Goldman R. Learning across the disciplines: Supporting technology rich learning across disciplines (Social Sciences and Humanities Research Council, 2012-2019, \$2,500,000)
26. **Lajoie S,** Azevedo R, **Lachapelle K,** Muis K, **Wiseman J,** Hmelo-Silver C, Leighton J, Chi M, van Lehn K, Shute V, Pekrun R, Moreno R, Frasson C, Calvos R, Lester J, Jang E, Stupnisky R. Technology rich learning



- environments: Supporting learning across the disciplines (Social Sciences and Humanities Research Council, 2011-2018, \$20,000)
27. Law S, Purden M, **Asseraf-Pasin L**, Daly M, **Macdonald ME**, **Mondou M**, **Nugus P**, Ormel I, Perlman C, Tardiff K, Wright D. Promoting patient-centered cancer care through experience-based Interprofessional education (IPE) strategies (Canadian Cancer Society; Knowledge to Action, 2016-2018, \$1,000,000)
 28. **Macdonald, ME**. Chercheur-boursier Junior 2 (Fonds de la recherche du Québec, 2017-2019, \$150,000)
 29. **Macdonald ME**, Law S. Advanced seminar on critical qualitative health research (RSBO Conference Grant, 2017, \$2,000)
 30. **Majnemer A**, O'Donnell M, Ballantyne M, Cohen E, Collet JP, Dewan T, Elsabbagh M, Grant P, Hanlon-Dearman A, Kitch T, McElroy T, McGrath P, Miller A, Patel H, Rempel G, Shevell M, Wittmeier K. BRIGHT coaching: A health coach system to empower families of preschoolers with developmental disabilities. (CIHR CHILD-BRIGHT project, 2016-2021, \$1,979,797)
 31. **Mak, S**. Stakeholders' Perspectives towards the McGill OT mentoring program (Class of '77 MedEd Innovation Grants Program, 2017, \$4,000)
 32. McEwen L, Chamberlain S, **Constantin E**, Dagnone D, **Dory V**, Fostaty Young S, **Gomez-Garibello C**, Luhanga U, Rich J. Operationalizing programmatic assessment: Practice guidelines with descriptions of stakeholder activities. (Royal College of Physicians and Surgeons of Canada Strategic Grant: Mission-aligned Research in Competency-based Medical Education, 2016-2019, \$31,075)
 33. Mercier J, Charland P, Saint-Amour D, Abrami P, Azevedo R, Bertone A, Gauvin I, Grabner R, Herba C, **Lajoie S** et al. NeuroLab. (Canada Foundation for Innovation, Leader Opportunity Fund, 2013-2018, \$1,000,000)
 34. Miller J, Bostick PG, Wideman T, **Bhanji F**, Bussi eres A, **Thomas A**, Tousignant-Laflamme Y, Walton D. Developing a stakeholder endorsed methodology to measure the outcomes of pain education in Canadian physiotherapy programs (Canadian Institutes of Health Research -Planning and Dissemination Grant– Institute Community Support, 2017-2018, \$10,000)
 35. Morrison L, Christenson J, Stiell I, deCaen A, Kirkpatrick A, Travers A, **Bhanji F**, Atkinson P, Ramanathan K, Vaillancourt C, et al. CanROC – Canadian Resuscitation Outcomes Consortium: Toward a national resuscitation clinical research network. (CIHR Operating Grant, 2015-2020, \$3,000,000)
 36. Muis K, **Lajoie S**. Environnements d'apprentissage technologiques: Augmenter la motivation, l'auto-r egulation et la r esulte scolaire des  tudiants   l'aide de l'apprentissage par l'enseignement. (FQRSC – MELS, 2013-2018, \$150,000)
 37. Muis K, **Lajoie S**. The development of a teachable agent learning environment: Fostering learning during complex mathematics problem solving. (Social Sciences and Humanities Research Council, 2016-2018, \$74,899)
 38. Nicolau B, Emami E, Members of Division of Oral Health and Society, Including **Macdonald ME**. Pan-Canadian Oral Health Match Website: Improving access to dental care for underserved populations (Public Health Agency of Canada, 2017-2019, \$10,000)
 39. **Nugus, P**. Chercheur-boursier: Career Award- Junior. (Fonds de la recherche du Qu ebec – Sant e, 2014-2018, \$306,000)



40. **Nugus P.** Interaction dynamics of organizational change: How will work roles change and re-align in a major re-structure? (Sciences and Humanities Development Grant, Faculty of Arts, 2014-2017, \$7,000)
41. **Nugus P,** Denis JL, & Chenevert D. Advancing knowledge translation from understanding complex care coordination (Canadian Foundation for Health Innovation, 2017-2018, \$8,000)
42. **Nugus P,** Denis JL, & Chenevert D. Building scholarly capacity in health services & policy research through an international conferences on organizational behavior in health care (Canadian Institutes of Health Research – Institute for Health Services & Policy Research, 2017-2019, \$2,500)
43. **Nugus P,** Faraj S, Engeström Y, Kajamaa A. Emerging organizational practices: Lessons from radical hospital restructuring (Insight Development Grant Social Science & Humanities Research Council, 2014-2017, \$70,494)
44. **Nugus P,** Mah R, Coffin N, & Horton A. The “Human Scale” of health care improvement: Aligning hospital foundations with frontline clinical practice, MITACS (Accelerate Grant Scheme, 2017-2019, \$30,000)
45. **Nugus P,** Mah R, Coffin N, Cooke M, Carroll K, Ramos D, **Steinert Y.** Improving intubation through video reflexive ethnography: Towards a culture of collaborative learning. (Grant Scheme, St Mary’s Hospital Foundation, 2016-2018, \$19,800)
46. **Sternszus R, Bhanji F, Andonian S, Snell L, Steinert Y,** Williams L, & Maniati J. From resident-as-teacher to resident-as-role model: Enriching a resident teaching skills curriculum (Canadian Association of Medical Education Wooster Family Education Grant, 2017-2019, \$8,795)
47. **Sternszus R, Boudreau D, Cruess R, Cruess S, Macdonald ME, & Steinert Y.** Supporting the development of a professional identity in students and residents: Staff physicians’ perceptions of their role. (McGill Osler Fellowship Fund, 2016-2018 \$10,000)
48. St-Onge C, **Young ME,** Varpio L, Renaud J-S, **Cummings BA.** Which, why and how are item analysis guidelines applied when monitoring the quality of examinations? Interviews with key informants. (Medical Council of Canada, 2015-2017, \$35,781)
49. St-Onge C, **Young ME,** Eva K, Featherstone R, Hodges B. From theory to practice: Quantification and consequences of different validity conceptualizations (Social Sciences and Humanities Research Council of Canada (SSHRC), 2014–2018, \$151,992)
50. St-Onge C, Langevin S, **Nguyen LHP, Thomas A.** Research project entitled “*Developmental Progress Assessment: Exploring the Basis for Best Practices*” (Royal College of Physicians and Surgeons of Canada Strategic Grant - Mission-aligned Research in Competency-based Medical Education, 2017-2019 \$35,000)
51. Tavares W, St-Onge C, Gauthier G, **Young ME.** “Why am I doing what I’m doing?”: An exploration into how raters adapt to formative and summative purposes of assessment (Medical Council of Canada, 2016–2017, \$37,500)
52. **Thomas A,** Chercheur-boursier: Career Award- Junior. (Fonds de la recherche du Québec – Santé, 2014-2018, \$340,000)
53. **Thomas A.** Professionals as scholars: Competency indicators and outcomes of advanced training (SSHRC: Internal Social Sciences and Humanities Development Grant, 2016-2017, \$4,000)
54. **Thomas A,** Bussi eres A, Hall e M-C, **Asseraf-Pasin L,** Steinhauer K, Storr C, **Mak S.** Supporting the development of learners’ evidence-based practice competencies: A qualitative study of faculty and



- clinical supervisors' perspectives (Edith Strauss Grant, Knowledge Translation Program, 2016-2018, \$12,000)
55. **Thomas A**, Kairy D, Ahmed S, Anaby D, Bussi eres A, Rochette A, Shikako-Thomas K. Quebec knowledge translation in rehabilitation strategic initiative. A knowledge translation initiative. Phase 2 (R seau Provincial de Recherche en Adaptation R adaptation (REPAR)- Fonds de recherche du Qu bec (FRQ-S), 2016-2017, \$20,000)
 56. **Thomas A**, Lysaght R, Lee M, Schmitz C. Phase 4 of the research on occupational therapy education: Establishing a Community of practice (COP) for occupational therapy and continued knowledge translation research in education (Association of Canadian Occupational Therapy University Programs (ACOTUP), 2017-2018, \$95,697)
 57. **Thomas A**, Rochette A, Lapointe J, O'Connor K, Ahmed S, Bussi eres A, Letts L, MacDermid J, Mayo N, Polatajko H, Salbach N, Paterson M, Debigare R, Rappolt S, Masnyk K, Larney E. Evolution of evidence-based practice: Evaluating the contribution of individual and contextual factors to optimize patient care (Canadian Institutes for Health Research, Project scheme grant, 2016-2020, \$294,332)
 58. **Thomas A**, **Young M**, **Dory V**, **Lubarsky S**, **Macdonald ME**, Varpio L, Yeung E. Clarifying and contextualizing the relationship between evidence-based practice and clinical reasoning in rehabilitation education (Centre for Medical Education Innovation and Research Seed Fund, 2016-2018, \$6,500)
 59. **Wagner, M**. Travel grant (McGill University Social Sciences and Humanities Research Council of Canada Paper Presentation Grant, 2017, \$1,500)
 60. **Wagner M**, Nedelec B, Saunders S, **Thomas A**, Perlman C, Slanik M. Social media as an innovative tool for gathering data: Potentials and possibilities (Innovation Seed Fund, Centre for Medical Education, Faculty of Medicine, McGill University, 2017-2018, \$9,900)
 61. Winkler-Schwartz A, **Lajoie S**, Del Maestro R. Does neurosurgical virtual reality training improve operative performance? (Royal College of Canada, 2017-2019, \$40,000)
 62. **Young ME**. How does an assessment approach become the valid standard of practice? A case study of multiple mini interview (Internal Social Science and Humanities Development Grants, 2016-2017, \$7,000)
 63. **Young A**, **Thomas A**, **Bhanji F**, **Lubarsky S**, **Dory V**, **Torabi, N**, Durning S. Understanding diagnostic error: A scoping study of the role of ambiguity and uncertainty in reasoning and error (Canadian Institutes of Health Research Project Scheme Grant: Knowledge Synthesis, 2016-2018, \$35,000)
 64. **Young M**, **Thomas A**, **Dory V**, Torabi N, **Lubarsky S**. What makes clinical reasoning complex, ambiguous, difficult or uncertain? A scoping study of the health professions education literature (Internal seed funds, Centre for Medical Education, Faculty of Medicine, McGill University, 2016-2018, \$9,950)

**APPENDIX II – PUBLICATIONS IN MEDICAL EDUCATION*****Journal Articles***

1. Alrasheed A, **Nguyen LHP**, Funnell R, Mongeau L, Funnell, WRJ, Tewfik M. The development and validation of a 3D printed ostiomeatal complex and frontal sinus training model for endoscopic sinus surgery. *Int Forum Allergy Rhinol.* 2017;7(8):837-841.
2. AlReefi MA, **Nguyen LHP**, Mongeau LG, ul Haq B, Boyanapalli S, Hafeez N, Cegarra-Escolano F, Tewfik MA. Development and validation of septoplasty training model using 3D printing technology. *Int Forum Allergy Rhinol.* 2017;7(4):399-404
3. Antunes Dos Santos R, **Snell L**, Patro M. The link between quality and accreditation of residency programs: The surveyors' perceptions. *Med Educ Online.* 2017;22(1):DOI: 10.1080/10872981.2016.1270093
4. Audétat MC, Laurin S, **Dory V, Charlin B**, Nendaz MR. Diagnosis and management of clinical reasoning difficulties: Part I. Clinical reasoning supervision and educational diagnosis. *Med Teach.* 2017;39(8):792-796.
5. Audétat MC, Laurin S, **Dory V, Charlin B**, Nendaz MR. Diagnosis and management of clinical reasoning difficulties: Part II. Clinical reasoning difficulties: Management and remediation strategies. *Med Teach.* 2017;39(8):797-801.
6. Baarends E, Van der Klink M, & **Thomas A**. An exploratory study on the teaching of evidence-based decision making. *Open J Occup Ther.* 2017;5(3) DOI: 10.15453/2168-6408.1292.
7. Bouhabel S, Kay-Rivest E, Nhan C, **Bank I, Nugus P**, Fisher R, **Nguyen LHP**. Error detection-based model to assess educational outcomes in crisis resource management training: A pilot study. *Otolaryngology Head Neck Surg.* 2017;156(6):1080-1083.
8. Cavallo S, Brosseau L, Toupin-April K, Wells GA, Smith C, Pugh A, Rahman P, Inmaculada C, Gallardo A, Stinson J, Thomas R, Ahmed S, Loew L, De Angelis G, Duffy C, Ehrmann Feldman D, **Majnemer A**, Gagnon I, Maltais D, Mathieu ME, Kenny GP, Tupper S, Whitney-Mahoney K, Bigford S. Ottawa panel evidence-based clinical practice guidelines for structured physical activity in the management of juvenile idiopathic arthritis. *Archives of Physical Medicine and Rehabilitation.* 2017;98(5):1018-1041.
9. Choi W, Dyens O, Chan T, Schijven M, **Lajoie S**, Mancini ME, et al. Engagement and learning in simulation: Recommendations of the Simnovate Engaged Learning Domain Group. *BMJ Simul Technol Enhanc Learn.* 2017;3(Sup1):S23-S32
10. Chorfi S, Schwartz JS, Verma N, **Young M**, Lawrence J, **Nguyen LHP**. Evolution of gender diversity among Canadian OTL-HNS residents: A 27-year analysis. *J Otolaryngol Head Neck Surg.* 2017;46(55):DOI 10.1186/s40463-017-0232-0.
11. Clavel V, Turnbull J, Morantz G, **Sternszus R**. Tiered curriculum in global child health: A novel CanMeds-based, multidisciplinary educational program. *Pediatrics & Child Health.* 2017;22(8):424-429.
12. **Cruess SR, Cruess RL**. From teaching professionalism to supporting professional identity formation: lessons from medicine. *Mercer Law Rev.* 2017;68:665-686.



13. **Cruess RL, Cruess SR, Hafferty FW.** “Social Contract” remains a useful metaphor. *Acad Med.* 2017;92(12):1650.
14. D’Angelo MC, Humphreys KR, Li T, **Young ME.** The impact of medical terminology in self-triage decision making. *Front Commun.* 2017;DOI: 10.3389/fcomm.2017.00006.
15. Dadoun A, Khalil E, **Bank I.** Invoking the “Expectant” Triage Category- Can we make the paradigm shift? *Am J Disaster Med.* 2017;12(3):167-172.
16. Ding W, Funnell RJ, Steinmetz P, **Noël G.** 3D printing heart models to facilitate cardiac ultrasound teaching. 5th World Congress Ultrasound in Medical Education. 2017.
17. Doleck, T & **Lajoie SP.** Social networking and academic performance: A review. *Educ Inf Technol.* 2017;23(1):435-465.
18. Elharram M, Lalande A, Ge S, Dinh T, Gao S, **Noel G.** Collaborative development of an international training program in surgery, pathology, anatomy and medical education: Exploration of the value in exchange experiences between Haitian, Rwandan and Canadian medical students. *Annals of Global Health.* 2017;82(2):351-352.
19. Ellaway R. **Dubé TV,** Cooper G, Graves L. Resetting the compass: Exploring the implicit messages of orientation to a community-engaged medical school. *Can Med Educ J.* 2017;8(1):e88-e100.
20. Englander R, Frank J, Caraccio C, Sherbino J, Ross S, **Snell L.** Toward a shared language for competency-based medical education. *Med Teach.* 2017;39(6):582-587.
21. Evans A, Hulme J, **Nugus P,** Cranmer H. An electronic competency-based evaluation tool for assessing humanitarian competencies in a simulated exercise. *Prehosp Disaster Med.* 32(3):253-260.
22. Fanous A, Rappaport J, **Young M,** Park YS, Manoukian J, **Nguyen LHP.** A longitudinal simulation-based ethical-legal curriculum for otolaryngology – head & neck surgery residents. *Laryngoscope.* 2017;127(11):2501-2509.
23. Ferguson P, Caverzagie K, Nousiainen M, **Snell L.** Changing the culture of medical training: An important step toward the implementation of competency-based medical education. *Med Teach.* 2017;39(6):599-602.
24. Figueiredo S, Mayo N, **Thomas A.** Future rehabilitation professionals' intentions to use self-management support: Helping students to help patients. *Physiother Can.* 2017;69(1):73-80.
25. Foucault ML, Vachon B, **Thomas A,** Rochette A, Giguère CE. Utilisation of an electronic portfolio to engage rehabilitation professionals in continuing professional development: Results of a provincial survey. *Disabil & Rehabil.* 2017;40(13):1591-1599.
26. Frank J, **Snell L,** Englander R, Holmboe E. Implementing competency-based medical education: Moving forward. *Med Teach.* 2017;39(6):568-573.
27. Furlini L, Noushi N, Castonguay G, Allison P, Bedos C, De Souza R, Esfandiari S, Hovey R, **Macdonald ME,** Morris M, Nicolau B, Power F, Feine J. Assessing dental student readiness to treat the underserved: A scoping review. *J Dent Educ.* 2017;82(5):483-491.
28. Gabra N, Mascarella M, **Young M,** Frenkiel S, **Nguyen LHP.** Part-time faculty in academic surgical specialties: The view of chairs in Canada. *Int J Acad Med.* 2017;3(1):53-58.



29. Gafoor T, Khalil E, **Bank I**, Ruddy M. Large-scale disaster simulation: Advancing pediatric disaster preparedness and safety through whole-hospital, inter-professional learning. *Prehosp Disaster Med.* 2017;32(s1):s225.
30. Gilfoyle E, Koot DA, Annear JC, **Bhanji F**, Cheng A, Duff JP, Grant VJ, St George-Hyslop CE, Delaloye NJ, Kotsakis A, McCoy CD, Ramsay CE, Weiss MJ, **Gottesman RD**. Teams4Kids investigators and the Canadian Critical Care Trials Group. Improved clinical performance and teamwork of pediatric interprofessional resuscitation teams with a simulation-based educational intervention. *Pediatr Crit Care Med.* 2017;18(2):e62-e69.
31. **Gomez-Garibello C, Young ME**. Emotions and assessment: Considerations for rater-based judgments of entrustment. *Cross-Cutting Edge. Med Educ.* 2017;52(3):254-262.
32. Goudzwaard M, **Finkelstein A**, Peterson R. Learning OS: The now generational digital learning environment. *Educause Review*. Available online: <https://er.educause.edu/articles/2017/8/learningos-the-now-generation-digital-learning-environment>
33. Graves L, **Lalla L, Young ME**. Evaluation of perceived and actual competency in a family medicine objective structured clinical examination. *Can Fam Physician.* 2017;63(4):e238-e243.
34. Gruppen L, Frank J, Lockyer J, Ross S, Bould M, Harris P, **Bhanji F**, Hodges B, **Snell L**, ten Cate O. Toward a research agenda for competency-based medical education. *Med Teach.* 2017;39(6):623-630.
35. Harris P, **Bhanji F**, Topps M, Ross S, Lieberman S, Frank J, **Snell L**, Sherbino J. Evolving concepts of assessment in a competency-based world. *Med Teach.* 2017;39(6):603-608.
36. Holmboe E, Sherbino J, Englander R, **Snell L**, Frank J. A call to action: The controversy of and rationale for competency-based medical education. *Med Teach.* 2017;39(6):574-581.
37. Imms C, King G, **Majnemer A**, Avery L, Chiarello L, Palisano R, Orlin M, Law M. Leisure participation–preference congruence of children with cerebral palsy: A children's assessment of participation and enjoyment international network descriptive study. *Dev Med Child Neurol.* 2017;59(4):380-387.
38. Jarrell A, Harley JM, **Lajoie SP**, Naismith L. Success, failure and emotions: Examining the relationship between performance feedback and emotions in diagnostic reasoning. *Educ Technol Res Dev.* 2017;65(5):1263-1284.
39. Jarrell A & **Lajoie SP**. The regulation of achievements emotions: Implications for Research and Practice. *J Can Psychol.* 2017;58(3):276-287.
40. Kandiah S & **Noel GPJC**. 3D scanning and printing as a mean to preserve one of Adolf Ziegler collection of human embryology wax models for educational purposes. *International Congress on Wax Modelling.* 2017.
41. Kay-Rivest E, Varma N, Scott GM, Manoukian JJ, Desrosiers M, Vaccani JP, **Nguyen LHP**. Securing an OTL-HNS residency: How competitive is it? Comparing medical student perceptions to actual Canadian statistics. 2017;46:16 DOI 10.1186/s40463-017-0192-4.
42. Kumagai A, Jackson B, **Razack S**. Cutting close to the bone: Student trauma, free speech, and institutional responsibility in medical education. *Acad Med.* 2017;92(3):318-323.



43. Labbé M, **Young M**, **Nguyen LHP**. Toolbox of assessment tools of technical skills in OTL-HNS: A systematic review. *Laryngoscope*. 2017;128(7):1571-1575.
44. **Lajoie SP** & Poitras E. Crossing disciplinary boundaries to improve technology-rich learning environments. *Teachers College Record*. 2017;119(3).
45. Lambrinakos-Raymond K, D'Arienzo D, **Dandavino M**, Korah N, Ballenas V, Alavi M. 2017. Multidisciplinary team-based deliberate practice using in situ simulations to enhance patient safety on a pediatric inpatient unit. *Paed child Health*. 22(suppl1):e29.
46. Lee J, **Andonian S**, Pace K, Grober E. Basic laparoscopic skills assessment study: Validation and standard setting among Canadian urology trainees. *J Urol*. 2017;197(6):1539-1544.
47. Lockyer J, Burse F, Richardson D, Frank J, **Snell L**, Campbell C. Competency based medical education and continuing professional development: A conceptualization for change. *Med Teach*. 2017;39(6):617-622.
48. **Majnemer A**, Dahan-Oliel N, Rohlicek C, Hatzigeorgiou S, Mazer B, Maltais D, Schmitz N. Educational and rehabilitation service utilization in adolescents born at high risk for disability. *Dev Med Child Neurol*. 2017;59(10):1056-1062.
49. Makansi N, Carnevale FA, **Macdonald ME**. Conceptualization of childhood in North American pediatric dentistry texts: A discursive case study analysis. *Int J of Paediatr Dent*. 2017;28(2):189-197.
50. Marwan Y, Waly F, Algarni N, Addar A, Sairan N, **Snell L**. The role of letters of recommendation in the selection process of surgical residents in Canada: A national survey of program directors. *J. of Surg Educ*. 2017;74(4):762-767.
51. **Moore F**. Peer-led small groups: Are we on the right track? *Perspect Med Educ*. 2017;6(5):325-330.
52. Mueller CL, Cyr G, **Bank I**, **Bhanji F**, Birnbaum L, **Boillat M**, Bolduc ME, Chankowsky J, **Constantin E**, **Cummings BA**, Fisher R, Legault P, Marchand H, Monton L, Rudkin T, Sabsabi B, Soilis N, Zigman D, Aggarwal R. The Steinberg Centre for Simulation and Interactive Learning at McGill University. *J Surg Educ*. 2017;74(6):1135-1141.
53. Nagji A, Leslie K, Wong E, Myhre D, **Young ME**, Chan MK. Something's missing from my education: Using a cross sectional survey to examine the needs and interest of Canadian medical students relating to their roles as teachers and educators. *Can Med Educ J*. 2017;8(3):e21-e29.
54. Naismith LM & **Lajoie SP**. Motivation and emotion predict medical students' attention to computer-based feedback. *Adv Health Sci Educ*. 2017;23:462-485.
55. Nakhla M, **Bell, LE**; Wafa S, Dasgupta K. Improving the transition from pediatric to adult diabetes care: the pediatric care provider's perspective in Quebec, Canada. *BMJ Open Diabetes Res. Care*. 2017;5(1).
56. Noureldin YA, **Andonian S**. Simulation for percutaneous renal access: Where are we? *J Endourol*. 31(S1):S10-S19.
57. **Nugus P**, McCarthy S, Holdgate A, Braithwaite J, Schoenmakers A, Wagner C. Packaging patients and handing them over: Communication context and persuasion in the emergency department. *Ann Emerg Med*. 69(2):210-217.



58. Osmanilliu E, Khalil E, **Bank I, Nugus P, Young M**. Let there be light: Evaluating decontamination effectiveness during a large-scale simulation of a CBRNe disaster. *Prehosp Disaster Med*. 2017;32(s1).
59. Paquin H, **Bank I, Young M, Nguyen LHP**, Fisher R, **Nugus P**. Leadership in crisis situations: Merging the interdisciplinary silos. *Leadership in Health Services*. 2017;31(1):110-128.
60. Pelaccia T, Tardif J, Tribby E, Ammirati C, Bertrand C, **Dory V, Charlin B**. Comment les médecins urgentistes raisonnent-ils ? Synthèse des principaux résultats d'une recherche qualitative multicentrique et multidisciplinaire sur la prise de décision en médecine d'urgence. *Annales françaises de médecine d'urgence*. 2017:1-6.
61. Poitras E, Doleck T, Huang L, Shan L & **Lajoie S**. Advancing teacher technology education using open-ended learning environments as research and training platforms. *Australasian J of Educ Technol*. 2017;33(3):32-45.
62. Poitras EG, Doleck, T, **Lajoie, SP**. Towards detection of learner distractions in a medical learning environment: A subgroup discovery approach. *Educ Technol Res Dev*. 2017;66(1):129-145.
63. Proulx K, **Majnemer A**, Dahan-Oliel N, Mazer B, Nadeau L, Vanier K, Maltais DB. Factors associated with moderate to vigorous physical activity in adolescents born preterm. *Pediatr Exerc Sci*. 2017;29(2):260-267.
64. Puschel K, Repetto P, Bernales M, Barros J, Perez I, **Snell L**. "In our own words": Defining medical professionalism from a Latin American perspective. *Educ Health*. 2017;30(1):11-18.
65. Ranellucci J, Hall NC, Muis KR & **Lajoie SP**. Mastery, maladaptive learning behavior, and academic achievement: An intervention approach. *Can J Educ*. 2017;40:4.
66. **Razack S**. The personal calculus of moral reasoning and identity in global health professions work. *Canadian Medical Education Journal*. 2017;8(2):e90-e94.
67. Saiki T, **Snell L, Bhanji F**. Twelve tips for promoting learning during presentations in cross cultural settings. *Med Teach*. 2017;39(5):458-462.
68. Saxena, S, Cinar E, **Majnemer A**, Gagnon I. Does dual tasking ability change with age across childhood and adolescence? A systematic scoping review. *Int. J. Dev. Neurosci*. 2017;58:35-49.
69. **Steinert, Y**. Faculty development: From program design and implementation to scholarship. Invited commentary. *GMS J Med Educ*. 2017;34(4).
70. **Steinert Y**. Scholarship in medical education. *Revista Internacional de Educação e Saúde*. 2017;1(1).
71. **Steinert, Y.**, Basi, M. and **Nugus, P**. How physicians teach in the clinical setting: The embedded roles of teaching and clinical care. *Med Teach*. 2017;39(12):1238-1244.
72. **Sternszus R**, Saroyan A, **Steinert Y**. Describing medical student curiosity across a four-year curriculum: An exploratory study. *Med Teach*. 2017;39(4):377-382.
73. **Sternszus R, Steinert Y, Bhanji F, Andonian S, Snell L**. Evaluating a novel resident role modeling program. *Clin Teach*. 2017;15(3):252-257.
74. St-Onge C, **Young ME**, Eva K, Hodges B. Validity: One word with a plurality of meanings. *Adv Health Sci Educ*. 2017;22(4):853-867.
75. **Sun N-Z**, Anand P, **Snell L**. Optimizing the design of high-fidelity simulation-based training activities using Cognitive Load Theory - Lessons learned from a real-life experience. *J Simul*. 2017;2:151-158.



76. Synnes A, Luu TM, Moddemann D, Church P, Lee D, Vincer M, Ballantyne M, **Majnemer A**, Creighton D, Yang J, Sauve R, Saigal S, Shah P, Lee SK. Canadian Neonatal Network and the Canadian Neonatal Follow-Up Network. Determinants of developmental outcomes in a very preterm Canadian cohort. *Arch Dis Child Fetal Neonatal Ed.* 2017;102(3):F235-F234.
77. Taylor D, Park YS, Egan R, PHD, Chan M-K, Karpinski J, Touchie C, **Snell L**, Tekian A. Equal, a novel rubric to evaluate entrustable professional activities for quality and structure. *Acad Med.* 2017;92(11s):s110-s117.
78. Tekian A, Watling CJ, Roberts TE, **Steinert Y**, Norcini J. Qualitative and quantitative feedback in the context of competency-based education. *Med Teach.* 2017;39(12):1245-1249.
79. Tofil NM, Lin Y, Zhong J, Peterson DT, White ML, Grant V, Grant DJ, **Gottesman R**, Sudikoff SN, Adler M, Marohn K, Davidson J, Cheng A. International network for simulation-based pediatric innovation, research and education cardiopulmonary resuscitation (INSPIRE CPR) investigators. Workload of team leaders and team members during a simulated sepsis scenario. *Pediatr Crit Care Med.* 2017;18(9):e423-e427.
80. **Thomas A**, Han L, Osler BP, Turnbull E. A., & Douglas E. Students' attitudes and perceptions of teaching and assessment of evidence-based practice in an occupational therapy professional master's curriculum: A mixed methods study. *BMC Med Educ.* 2017;17:64 DOI 10.1186/s12909-017-0895-2.
81. **Thomas A**, **Lubarsky S**, Durning S, & **Young M**. Knowledge syntheses in medical education: Demystifying scoping reviews. *Acad Med.* 2017;92(2):161-166.
82. **Thomas A**, **Young ME**, Mazer BL, **Lubarsky SE**, & **Razack SI**. Reliability and validity of multiple mini interviews for admissions to an occupational therapy professional program. *Br J Occup Ther.* 2017;80(9):558-567.
83. Tsuchiya S, Takamiya Y, **Snell L**. A New description of a healthcare professional's resilience, incorporating an eastern philosophical perspectives of self-definition - How to bridge the gap between independent and interdependent self-definition in medical education. *International J of Whole Person Care.* 2017;4(2):5-12.
84. Vachon B, Foucault M-L, Giguère C-É, Rochette A, **Thomas A**, Morel M. Factors influencing acceptability and perceived impacts of a mandatory ePortfolio implemented by an occupational therapy regulatory organization. *J Contin Educ Health Prof.* 2017;38(1)25-31.
85. Weston C, Ferris J, **Finkelstein A**. Leading change: An organizational development role for educational developers. *International Journal of Teaching and Learning in Higher Education.* 2017;29(2):270-280.
86. Whyte S, Paradis E, Cartmill C, Kuper A, Boon H, Hart C, **Razack S**, Pipher M, Whitehead CM. Misalignment of purpose and power in an early Canadian interprofessional education initiative. *Adv Health Sci Educ.* 2017;22(5):1123-1149.
87. Wideman TH, Miller J, Bostick G, **Thomas A**, Bussi eres A. Advancing pain education in Canadian physiotherapy programs: Results of a consensus-generating workshop. *Physiother Can.* 2017;70(1):24-33.



88. Wittich W, Jarry J, Barstow E, **Thomas A**. Vision and hearing impairment and occupational therapy education: Needs and current practice. *Br J Occup Ther*. 2017;80(6):384-391.
89. Yang N, Hosseini S, Mascarella MA, **Young M**, Posel N, Fung K, **Nguyen LHP**. Identifying high quality medical education websites in Otolaryngology: A guide for medical students and residents. *J Otolaryngol Head Neck Surg*. 2017;46:42 DOI 10.1186/s40463-017-0220-4.
90. **Young ME, Cummings BA**, St-Onge C. Ensuring the quality of multiple-choice exams administered to small cohorts: A cautionary tale. *Perspect Med Educ*. 2017;6(1):21-28.
91. **Young ME, Thomas A**, Varpio L, **Razack S**, Hanson MD, Slade S, Dayem K, McKnight DJ. Facilitating admissions of diverse students: A six-point, evidence-informed framework for pipeline and program development. *Perspect Med Educ*. 2017;6(2):82-90.



Monographs, Books and Book Chapters

1. Arnaert A, **Ponzoni N**, Liebert J & Debe Z. Transformative technology: What accounts for the limited use of clinical decision support systems in nursing practice when compared to medicine? In: Shachak A, Borycki E, Reis E, Eds. Health Professionals Education in the Age of Clinical Information Systems, Mobile Computing and Social Networks. Academic Press. 2017:131-145
2. **Bell L** Transition to adult care. In: Warady B, Schaefer F, Alexander S, Eds. Pediatric Dialysis Case Studies: A Practical Guide to Patient Care. Springer eBooks. 2017.
3. **Cruess S.R. & Cruess R.L.** Forward In: Monrouxe L., Rees C, Eds. Healthcare Professionalism: Improving Practice Through Reflections on Workplace Dilemmas. 2017:xi-xii.
4. **Hutchinson TA.** Whole Person Care: Transforming Healthcare. Springer eBooks. 2017.
5. **Lajoie SP.** Learning science applications for research in medicine. In: Lin L, Spector J, Eds. The Sciences of Learning and Instructional Design: Constructive Articulation Between Communities. New York: Routledge Taylor & Francis Group. 2017:108-118.
6. **Snell L**, Frank J, Philak R, Sa J. Postgraduate medical education: A “pipeline” to competence. In: Dent J, Harden R, Hunt D, Eds. A Practical Guide for Medical Teachers (5th edition). New York: Elsevier. 2017:20-27.
7. Syncox D, DiGenova L, Crump A, **Winer L.** Doctoral student success: McGill University’s holistic support model. In: Wood LN, Breyer YA, Eds. Success in Higher Education: Transitions to, Within and From University. Singapore: Springer Nature. 2017:343-361.



APPENDIX III – VISITORS TO THE CENTRE

Guests	Topic
Monika Kvernenes University of Bergen	Workshop on Phenomenographic Analysis: Mapping Conceptions of Bedside Teaching
Fred Hafferty Mayo Clinic	Kool-Aid, Barnyard Animals, and the Invisible Geography of Mayo
Louise Nasmith The University of British Columbia	Resilience: Teaching, Learning and Assessing
Christina St-Onge Université de Sherbrooke	Monte Carlo Simulation Studies: Answering Statistically Challenging Questions in Health Professions Education
Vincent Dumez Université de Montréal	Patient Partnership in Care, Education and Research: Implementation Principles and Challenges

Visitors and Visiting Scholars	Institution
Edvin Schei	University of Bergen
Torsten Risør	UiT The Arctic University of Norway



APPENDIX IV – HONOURS, AWARDS & RECOGNITION

Andonian, Sero

- Awarded the Department of Surgery Harvey Sigman Award for Excellence in Undergraduate Teaching

Asseraf-Pasin, Liliane

- Awarded the McGill University Equity and Community Building Award

Bank, Ilana

- Named to the Faculty Honour List for Educational Excellence

Boillat, Miriam

- Awarded the Ian McWhinney Family Medicine Education Award from the College of Family Physicians of Canada

Cruess, Richard

- Awarded the Alpha Omega Alpha Honor Medical Society (AOA) Edward D. Harris Professionalism Award (Shared with S.R. Cruess)
- Received the AOA 2017 Edward D. Harris Professionalism Award for standing at the forefront of medicine's modern day professionalism movement (Shared with S.R. Cruess)

Cruess, Sylvia

- Awarded the Alpha Omega Alpha Honor Medical Society (AOA) Edward D. Harris Professionalism Award (Shared with R.L. Cruess)
- Received the AOA 2017 Edward D. Harris Professionalism Award for standing at the forefront of medicine's modern day professionalism movement (Shared with R.L. Cruess)

Gottesman Ronald

- Named the Wendy MacDonald Endowed Chair in Pediatric Medical Education, Faculty of Medicine.

Lajoie, Susanne

- Awarded the Outstanding International Research Collaboration Award from the Technology, Instruction, Cognition, and Learning SIG of the American Educational Research Association
- Recipient of the Wyng Foundation Distinguished Lecturer

Majnemer, Annette

- Awarded the Pfizer Research Award of Excellence, Montreal Children's Hospital Foundation
- Received the Fellowship Award for Outstanding Contributions and Service over an Extended Period of Time, Canadian Association of Occupational Therapists



Meterissian, Sarkis

- Awarded Physician of the year, McGill University Health Centre
- Awarded Prix d'Honneur For Medical Research and Scientific Contributions Quebec Breast Cancer Foundation
- Awarded the Canadian Association for Medical Education Certificate of Merit

Moore, Fraser

- Awarded McGill Neurology co-Teacher of the Year
- Received McGill University Osler Award

Nguyen, Lily Ha-Nam P

- Awarded First Place for Best Presentation (co-author) *A trauma patient's journey: From arrival to disposition*. Simulation Summit annual meeting, Royal College of Physician and Surgeons of Canada, Montreal, Canada
- Awarded First Place for Best Research Award – Medical Student Level (with Mathilde Labbe*)
How Consistent is Competent? Examining Variance and Technical Skills Assessment Annual James D. Baxter Memorial Research Day, McGill University

Nugus, Peter

- Awarded the TCP Family Medicine Teaching Award, as voted by second-year undergraduate medical students

Ragsdale, David

- Awarded the Canadian Association for Medical Education Certificate of Merit

Snell, Linda

- Awarded the McGill University Lifetime Achievement Award for Leadership in Learning

Steinert, Yvonne

- Recipient of the CFPC Lifetime Achievement Award in Family Medicine Research, College of Family Physicians of Canada

Sternszus, Robert

- Recipient of the Paige and Bernard Kaplan Award for Excellence in Clinical Teaching (Awarded annually by the pediatrics residents to a clinical teacher in pediatrics)

Ventura, Nicole

- Recipient of the Jonathan Campbell Meakins and Family Memorial Fellowship

Young, Meredith

- Awarded the Canadian Association for Medical Education's (CAME) Meredith Marks New Educator Award

**APPENDIX V – FACULTY, CENTRE FOR MEDICAL EDUCATION**

Core Faculty	
Name	Department
Donald Boudreau	Internal Medicine
Richard Cruess	Centre for Medical Education
Sylvia Cruess	Centre for Medical Education
Beth-Ann Cummings	Internal Medicine
Valérie Dory	Assessment and Evaluation
Tim Dubé	Curriculum Design and Alignment
Carlos Gomez-Garibello	Assessment and Evaluation
Stuart Lubarsky	Neurology and Neurosurgery
Mary Ellen Macdonald	Oncology and Nursing
Saleem Razack	Pediatrics
Linda Snell	Internal Medicine
Yvonne Steinert	Family Medicine
Robert Sternszus	Pediatrics
Maryam Wagner	Assessment and Evaluation
Jeffrey Wiseman	Internal Medicine

Research Scientists	
Name	Department
Peter Nugus	Sociology
Aliki Thomas	Physical and Occupational Therapy
Meredith Young	Cognitive Psychology



Centre Members	
Name	Department
Sero Andonian	Urology
Liliane Asseraf-Pasin	Physical and Occupational Therapy
Ilana Bank	Pediatrics
Lorraine Bell	Pediatrics
Laeora Berkson	Internal Medicine
Farhan Bhanji	Pediatrics
Miriam Boillat	Family Medicine
Colin Chalk	Neurology and Neurosurgery
Evelyn Constantin	Postgraduate Medical Education
Mylène Dandavino	Pediatrics
Elaine Doucette	Nursing
Michelle Elizov	Internal Medicine
Ronald Gottesman	Pediatric Critical Care Medicine
Terry Hébert	Pharmacology and Therapeutics
Tom Hutchinson	Whole Person Care
Kevin Lachapelle	Surgery
Susanne Lajoie	Educational and Counselling Psychology
Leonora Lalla	Family Medicine
Susan Law	Family Medicine
Annette Majnemer	Physical and Occupational Therapy
Susanne Mak	Physical and Occupational Therapy
Markus Martin	Obstetrics and Gynecology
Sarkis Meterissian	Surgery and Oncology
Mélanie Mondou	Undergraduate Medical Education
Fraser Moore	Neurology and Neurosurgery
Lily Ha-Nam Nguyen	Otolaryngology
Geoffroy Noel	Anatomy and Cell Biology
Joyce Pickering	Medicine
Norma Ponzoni	Nursing
Charo Rodriguez	Family Medicine
Elisa Ruano-Cea	Pediatrics
Ruth Russell	Psychiatry
Ning-Zi Sun	Internal Medicine
Pierre-Paul Tellier	Family Medicine
Nazi Torabi	Liaison Librarian
Claire Trottier	Microbiology and Immunology
Teresa Valois	Anesthesia and Pediatrics
Nicole Ventura	Anatomy and Cell Biology



Postdoctoral Fellows	
Name	Area of Specialty
Marie-Christine Halle	Series of Intervention Studies in KT and in EBP competency development in health professions
Lerona Lewis	Faculty Development, Culture, and the Professional Identity of Faculty Members

Affiliate Members	
Name	Department
Armand Aalamian	Postgraduate Medical Education
Bernard Charlin	Director of Research and Development, CPASS, Université de Montréal
Deborah Danoff	Adjunct Professor, Department of Medicine, McGill University
Adam Finkelstein	Academic Associate, Teaching and Learning Services
Laura Winer	Director, Teaching and Learning Services

Masters Students	
Name	Discipline
Aisha Al Khamisi	Emergency Medicine
Alina Levtova	Medical Genetics
Nisreen Maghraby	Emergency Medicine
Fadi Toonsi	Diagnostic Radiology
Osamu Nomura	Geriatrics