

## **SHELLEY P. ROSS, B.Sc., M.A., PhD, MCFP (Hon.)**

Department of Family Medicine, Faculty of Medicine & Dentistry, College of Health Sciences, University of Alberta. 6-10 University Terrace, Edmonton, Alberta, Canada, T6G 2T4

Telephone: (780) 248-1264; fax (780) 492-8191

Email: [sross@ualberta.ca](mailto:sross@ualberta.ca)

Website: <https://www.researchbyross.com>

---

### **ACADEMIC POSITIONS**

<b>Professor</b> , Department of Family Medicine, University of Alberta	2021 - present
<b>Associate Professor</b> , Department of Family Medicine, University of Alberta	2014 – 2021
<b>Assistant Professor</b> , Department of Family Medicine, University of Alberta	2008 – 2014

### **EDUCATION**

<b>Doctor of Philosophy, Educational Psychology (Measurement &amp; Evaluation)</b> University of Victoria, Victoria, BC Dissertation topic: “Motivation correlates of academic achievement: Exploring how motivation influences academic achievement in the PISA 2003 dataset”	2008
<b>Master of Arts, Educational Psychology (Learning and Development)</b> University of Victoria, Victoria, BC Thesis topic: “The roles of goal orientation and emotion in responses to failure”	2003
<b>Post-Degree Professional Program (Secondary)</b> University of Victoria, Victoria, BC (Teaching certification)	2001
<b>Bachelor of Science, Major: Psychology, Minor: Biology</b> University of Victoria, Victoria, BC <i>Graduated with Distinction</i>	1994

### **ACADEMIC APPOINTMENTS**

<b>Affiliate Member of the Faculty of Graduate Studies</b> (Adjunct Professor) Department of Curriculum & Instruction, Faculty of Education, University of Victoria	2021 - present
<b>Academic Director, Teaching &amp; Learning Strategic Planning Initiatives</b> Faculty of Medicine & Dentistry, University of Alberta	2020 - 2023
<b>Director of Research &amp; Development, Teaching &amp; Assessment Support Program</b> Department of Family Medicine, University of Alberta	2016 - present
<b>Adjunct Associate Professor</b> Department of Family Medicine, Western University	2012 - 2020
<b>Adjunct Professor</b> (Assistant Professor 2008-2014; Associate Professor 2014-2021) Faculty of Education, University of Alberta	2008 - present
<b>Director, Competency-Based Achievement Program (CBAS)</b> Department of Family Medicine, University of Alberta	2015 - 2016
<b>Assistant Director, Education Support Program</b> Department of Family Medicine, University of Alberta	2008 - 2015

## **LEADERSHIP**

<b>Secretary</b> , Canadian Association for Medical Education	2023 - Present
<b>Past President</b> , Canadian Association for Medical Education	2022 - 2023
<b>President</b> , Canadian Association for Medical Education	2020 - 2022
<b>President Elect</b> , Canadian Association for Medical Education	2019 - 2020
<b>Secretary</b> , Canadian Association for Medical Education	2016 - 2019
<b>Co-Chair, Working Group on Survey Development (Triple-C Evaluation)</b> College of Family Physicians of Canada	2013 - 2015
<b>Team Lead, Education Strategic Planning</b> Department of Family Medicine, University of Alberta	2010 - present
<b>Education Lead, School of Community-Based Medicine</b> Faculty of Medicine & Dentistry, University of Alberta	2010 - 2013

## **PUBLICATIONS**

### **BOOKS**

Waugh E, Ross S, Schipper S (Eds). *Female Doctors in Canada: Experience and Culture*. Toronto, Canada: University of Toronto Press; 2019.

Ross, S. *Motivation Correlates of Academic Achievement: Exploring the Relationship Between Motivation and Academic Achievement in the PISA 2003 Dataset*. Saarbrücken, Germany: VDM Verlag; 2010.

### **BOOK CHAPTERS**

Ross S. The Feminization of Medicine: Issues and Implications. In E. Waugh, S. Ross, S. Schipper (Eds), *Female Doctors in Canada: Experience and Culture*. Toronto, Canada: University of Toronto Press; 2019.

Hamza D, Ross S. Current State of Women in Medicine: The Statistics. In E. Waugh, S. Ross, S. Schipper (Eds), *Female Doctors in Canada: Experience and Culture*. Toronto, Canada: University of Toronto Press; 2019.

Waugh E, Ross S, Schipper S. Female Doctors in Canada: The Way Forward. In E. Waugh, S. Ross, S. Schipper (Eds), *Female Doctors in Canada: Experience and Culture*. Toronto, Canada: University of Toronto Press; 2019.

Crutcher R, Thon Duop DM, Clayton R, Parent R, Dennis A, Shannon S, Ross S. Competence, confidence, and conflict: the Sudanese Physician Reintegration Program. 2015. In Madibbo A (Ed) *Sudan in Canada, Canada in Sudan: Immigration, Conflict and Reconstruction* (pp. 125-151) Montreal, CA; McGill-Queen's University Press.

Anderson JO, Milford T, Ross S. Multilevel modeling with HLM: Taking a second look at PISA. 2008. In M. C. Shelley II, L. D. Yore, & B. Hand (Eds.), *Quality research in literacy and science education: International perspectives and gold standards* (pp.263-286). Dordrecht, The Netherlands, Springer.

#### **PEER-REVIEWED JOURNAL ARTICLES** (trainees underlined)

Hess BJ, Cupido N, Ross S, Kvern B. Becoming adaptive experts in an era of rapid advances in generative artificial intelligence. *Medical Teacher*, 2024; DOI: 10.1080/0142159X.2023.2289844

Shah P, Ross S, Konkin J, Au L, Lee A. *Rubric invites discussions of social determinants of health*. *Medical Education*. 2023; 57(5): 487-487. DOI: 10.1111/medu.15058

Kostov S, Horvey S, Wicijowski T, Ross S. *Designing a User-Friendly Context-Specific Assessment Tool for Community-Based Teachers*. *Journal of Graduate Medical Education*. 2023; 15(3): 400-402. DOI: 10.4300/JGME-D-22-00783.1

Hamza DM, Hauer KE, Oswald A, van Melle E, Ladake Z, Zuna I, Assefa MK, Pelletier GN, Sebastianski M, Keto-Lambert D, Ross S. Response to letter to the editor about “Making sense of competency-based medical education”. *Medical Teacher* 2023; 45(7): 794-795. DOI: 10.1080/0142159X.2023.2195723.

Hamza DM, Hauer KE, Oswald A, van Melle E, Ladake Z, Zuna I, Assefa MK, Pelletier GN, Sebastianski M, Keto-Lambert D, Ross S. *Making sense of competency-based medical education (CBME) literary conversations: A BEME scoping review: BEME Guide No. 78*. *Medical Teacher* 2023; 45 (8): 802-815. DOI:10.1080/0142159X.2023.2168525

Ross S, Lawrence K, Bethune C, van der Goes T, Pélissier-Simard L, Donoff M, Crichton T, Laughlin T, Dhillon K, Potter M, Schultz K. *Development, implementation, and meta-evaluation of a national approach to programmatic assessment in family medicine residency training*. *Academic Medicine* 2023; 98(2):188-198 DOI 10.1097/ACM.0000000000004750

Cupido N, Ross S, Lawrence K, Bethune C, Fowler N, Hess B, van der Goes T, Schultz K. *Making sense of adaptive expertise for frontline clinical educators: A scoping review of definitions and strategies*. *Advances in Health Sciences Education*. 2022; 27(5):1213-1243. DOI: 10.1007/s10459-022-10176-w

Lee A, Donoff C, Ross S. *Using learning analytics to examine differences in assessment forms completed by continuous versus episodic supervisors*. *J Grad Med Educ* 2022; 14 (5): 606–612. <https://doi.org/10.4300/JGME-D-21-00832.1>

Lee JR, Ross S. *A comparison of resident-completed and preceptor-completed formative workplace-based assessments in a competency-based medical education program*. *Fam Med*. 2022;54(8):599-605. DOI: 10.22454/FamMed.2022.854689 \***University of Alberta Department of Family Medicine selection for submission to the CFPC Family Medicine Article Outstanding Research Award competition.**

- Ross S, Pirraglia C, Aquilina A, Zulla R. *Effective competency-based medical education requires learning environments that promote a mastery goal orientation: A narrative review*. Medical Teacher. 2022; 44(5): 527-534. <https://doi.org/10.1080/0142159X.2021.2004307>
- Ross S, Hamza D, Zulla R, Stasiuk S, Nichols D. *Development and preliminary validity evidence for the EFeCT feedback scoring tool*. Journal of Graduate Medical Education. 2022; 14(1):71-9.
- Ross S, Lee A. *Relationships, continuity, and time in health professions education*. Medical Education. 2021; 55(12): 1344-1346. DOI 10.1111/medu.14674
- Hamza DM, Ross S, Oandasan I. *Perceptions of Family Medicine in Canada through the Eyes of Learners*. Canadian Family Physician. 2021; 67(9):e249-e256.
- Richardson D, Kinnear B, Hauer KE, Turner TL, Warm EJ, Hall AK, Ross S, Thoma B, Van Melle E. *Growth mindset in competency-based medical education*. Med Teach. 2021; 43(7): 751-757. DOI: <https://doi.org/10.1080/0142159X.2021.1928036>
- Ross S, Hauer K, Wycliffe-Jones K, Hall AK, Molgaard L, Richardson D, Oswald A, Bhanji F. *Key considerations in planning and designing programmatic assessment in competency-based medical education*. Med Teach. 2021; 43(7): 758-764. DOI: 10.1080/0142159X.2021.1925099
- Ten Cate O, Schultz K, Frank JR, Hennis MP, Ross S, Schumaker DJ, Snell LS, Whelan A, Young JQ. *Questioning medical competence: Should the covid-19 crisis affect the goals of medical education?* Med Teach. 2021; 43(7): 817-823. DOI: 10.1080/0142159X.2021.1928619
- Schumacher DJ, ten Cate O, Damodaran A, Richardson D, Hamstra SJ, Ross S, Hodgson J, Touchie C, Molgaard L, Gofton W, Carraccio C. *Clarifying essential terminology in entrustment*. Med Teach. 2021; 43(7): 737-744. DOI [10.1080/0142159X.2021.1924365](https://doi.org/10.1080/0142159X.2021.1924365)
- Touchie C, Kinnear B, Schumacher DJ, Caretta-Weyer H, Hamstra SJ, Hart D, Gruppen L, Ross S, Warm E, ten Cate O. *On the validity of summative entrustment decisions*. Med Teach. 2021; 43(7): 780-787. DOI [10.1080/0142159X.2021.1925642](https://doi.org/10.1080/0142159X.2021.1925642)
- Ten Cate O, Carraccio C, Damodaran A, Gofton W, Hamstra S, Hart D, Richardson D, Ross S, Schultz K, Whelan A, Warm E, Schumacher D. *Entrustment decision-making: Extending Miller's Pyramid*. Academic Medicine. 2021; 96 (2): 199-204.
- Lee AS, Ross S. *Continuity of supervision: Does it mean what we think it means?* Medical Education. 2020; 55(4): 448-454. DOI: <https://doi.org/10.1111/medu.14378>
- Lee A, Ross S. *Five ways to get a grip on evaluating and improving educational continuity in health professions education programs*. Canadian Journal of Medical Education 2020; 11 (5): e87-e91 <https://doi.org/10.36834/cmej.69228>
- McKinney M, Smith KE, Dong KA, Babenko O, Ross S, Kelly MA, Salvalaggio G. *Development of the Inner City Attitudinal Assessment Tool (ICAAT) for Learners Across Health Care Professions*. BMC Health Services Research 2020 20:174. DOI: <https://doi.org/10.1186/s12913-020-5000-6>

Hamza DM, Ross S, Oandasan I. *Process and outcome evaluation of a CBME intervention guided by program theory*. Journal of Evaluation in Clinical Practice. 2020; 26; 1096-1104. DOI: 10.1111/jep.13344.

Babenko O, Daniels LM, Ross S, White J, Oswald A. *Medical student well-being and lifelong learning: A motivational perspective*. Education for Health. 2019; 32(1):25-32.

Zhang PA, Hamza DM, Ross S, Oandasan I. *Exploring change after implementation of family medicine residency curriculum reform*. Family Medicine 2019; 51 (4): 331-7.

Binczyk NM, Babenko O, Schipper S, Ross S. *Unexpected result of competency-based medical education: 9-year application trends to enhanced skills programs by family medicine residents at a single institution in Canada*. Education for Primary Care. 2019 Feb 14:1-6.

Ross S, Binczyk N, Hamza D, Schipper S, Humphries P, Nichols D, Donoff M. *Association of a competency-based assessment system with identification of and support for medical residents in difficulty*. JAMA Network Open 2018; 1 (7): e184581.

Binczyk NM, Babenko O, Schipper S, Ross S. *Reply to “Underrepresented Minorities and Academic Difficulty During Family Medicine Residency: No Association?”*. Fam Med. 2018; 50(10): 790. doi:10.22454/FamMed.2018.943488

Svystun O, Ross S. *Difficulties in residency: An examination of clinical rotations and competencies where family medicine residents most often struggle*. Family Medicine 2018; 50 (8): 613-6.

Oandason I, Archibald D, Authier L, Lawrence K, McEwen LA, Mackay MFP, Parkkari M, Ross S, Slade S. *Future practice of comprehensive care: Practice intentions of exiting family medicine residents in Canada*. Can Fam Phys. 2018; 64: 520-528.

Butterworth K, Rajupadhya R, Gongal R, Manca T, Ross S, Nichols D. *A clinical nursing rotation transforms medical students' interprofessional attitudes*. PloS One. 2018 May 24;13(5):e0197161.

Ellaway RH, Mackay MP, Lee S, Hofmeister M, Malin G, Archibald D, Lawrence K, Dogba J, Cote L, Ross S. *The impact of a national competency-based medical education initiative in family medicine*. Academic Medicine. 2018; 93 (12): 1850-1857.

Ross S, Hauer K, van Melle E. *Outcomes are what matter: Competency-based medical education gets us to our goal*. MedEdPublish, 12/04/2018 , 7 (2) , Paper No: 17, DOI: <https://doi.org/10.15694/mep.2018.0000085.1>

Binczyk NM, Babenko O, Schipper S, Ross S. *Common factors among family medicine residents who encounter difficulty*. Fam Med. 2018;50(4):300-303. DOI: 10.22454/FamMed.2018.912108

Kolber MR, Ross S. *Skills, Practice Patterns, and Knowledge of Canadian Family Physician Endoscopists*. Fam Med. 2018;50(3):212-216. <https://doi.org/10.22454/FamMed.2018.877757>.

Babenko O, Daniels LM, White J, Oswald A, Ross S. *Achievement goals of medical students and physicians*. Educational Research and Reviews 2018; 13(2):74-80. doi:10.5897/ERR2017.3392

Garcia-Rodriguez JA, Dickinson JA, Perez G, Ross D, Au L, Ross S, Babenko O, Johnston I. *Procedural knowledge and skills of residents entering Canadian family medicine programs in Alberta*. Family Medicine 2018; 50: 10-21.

Humphrey-Murto S, Wood TJ, Ross S, Tavares W, Kvern B, Sidhu R, Sargeant J, Touchie C. *Assessment Pearls for Competency-Based Medical Education*. Journal of Graduate Medical Education. 2017 Dec;9(6):688-91.

Lee A, Kennett S, Khera S, Ross S. *Perceptions, practice, and “ownership:” experiences in continuity of the patient-doctor relationship in a family medicine residency*. Canadian Medical Education Journal. 2017 Dec 16;8(4). e74-85.

Woloschuk W, Myhre D, Dickinson J, Ross S. *Implications of not matching to a first choice discipline: a family medicine perspective*. CMEJ 2017; 8(3):e30-e36

Loeppky C, Babenko O, Ross S. *Examining gender bias in the feedback shared with family medicine residents*. Education for Primary Care. 2017 Nov 2;28(6):319-24.

Englander R, Frank JR, Carraccio C, Sherbino J, Ross S, Snell LS, & on behalf of the ICBME Collaborators. *Toward a shared language for competency-based medical education*. Medical Teacher 2017; 39: 582-587.

Caverzagie KJ, Nousiainen MT, Ferguson PC, ten Cate O, Ross S, Harris KA, Busari J, Bould MD, Bouchard J, Iobst WF, Carraccio CL, Frank JR, & on behalf of the ICBME Collaborators. *Overarching challenges to the implementation of competency-based medical education*. Medical Teacher 2017; 39: 588-593.

Harris P, Bhanji F, Topps M, Ross S, Lieberman S, Frank JR, Snell LS, Sherbino J, & on behalf of the ICBME Collaborators. *Evolving concepts of assessment in a competency-based world*. Medical Teacher 2017; 39: 603-608.

Gruppen LD, Frank JR, Lockyer JM, Ross S, Bould MD, Harris P, Bhanji F, Hodges B, Snell LS, ten Cate O, & on behalf of the ICBME Collaborators. *Toward a research agenda for competency-based medical education*. Medical Teacher 2017; 39: 623-630.

Babenko O, Campbell-Scherer D, Schipper S, Chmelicek J, Barber T, Duerksen K, Ross S. *Examining Accuracy of Self-Assessment of In-Training Examination Performance in a Context of Guided Self-Assessment*. Family Medicine. 2017 Jun;49(6):451-5.

Amin M, Zulla R, Gaudet-Amigo G, Patterson S, Murphy N, Ross S. *Dental students' perceptions of the learning value of problem-based learning (discovery learning) in segregated vs. integrated medical/dental student groups*. Journal of Dental Education 2017; 81: 65-74.

Slade S, Ross S, Lawrence K, Archibald D, Mackay MFP, Oandason I. *Extended family medicine training: Measuring training flows at a time of significant pedagogical change*. Canadian Family Physician 2016; 62: e749-e757.

Babenko O, Ross S, Schipper S, Chmelicek J, Duerksen K, Campbell-Sherer D. *Using in-training examination data in residency program quality assurance*. MedEdPublish. 2016. DOI: <http://dx.doi.org/10.15694/mep.2016.000112>

Ross S, Dudek N, Halman S, Humphrey-Murto S. *Context, time, and building relationships: bringing in situ feedback into the conversation*. Medical Education, 2016 50: 893-895.

Klein D, Guenther C, Ross S. *Do what I say, not what I do: Lifestyles and counseling practices of physician faculty*. Canadian Family Physician, 2016 62: e393-399.

Ross D, Schipper S, Westbury C, Banh HL, Loeffler K, Allan GM, Ross S. *Examining critical thinking skills in family medicine residents*. Family Medicine, 2016 48; 2: 121-126.

Ross S. *Are influential teachers born or can they be taught?* Medical Education. 2016 49; 11: 1058-1060.

Walton J, White J, Ross S. *What's on YOUR Facebook profile? An educational intervention to promote appropriate use of privacy settings by medical students on social networking sites*. Medical Education Online, [S.l.], v. 20, jul. 2015. ISSN 1087-2981. Available at: <<http://med-ed-online.net/index.php/meo/article/view/28708>>.

Oandasan I, Archibald D, Authier L, Lawrence K, McEwen L, Palacios M, Parkkari M, Plant H, Slade S, Ross S. *Complementing undergraduate medical training*. Can Fam Phys. 2015; 61: 668-668.

Oandasan I, Archibald D, Authier L, Lawrence K, McEwen L, Palacios M, Parkkari M, Plant H, Slade S, Ross S. *Giving Curriculum Planners an Edge: Using Entrance Surveys To Design Family Medicine Education*. 2015. Can Fam Phys, 61 (4), e204-e210.

Edwards A, Salvalaggio G, Ross S, Koppula S. *How big is that baby bump? Learner variation in measuring symphysis-fundal height*. 2014. University of Alberta Health Sciences Journal, 10, 14-17.

Tan A, Duerksen K, Ross S. *"Death is not always a failure": Outcomes from implementing an online virtual patient clinical case in Palliative Care for Family Medicine Clerkship*. Med Educ Online 2013; 18: 22711 - <http://dx.doi.org/10.3402/meo.v18i0.22711>

White J, Kirwan P, Lai K, Walton J, Ross, S. *"Have you seen what's on Facebook?" The use of social networking software by healthcare professions students*. BMJ Open 2013; 3:e003013. doi:10.1136/bmjopen-2013-003013

Ross S, Lai K, Walton JM, Kirwan P, White J. *"I have the right to a private life": Medical students' views about professionalism in a digital world*. Medical Teacher, 2013; 35, 826-831

Korownyk C, Ross S, Ma V, Aaron S, Allan GM. *A descriptive analysis of a novel intervention to help residents become evidence users*. 2013. Medical Teacher, 35, e1546-1550.

Nichols D, Kulaga A, Ross S. *Coaching the coaches: Targeted faculty development for teaching*. Medical Education. 2013; 47:534-535.

Forgie S, Duff J, Ross S. *Twelve Tips for using Twitter as a Learning Tool in Medical Education*. Medical Teacher. 2013; 35; 8-14.

Solez K, Karki A, Rana S, Bjerland H, Cujec B, Aaron S, Morrish D, Walker M, Gowrishankar M, Bamforth F, Satkunam L, Glick N, Stevenson T, Ross S, Dhakal S, Allain D, Konkin J, Zakus D & Nichols D. *Multifaceted Support for a New Medical School in Nepal Devoted to Rural Health by a Canadian Faculty of Medicine and Dentistry*. Global Journal of Health Science. 2012; 4: 109-119.

Ross S, Forgie S. *Distracted doctoring: Smartphones before patients?* CMAJ. 2012; 184: 1440. DOI:10.1503/cmaj.120462

Ross S, Poth C, Donoff M, Papile C, Humphries P, Stasiuk S, Georgis R. *Involving Users in the Refinement of the Competency-Based Achievement System (CBAS), an Innovative Approach to Competency-Based Assessment*. Medical Teacher. 2012; 34:e413-e417.

Ross S, Poth C, Donoff M, Humphries P, Steiner I, Schipper S, Janke F, Nichols D. *The Competency-Based Achievement System (CBAS): Using formative feedback to teach and assess competencies with Family Medicine residents*. Canadian Family Physician. 2011;57:e323-e330.

Schipper S, Ross S. *Structured teaching and assessment: A new chart-stimulated recall worksheet for family medicine residents*. Canadian Family Physician. 2010;56:958 – 959.

Shavit I, Peled S, Steiner I, Harley D, Ross S, Tal-Or E, Lemire A. *Comparison of outcomes of two skills-teaching methods on lay-rescuers' acquisition of infant basic life support skills*. Academic Emergency Medicine. 2010;17:979-86.

Milford T, Ross S, Anderson JO. *An opportunity to better understand schooling: The growing presence of PISA in the Americas*. International Journal of Science and Mathematics Education. 2010;8:453-473.

Ross S, Poth C, Donoff M, Humphries P. *Monitoring, adapting, and evaluating a competency-based assessment framework in medical education through participatory action research*. Alberta Journal of Educational Research. 2009;55 549-552.

Anderson J O, Lin H, Treagust D, Ross S., Yore L. *Using Large-scale Assessment Datasets for Research in Science and Mathematics Education: Programme for International Student Assessment (PISA)*. International Journal of Science and Mathematics Education. 2007;5:590-614.

Ross S, Skelton R, Mueller S. *Gender differences in spatial navigation in virtual space: implications when using virtual environments in instruction and assessment*. Virtual Reality: Special Issue: Virtual Reality and Education. 2006;10:175-184.

Skelton R, Ross S, Nerad L, Livingstone S. *Human spatial navigation deficits after traumatic brain injury shown in the Arena Maze, a virtual Morris Water Maze*. Brain Injury. 2006;20:189-203.



Mueller S, Skelton R, Ross S. *Dissociating gender differences in spatial abilities using virtual environments*. Journal of the International Neuropsychological Society. 2005;11(52):4.

Roberts J, Mortimer T, Massie K, Maxwell L, Sinclair B, Ross S, van Winkel L, Elliott T. *Listen to me! Involving children and families living with congenital heart disease in the research process*. Journal of Youth and Child Care. 2004;19: 186-191.

**COALITION PUBLICATIONS (PEER-REVIEWED)** *Publications where I contributed as a coalition member but am not a named author. All publications are from the International Competency-Based Medical Education Collaborators.*

Frank JR, Snell L, Oswald A, Hauer KE, & on behalf of the ICBME Collaborators. *Further on the journey in a complex adaptive system: Elaborating CBME*. Med Teach. 2021; 43(7):734-736.

Hall J, Oswald A, Hauer KE, Hall AK, Englander R, Cheung WJ, & on behalf of the ICBME Collaborators. *Twelve tips for learners to succeed in a CBME program*. Med Teach. 2021; 43(7): 745-750.

Chan T, Oswald A, Hauer KE, Caretta-Weyer HA, Nousiainen MT, Cheung WJ, and on behalf of the ICBME Collaborators. *Capturing outcomes of competency-based medical education: The call and the challenge*. Med Teach. 2021; 43(7): 794-800.

Thoma B, Caretta-Weyer H, Schumacher DJ, Warm E, Hall AK, Hamstra SJ, Cavalcanti R, Chan TM, and on behalf of the ICBME Collaborators. *Becoming a deliberately developmental organization: Using competency-based assessment data for organizational development*. Med Teach. 2021; 43(7): 801-809.

Caretta-Weyer HA, Chan T, Bigham BL, Kinnear B, Huwendiek S, Schumacher DJ, and on behalf of the ICBME Collaborators. *If we could turn back time: Imagining time-variable, competency-based medical education in the context of COVID-19*. Med Teach. 2021; 43(7): 774-779.

Hall AK, Schumacher DJ, Thoma B, Caretta-Weyer H, Kinnear B, Gruppen L, Cooke LJ, Frank JR, Van Melle E, and on behalf of the ICBME Collaborators. *Outcomes of competency-based medical education: A taxonomy for shared language*. Med Teach. 2021; 43(7): 778-793.

Lockyer J, Bursey F, Richardson D, Frank JR, Snell L, Campbell C, & on behalf of the ICBME Collaborators. *Competency-based medical education and continuing professional development: A conceptualization for change*. Medical Teacher 2017; 39: 609-616.

Frank JR, Snell L, Englander R, Holmboe ES, & on behalf of the ICBME Collaborators\*. *Implementing competency-based medical education: Moving forward*. Medical Teacher 2017; 39: 568-573.

Holmboe ES, Sherbino J, Englander R, Snell, Frank JR, & on behalf of the ICBME Collaborators\*. *A call to action: The controversy of and rationale for competency-based medical education*. Medical Teacher 2017; 39: 574-581.

Nousiainen MT, Caverzagie KJ, Ferguson PC, Frank JR, & on behalf of the ICBME Collaborators\*. *Implementing competency-based medical education: What changes in curricular structure and processes are needed?* Medical Teacher 2017; 39: 594-598.

Ferguson PC, Caverzagie KJ, Nousianinen MT, Snell LS, & on behalf of the ICBME Collaborators\*. *Changing the culture of medical training: An important step toward the implementation of competency-based medical education*. Medical Teacher 2017; 39: 599-602.

Lockyer J, Carraccio C, Chan M, Hart D, Smee S, Touchie C, Holmboe ES, Frank JR & on behalf of the ICBME Collaborators\*. *Core principles of assessment in competency-based medical education*. Medical Teacher 2017; 39: 568-573.

**PUBLISHED ABSTRACTS (PEER-REVIEWED)** (students underlined)

Shah P, Ross S, Konkin J, Au L, Lee A. One small step for rubrics, one giant leap for social accountability. CMEJ 2023, 14(3): e358.

Lee S, Papp K, Kryslar A, Ross S. A strategy to diversify the medical profession. Mini medical schools. CMEJ 2023, 14(3): e231.

Papp K, Kryslar A, Lee S, Ross S. Giving youth the tools to pursue medicine with mini med school. CMEJ 2023, 14(3): e231.

Kryslar A, Lee S, Papp K, Ross S. Mini Med School: Inspiring the physicians of tomorrow. CMEJ 2023, 14(3): e230.

Brody Z, Ross S. Using learning analytics to examine how preceptors describe chest pain symptoms in male versus female patients. CMEJ 2023, 14(3): e198.

Ross S, Brody Z. How are chest pain symptoms described in female vs. male patients during clinical teaching of family medicine residents? Annals of Family Medicine 2023; 21(S1): 4390.

Ross S, Schultz K, Bethune C, Lawrence K, van der Goes T, Potter M. Evaluation of Competency-based Medical Education in Canadian family medicine residency programs. Canadian Medical Education Journal 2022; 13 (5): e15

Morros M, Horvey S, Ross S, Radke N, Donoff C. Is selection working? An examination of the relationship between selection and outcome in a family medicine residency program. Canadian Medical Education Journal 2022; 13 (5): e7

Kostov S, Horvey S, Wicijowski T, Ross S, Chiodo M. Development and validation of the family medicine obstetrics assessment tool. Canadian Medical Education Journal 2022; 13 (5): e5

Lee A, Du Plessis L, Ross S. Faculty and Resident Perceptions of the Relationship Between Continuity of Supervision and Assessment. Canadian Medical Education Journal 2022; 13 (2): e133

Cupido N, Ross S, Hess B, Fowler N, Schultz K, Lawrence K, van der Goes T, Pelissier-Simard L, Bethune C, Potter M. A scoping review of adaptive expertise in health professions education. Canadian Medical Education Journal 2022; 13 (2): e183

Lee J, Ross S, Nichols D, Donoff C, Fortier A, Dhillon K, Morros M, Humphries P. Comparing patterns in low stakes workplace-based assessments submitted prior to and during COVID-19. Canadian Medical Education Journal 2022; 13 (2): e246

Du Plessis L, Lee A, Ross S. An Exploration of Faculty and Resident Perspectives on the impact of the COVID-19 Pandemic on Continuity of Education. Canadian Medical Education Journal 2022; 13 (2): e169

Lee J, Ross S. Using learning analytics to examine predictors of documented feedback quality in low-stakes workplace-based assessments. Canadian Medical Education Journal 2022; 13 (2): e116

Pirraglia C, Aquilina A, Ross S. Adapting the Motivated Strategies for Learning Questionnaire for use with postgraduate medical education learners. Canadian Medical Education Journal 2021; 12 (2): e157.

Ross S, Lee JR. Examining resident-entered vs preceptor-entered low stakes workplace-based assessments in competency-based medical education. Canadian Medical Education Journal 2021; 12 (2): e267.

Aquilina A, Pirraglia C, Ross S. Narrative review of the use of the Motivated Strategies for Learning Questionnaire. Canadian Medical Education Journal 2021; 12 (2): e306.

Ross S, Schultz K, Bethune C, Lawrence K, van der goes T, Pélissier-Simard L, Kvern B. Continuous Reflective Assessment for Training (CRAFT): A programmatic approach to competency-based assessment in residency training. CMEJ 2021, 12(1): e173.

Lebrun C, Hamza D, Ross S. Findings from six years of implementation of the Competency-Based Assessment System (CBAS) in two Sport and Exercise Medicine (SEM) enhanced skills residency programs. CMEJ 2021, 12(1): e174.

Ross S, Aquilina A, Hamza D, Poth C, Schipper SA, Kiddell R, Milford T, van der Goes T. Self-regulated learning behaviours of residents entering two different family medicine residency programs. CMEJ 2021, 12(1): e156.

Ross S, Linkiewicz D, Donoff M, Humphries P, Schipper SA. Examining quality of feedback at initial implementation and seven years post-implementation of a Competency-based Medical Education innovation. CMEJ 2021, 12(1): e136

Lee A, Ross S. Effect of continuous versus episodic supervision on assessment. CMEJ 2021, 12(1): e130.

Ross S, Kvern B, van der Goes T, Pelissier-Simard L, Schultz K, Lawrence K, Bethune C, Dhillon K. *National implementation and local differences: The Canadian family medicine residency experience ten years after introducing competency-based medical education*. Canadian Medical Education Journal 2020; 11: e30.

Ross S, Aquilina A, Milford T, Kiddell R, Hamza D, van der Goes T, Poth C, Schipper S. *Examining self-regulated learning behaviours of incoming PGY1 residents in two Canadian family medicine programs*. Canadian Medical Education Journal 2020; 11: e241.

Ross S, Humphries P, Donoff M, Schipper S, Hamza D. *Examining trends in low stakes assessment information collected in a competency-based residency program*. Canadian Medical Education Journal 2019; 10: e98-99.

Chapman E, Ross S, Hamza D. *An examination of trends in patient-centered care, specific to the treatment of substance misuse and mental health conditions, using data from a family medicine residency program*. Canadian Medical Education Journal 2019; 10: e160.

Ross S, Wiebe D, Zulla R. Improving feedback quality may be affected by preceptor uncertainty about defining feedback. Medical Education 2018; 52 (Suppl. 1) 120.

Zulla R, Wiebe D, Ross S. Understanding preceptor perceptions of the feedback they share with learners in the workplace. Medical Education 2018; 52 (Suppl. 1) 120.

Ross S, Chiodo M, Humphries P, Donoff M, Schipper S. Implementing CBME: Using change management principles to facilitate transformation of your program. Medical Education 2018; 52 (Suppl. 1) 12.

Hamza D, Ross S, Forte M, Grierson L, Lawrence K, Van Melle E. Implementing Competency-Based Medical Education on a National Scale: Lessons learned from a pan-Canadian evaluation. Medical Education 2018; 52 (Suppl. 1) 12.

Donoff C, Ross S, Babenko O, Schipper S, Humphries P, Donoff M. Does Formative Assessment Capture Residents' Increased Competence from PGY1 to PGY2? Medical Education 2017; 51 (Suppl. 1) 26.

Binczyk N, Schipper S, Ross S, Babenko O. Impact of Competency Based Medical Education on Resident Performance. Medical Education 2017; 51 (Suppl. 1) 49.

Loeppky C, Babenko O, Ross S, Schipper S. Exploration of Gender Bias in the Assessment of Family Medicine Residents. Medical Education 2017; 51 (Suppl. 1) 90.

Jahangir K, Dubois L, Cooke L, Ross S. Evaluating a Tool for Assimilating Competence By-Design: An Innovative New Survey Designed to Capture Perceived and Unperceived Needs of Family Physicians in Alberta in the Context of CanMEDS Competencies. Medical Education 2017; 51 (Suppl. 1) 109.

Ross S, Svystun O, Donoff M, Schipper S, Humphries P. Detection of residents in difficulty is enhanced when assessors write more and better comments. Canadian Family Physician 2017; 63 (Suppl 1) S31.

Lebrun C, Fischer L, Manca T, Ferbey S, Shaw S, Donoff M, Wiley R, Lun V, Ross S. Competency-based assessment in sport and exercise medicine enhanced skills resident programs Pilot project. Canadian Family Physician 2017; 63 (Suppl 1) S82.

Schipper S, Ross S, Brailovsky C, Belle Brown J. Digging into why residents fail the CFPC examination: Examiners' narratives. Canadian Family Physician 2017; 63 (Suppl 1) S84.

Ross S, Schipper S, Kaur P, Stobart J, Humphries P, Donoff M. Examination of changes in assessment information before and after implementation of the Competency-Based Achievement System. *Canadian Family Physician* 2017; 63 (Suppl 1) S22.

Morros M, Ross D, Zulla R, Chmelicek J, Humphries P, Janke F, Donoff M, Schipper S, Ross S. Using archived resident data to improve CaRMS selection through evidence-based interview questions. *Can Fam Phys* 2016: 62 (Suppl. 1) S23.

Morros M, Zulla R, Steblecki L, Robertson S, Ross S. Examining past resident files to improve CaRMS selection through an evidence-based file review process. *Canadian Family Physician* 2016; 62 (S1): S24.

Ross S, Syvstun O, Donoff M, Humphries P, Schipper S. Trends in resident rotation flags before and after implementation of the Competency-Based Achievement System. *Can Fam Phys* 2016: 62 (Suppl. 1) S25.

Lee A, Robertson S, Khera S, Ross S. Relational continuity experiences of residents and preceptors in a family medicine residency. *Canadian Family Physician* 2016; 62 (S1): S11.

Kolber M, Ross S. Endoscopic knowledge, skills, and practice patterns of Canadian family physician endoscopists. *Canadian Family Physician* 2016; 62 (S1): S46.

Schipper S, Ross S, Belle Brown J. *Performance on the family medicine certification examination: Why do residents fail?* *Medical Education* 2016: 50 (Suppl 1): 129.

Kaur P, Stobart J, Ross S, Schipper S. *Examining whether competency-based assessment increases amounts of assessment information about residents.* *Medical Education* 2016: 50 (Suppl 1): 73.

Ross S, Donoff M, Schipper S, Humphries P. *No time to be complacent: Challenges in maintaining an established competency-based education program.* *Medical Education* 2016: 50 (Suppl 1): 30.

Syvstun O, Ross S. *Examining the effectiveness of the Competency-Based Achievement System for early identification of residents experiencing difficulty.* *Medical Education*, 2015; 49 (Suppl. 1) 94.

Chmelicek J, Campbell-Scherer D, Barber T, Ross S. *Resident perceptions of the utility of a formative academic benchmarking examination.* *Can Fam Phys.* 2015, 61 (Suppl 1) S42.

Koppula S, Ross S. *What the teachers told us: Results of a faculty development needs assessment survey.* *Medical Education*, 2014; 48 (Suppl . 1) 11.

Crutcher R, Ross S, Dennis A, Shannon S, Parent R. *Evaluating the Impact of a Global Health Project: The SSHARE Program in South Sudan.* *Medical Education*, 2014; 48 (Suppl . ) 57.

Ross S, Archibald D, Authier L, Eriksson J, Lawrence K, McEwen L, Palacios M, Safarov A, Slade S, Oandasan I. *Evaluating the Triple C curriculum: Longitudinal outcomes-based program evaluation.* *Canadian Family Physician* 2014, 60 (Suppl. 1), p. S5.

Hegstrom A, Ross S, Smith S. *Tracking the feedback received by family medicine residents.* *Medical Education* 2013; 47 (Suppl. 1) 14.

Janke F, Ross S. *The Value of Rural Experience in Family Medicine*. Medical Education 2013; 47 (Suppl. 1) 72.

Cruz A, Lott A, Nzekwu E, Kowalewska Grochowska KT, Ross S, Coumont M. *Evolution of the Health Advocacy and Leadership Program (HAL)*. Medical Education 2013; 47 (Suppl. 1) 78.

Ross S, Stasiuk S, Hegstrom A, Nichols D. *Development and Validation of a Tool to Evaluate the Quality of Written Formative Feedback*. Medical Education 2013; 47 (Suppl. 1) 83.

Donoff M, Ross S, Humphries P, Schipper S. *Successful Competency-Based Assessment: Using Assessment for Learning in the Competency-Based Achievement System (CBAS)*. Medical Education 2013; 47 (Suppl. 1) 125.

Lai K, Ross S, Kirwan P, White J. *New attitudes of professionalism in the web 2.0 generation*. Medical Education 2013; 47 (Suppl. 1) 12.

Wong K, Hirt C, Ross S, Erichsen S, White J. *Teachable Moments: Developing an online database of scenes from television dramas for use in medical education*. Medical Education 2013; 47 (Suppl. 1) 65.

Tan A, Ross S. *Development and implementation of an online virtual patient clinical case in palliative care for Year 3 Family Medicine clerkship*. Family Medicine. 2012; 44 (suppl. 4).

Stasiuk S, Ross S, Poth C. *Documenting the process: tracking the development, implementation, and uptake of a novel competency-based assessment tool*. Family Medicine. 2012; 44 (suppl. 4).

Edwards A, Salvalaggio G, Ross S, Koppula S. *Inter- and intra-observer variation in symphysis-fundal height measurements among first year family medicine residents*. Family Medicine. 2012; 44 (suppl. 4).

Hegstrom A, Ross S, Donoff M, Humphries P, Barber A. *Teaching the teachers: using written formative feedback as a basis for improving preceptor teaching*. Family Medicine. 2012; 44 (suppl. 4).

Donoff M, Ross S, Humphries P. *Using formative feedback to guide summative assessment in a competency-based program*. Medical Education. 2012; 46 (suppl. 1): 6.

Ross S, Hegstrom A, Donoff M, Humphries P. *Using preceptors' documented feedback about resident progress to target coaching of preceptor teaching skills*. Medical Education. 2012; 46 (suppl. 1): 64.

Kirwan P, White J, Ross S. *Facebook use by healthcare students and faculty: do we need guidelines for online professionalism?* Medical Education. 2012; 46(suppl. 1):53.

Dennis A, Ross S, Crutcher R. *Clinical skills assessment of Sudanese-Canadian physicians in South Sudan: Challenges and possibilities*. Medical Education. 2012; 46(suppl. 1):60.

Tan A, Ross S. *Benefits of implementation of an online virtual patient clinical case in palliative care for year 3 family medicine clerkship*. Medical Education. 2012; 46(suppl. 1): 41.

Forgie S, Walton J, Ross S. *Laptops in lectures: How engaged are connected students?* Medical Education. 2011; 45(suppl. 1):33.

Donoff M, Humphries P, Nichols D, Ross S. *Making competencies make sense: Reconciling the varied ways of viewing competency with the day-to-day task of assessing what residents are doing in the workplace*. Medical Education. 2011; 45(suppl. 1):33.

Tan A, Levy M, Ross S. *Development and implementation of a new curriculum for third year clerkship in family medicine*. Family Medicine. 2010; 42(suppl. 4).

Ross S, Donoff M, Humphries P, Steiner I. *Development and implementation of competency-based assessment*. Family Medicine. 2010; 42(suppl. 4).

Campbell-Scherer D, Schipper S, Ross S. *Introduction of an academic benchmarking examination to a Canadian Family Medicine residency program*. Family Medicine. 2010; 42 (suppl. 4).

## **POLICY PAPERS AND GUIDELINES**

Crichton T, Schultz K, Lawrence K, Donoff M, Laughlin T, Brailovsky C, Bethune C, van der Goes T, Dhillon K, Péllissier-Simard L, Ross S, Hawrylyshyn S, Potter M. *Assessment Objectives for Certification in Family Medicine*. Mississauga, ON: College of Family Physicians of Canada; 2020.

## **INVITED PRESENTATIONS**

*(All CBAS presentations are a product of work of the full CBAS team: Mike Donoff, Shirley Schipper, Paul Humphries, Shelley Ross) (Students underlined)*

Ross S, Lawrence K, Cupido N. *Adaptive Expertise and Adaptivity as Features of Preparedness*. Invited presentation as part of Education Design Retreat, Outcomes of Training Project, College of Family Physicians of Canada, June 14-16, 2023, Mississauga, ON.

Ross S. *Improving and advancing postgraduate health professions education through research and scholarship*. Invited keynote for Research, Innovation, and Scholarship in Education (RISE) conference. Saskatoon, SK. June 9, 2023.

Ross S. *What if program evaluation was exciting instead of scary (or boring)? Approaching continuous quality improvement from a curiosity perspective*. Invited workshop for Research, Innovation, and Scholarship in Education (RISE) conference. Saskatoon, SK. June 9, 2023.

Ross S, Sonnenberg L, Abraham J, Kvern B, Wilson, K. *CaRMS Dating Game!* Invited presentation at the Section of Teachers meeting. Family Medicine Forum, November 12, 2021. Virtual delivery.

Ross S, van der Goes T. *Programmatic assessment in family medicine residency programs*. Invited speaker for Assessment Directors' Meeting. Family Medicine Forum, October 30, 2021. Virtual delivery.

Ross S, Sonnenberg L, Abraham J, Kvern B. *Pandemic times*. Invited presentation at the Section of Teachers meeting. Family Medicine Forum, November 6, 2020. Virtual delivery.

Ross S, Touchie C, Kvern B, Wright B. *Is programmatic assessment of learners sufficiently robust to make high stakes decisions on individual learners?* Invited panel presentation, Annual General meeting of the Medical Council of Canada, Ottawa, ON, September 21, 2019.

Ross S. *Competence or Excellence? Pedantics, pendulums, pedagogy, and the essential role of medical education research*. Invited keynote, Health and Medical Education Scholarship Symposium 2019, Calgary, AB, February 21, 2019.

Ross S. *If it's all about the learners, why aren't they involved in the research? The perils, pitfalls, and rewards of involving end users in medical education research*. Invited workshop, Health and Medical Education Scholarship Symposium 2019, Calgary, AB, February 21, 2019.

Ross S. *Basics of assessment; Competency-based medical education and workplace-based assessment; Formative feedback and coaching*. Invited full day educational retreat. Department of Dermatology, University of California Davis. Sacramento, CA, September 5, 2018.

Ross S. *A word on Field Notes*. University of Saskatchewan College of Medicine, Saskatoon, SK, September 21, 2017.

Ross S. *Competency-based education and assessment in Canadian family medicine residency programs*. Second Affiliated Hospital of Zhejiang University, Hongzhou, China, March 27, 2016.

Ross S, Schipper S, Donoff M, Humphries P. *An overview of the Competency-Based Achievement System (CBAS): Trustworthy assessment in a competency-based education world*. Department of Palliative Care, University of Alberta, Edmonton, AB, November 19, 2015.

Ross S, Archibald D. *Understanding and using the Triple C Evaluation Survey data within your own program: Opportunities for program evaluation*. Family Medicine Forum, Toronto, ON, November 11-14, 2015.

Ross S, Schipper S, Humphries P, Donoff M. *Competency-Based Assessment Systems: Design and Implementation*. College of Anesthetists of Ireland, Dublin, IR, September 14, 2015.

Ross S. *Practical application of motivation theory to health professions education: A scoping review and examples for practice*. Society of Directors of Research in Medical Education, Salt Lake City, UT. June 27-29, 2015.

Ross S, & Chiodo M. *Getting the most out of the Competency-based Achievement System (CBAS)*. FREEZeR Faculty and resident retreat, Department of Family Medicine, Jasper, AB, March 28, 2015.

Ross S. *Assessment, trust, and competence: An overview of the Competency-Based Achievement System (CBAS)*. Pediatric Grand Rounds, University of Alberta. Edmonton, AB, March 12, 2015.

Ross, S. *Designing responsive faculty development: The AMMI Canada Educational Needs Assessment in action*. Association of Medical Microbiology and Infectious Disease Canada Annual General Meeting, Victoria BC, April 4, 2014.

Ross, S. *Direct observation tools: What do provinces need for effective training of assessors in practice readiness assessment programs?* Medical Council of Canada National Assessment Collaboration, Victoria BC, December 3, 2013.



Ross S. *Introducing the Competency-Based Achievement System: Tools for Direct Observation in Practice Readiness Assessments*. College of Physicians and Surgeons of Nova Scotia, Halifax NS, June 28, 2013.

Ross S. Micro-keynote: *Exploring questions of professionalism and use of social media among students in professional training programs*. Advances in Qualitative Methods Conference, Edmonton AB, June 21, 2013.

Ross S. *Competency-based assessment tools to determine practice readiness*. College of Physicians and Surgeons of Alberta Assessor Training Session, Grande Prairie AB, June 15, 2013.

Ross S. *The Competency-Based Achievement System (CBAS) and Sentinel Habits*. National Assessment Collaboration Working Group (Medical Council of Canada): Family Medicine. National retreat held in Victoria BC, February 18-20, 2013.

Ross S. *Outcomes of the AMMI Needs Assessment*. Meeting of the Education Executive of the - Association of Medical Microbiology and Infectious Disease Canada. Edmonton, AB, November 30, 2013.

Crutcher R, Ross S, Dennis A, Parent R. *Discordant Dilemmas: Assessing the clinical skills of Sudanese-Canadian physicians in South Sudan*. Wednesday Seminar Series, University of Calgary AB, Oct. 24, 2012.

Schipper S, Ross S. *An introduction to the competency-based achievement system (CBAS). General Meeting of the Associate Deans of Post-Graduate Medical Education*. Banff, AB. April 14-18, 2012.

Ross S. *Are you on facebook? Examining professionalism in the era of social media*. Family Medicine Research Forum, University of Alberta. Edmonton, AB. October 28, 2011.

Ross S. *Creating an effective conference poster*. Faculty Development, Department of Family Medicine, University of Alberta. Edmonton, AB. September 2011.

Ross S. *Motivating your learner*. Faculty Development, Department of Family Medicine, University of Alberta. Edmonton, AB. January 2011.

Ross S, Poth C, Donoff M, Humphries P, Steiner I. *Using participatory action research in the development and implementation of a competency-based achievement system*. Family Medicine Research Forum, University of Alberta. Edmonton, AB. June 25, 2009.

Ross S. *Motivation theory in action: Best practices in giving feedback*. Family Medicine Research Forum, University of Alberta. Edmonton, AB. March 26, 2009.

Anderson JO, Ross S, Milford T. *Schools and student achievement: Investigating relationships in science and mathematics education*. CRYSTAL-Alberta Speakers Series 2007-2008; University of Alberta. Edmonton, AB. September 15, 2007.

## **LETTERS TO THE EDITOR, BLOG POSTS, OTHER MEDIA**

Ross S. *CBME: Everything old is new again (and that's not a bad thing)*. International Competency-Based Medical Education Collaborators Blog. February 2023.  
<https://icenetblog.royalcollege.ca/2023/02/09/cbme-everything-old-is-new-again-which-is-not-a-bad-thing/>

Ross S. *How am I doing? Getting an answer through planning and design of programmatic assessment*. International Competency-Based Medical Education Collaborators Blog. December 2021.  
<https://icenetblog.royalcollege.ca/2021/12/16/how-am-i-doing/>

Ross S. *Medical education and practice is gender neutral – or is it?* Canadian Family Physician Blog. August 2019.

## **CONFERENCE PRESENTATIONS – PEER-REVIEWED**

**Workshops** (does not include those listed as published abstracts above) (students underlined)

Ross S, Fowler N, Cupido N, Lawrence K, Bethune C, van der Goes T, Wilson K, Potter M, Schultz P. The Role of Adaptive Expertise in Family Medicine. Family Medicine Forum virtual event, November 14-16, 2022, online.

Ross S, Lawrence K, Bethune C, van der Goes T, Wilson K, Potter M. Assessment Foundations 2: Designing and implementing programmatic assessment. Family Medicine Forum, November 9-12, 2022, Toronto, ON.

Ross S, Schultz K, van der Goes T, Lawrence K, Bethune C, Potter M. Programmatic Assessment for Competency-Based Medical Education: How Canada successfully implemented competency-based assessment in family medicine postgraduate training. Pre-conference workshop. Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions, August 26-28, 2022, Lyon, France.

Amiel J, Schultz K, Ross S, Turner TL, Hodgson J, DuBois D, Niemi-Murola L, Richardson D. Competency-Based Education: Frameworks and Foundations for Building a Competency Based Curriculum. Annual meeting of the Association for Medical Education – Europe, August 27-31, 2022 Lyon, France.

Ross S, Fowler N, Cupido N, Lawrence K, Bethune C, van der Goes T, Wilson K, Potter M, Schultz K. The Role of Adaptive Expertise in Family Medicine. Family Medicine Forum Virtual, November 16-19, 2022.

Ross S, Lawrence K, Bethune C, van der Goes T, Wilson K, Potter M, Schultz K. Assessment Foundations 2: Designing and implementing programmatic assessment. Workshop. Family Medicine Forum, November 9-12, 2022.

Potter M, Bethune C, Van Der Goes T, Ross S, Lawrence K, Péliissier-Simard L, Schultz K, Dillon K. Assessment Foundations 1: Principles for assessing learners. Workshop. Family Medicine Forum, November 10-13, 2021. Virtual delivery.

Ross S, Bethune C, Kvern B, Lawrence K, Pelissier-Simard L, van der Goes T, Schultz K, Dillon K. Assessment Foundations 2: Assessment principles in programmatic assessment. Family Medicine Forum, November 4-7, 2020. Virtual delivery.

Bethune C, Ross S, Kvern B, Lawrence K, Pelissier-Simard L, van der Goes T, Schultz K, Dillon K. Assessment Foundations 1: Principles for assessing learners. Family Medicine Forum, November 4-7, 2020. Virtual delivery.

Ross S, Bethune C, Kvern B. Assessment Foundations 1: Principles and approaches for assessing learners. Family Medicine Forum, October 30- November 2, 2019. Vancouver, BC.

Morros M, Ross. Let's talk Selection: The good, the bad, and the ugly Family Medicine Forum, October 30- November 2, 2019. Vancouver, BC.

Ross S, Bethune C, Kvern B. Assessment Foundations 2: Assessment principles in programmatic assessment. Family Medicine Forum, October 30- November 2, 2019. Vancouver, BC.

Ross S, Kvern B. Programmatic Assessment in Action: Designing competency-based assessment using Canadian family medicine as an example. Annual meeting of the Association for Medical Education – Europe, August 24-28, 2019, Vienna, Austria.

Ross S, Bethune C, Kvern B. Designing Programmatic Assessment That Meets Accreditation Requirements: Applying Core Principles and Approaches to Assessment of Learners in Clinical Training. Society of Teachers of Family Medicine, April 26-May 1, 2019, Toronto, ON

Ross S, Humphries P, Donoff M, Hamza D, Chiodo M, Schipper S. Implementing Competency-Based Assessment to Meet Accreditation Guidelines: Examples From Canadian Family Medicine Residency Training. Society of Teachers of Family Medicine, April 26-May 1, 2019, Toronto, ON

Ross S, Kvern B. Decision making in competency-based medical education: what information is needed for competency committees to make defensible decisions? Canadian Conference on Medical Education, April 13-16, 2019, Niagara Falls, ON.

Bethune C, Ross S. Fundamentals of Assessment 102: Applying assessment principles to designing programmatic assessment. Family Medicine Forum, November 14-17, 2018, Toronto, ON.

Bethune C, Ross S. Fundamentals of Assessment 101: Principles and approaches for assessing learners in clinical training. Family Medicine Forum, November 14-17, 2018, Toronto, ON.

Ross S, Humphries P, Schipper S, Donoff M. Learning plans: Individualized road maps to competence for residents. Family Medicine Forum, November 14-17, 2018, Toronto, ON.

Morros M, Ross S. Selection boot camp: Brainstorming solutions to barriers and pitfalls in the selection process. Family Medicine Forum, November 14-17, 2018, Toronto, ON.

Ross S, Kvern B, Sargeant J. Effectively sharing feedback with learners: Helping learners by going from the general to the specific. Canadian Conference on Medical Education, April 29-May 2, 2017, Winnipeg, MB.

Schipper S, Ross S. Workplace-based Assessment: an essential component of competency-based medical education. Canadian Conference on Medical Education, April 29-May 2, 2017, Winnipeg, MB.

Humphries P, Ross S, Donoff M, Schipper S. Acknowledge the Elephant in the Room: Necessary steps for effective competency-based assessment. Family Medicine Forum, November 9-12, 2016, Vancouver, BC.

Ross S, Archibald D, Babenko O. MedEd Research 101 (An introduction to medical education research): Turn your passion into scholarship. Family Medicine Forum, November 9-12, 2016, Vancouver, BC.

Archibald D, Ross S, Babenko O. MedEd Research 102: Here's my research question, what now? Next steps in medical education scholarship. Family Medicine Forum, November 9-12, 2016, Vancouver, BC.

Schipper S, Ross S, Humphries P, Donoff M. An Introduction to Tools for Competency-Based Assessment: The great, the good, and the “maybe later”. Family Medicine Forum, November 9-12, 2016, Vancouver, BC.

Ross S, Humphries P, Donoff M, Schipper S. Achieving effective competency-based assessment by using dangerous ideas. Pre-conference workshop, Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions. Perth, Australia. March 19-23, 2016.

Ross S, Schipper S, Humphries P, Donoff M. Assessment in Competency-Based Medical Education: Finding assessment strategies that fit your program. Family Medicine Forum, November 11-14, 2015 Toronto, ON.

Ross S, Archibald D. Medical Education Research 101 Revisited: An overview of the basics of methodology and design. Family Medicine Forum, November 11-14, 2015 Toronto, ON.

Ross S, Schipper S, Humphries P, Donoff M. Flipping assessment: How documents from teaching can be used to improve teaching. International Conference on Residency Education, October 22-24, 2015 Vancouver, BC.

Holmboe E, Busari J, Glasgow N, Ross S, Harris P. Milestones and EPAs – Useful frameworks for CBME and assessment. Pre-conference workshop, Association for Medical Education-Europe, September 4-9, 2015 Glasgow, Scotland.

Ross S, Donoff M, Schipper S, Humphries P. Meeting the challenge of defensible competency-based assessment: Examples from a fully implemented competency-based residency program. Canadian Conference on Medical Education, April 24-27, 2015 Vancouver, BC.

Archibald D, Ross S. Residency level program evaluation and you: How to use results to evaluate and improve curriculum through faculty development. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Ross S, Humphries P, Schipper S. Flipping assessment: Using field notes to improve teaching. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Ross S, Archibald D, Oandasani I, Authier L, Lawrence K, McEwen L, Palacios M, Parkkari M, Slade S. Exploring Research Opportunities Using the Triple C Evaluation Survey Data. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Humphries P, Ross S, Schipper S, Donoff M. Using evidence triangulation to help residents in difficulty. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Ross S, Archibald D. Medical Education Research 101: An introduction to basics of methodology and design. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Schipper S, Loeffler K, Ross D, Ross S, Allan M. Predicting Performance of Family Medicine Residents Using a Critical Thinking Skills Test. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Ross S, Schipper S. Getting essential assessment information: Practical competency-based assessment in family Medicine using Competency-Based Achievement System (CBAS). STFM San Antonio, Texas. May 4-6, 2014.

Ross S, Donoff M, Schipper S. Practical and trustworthy competency-based assessment in residency: Lessons learned from four years of implementation of the Competency-Based Achievement System (CBAS). Ottawa Conference . Ottawa, ON, April 26-30, 2014.

Ross S, Humphries P, Schipper S, Donoff M. Improving use of the Competency-Based Achievement System (CBAS). Annual Scientific Assembly of the Alberta College of Family Medicine, Banff AB, February 27-March 1, 2014.

Ross S, Donoff M, Schipper S. The Competency-Based Achievement System (CBAS): Practical and trustable competency-based assessment in residency education. The International Conference on Residency Education. Calgary, AB. September 26-28, 2013.

Donoff M, Ross S, Humphries P, Schipper S. Successful competency-based assessment: Using assessment for learning in the Competency-Based Achievement System (CBAS). Canadian Conference on Medical Education. Quebec City, QC. April 20-23, 2013.

Ross S, Schipper S, Humphries P, Donoff M. *The Competency-Based Achievement System (CBAS): Practical and trustworthy competency-based assessment and learning*. Annual Meeting of the American Association of Medical Colleges, Group on Educational Affairs (GEA). San Francisco, CA. November 2-8, 2012.

Ross S, Schipper S, Humphries P, Donoff M. *The Competency-Based Achievement System (CBAS): Workable competency-based assessment in residency education*. The International Conference on Residency Education. Ottawa, ON. October 18-20, 2012

Ross S, Donoff M, Humphries P. Implementing competency-based assessment in family medicine: Two years of the competency-based achievement system (CBAS). Annual Meeting of the Society of Teachers of Family Medicine. Seattle, WA. April 25-29, 2012.

Donoff M, Ross S, Humphries P. Using formative feedback to guide summative assessment in a competency-based program. Canadian Conference on Medical Education. Banff, AB. April 14-18, 2012.

Donoff M, Ross S, Humphries P. Evidence-based competency assessment in primary care: Using formative feedback to improve residency training. Annual Meeting of the North American Primary Care Research Group. Banff, AB. November 12-16, 2011.

Schipper S, Donoff M, Humphries P, Nichols D, Janke F, Ross S. A program directors' perspective on the competency-based achievement system (CBAS). Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Ross S, Koppula S. Finding research opportunities in your teaching: Don't fear research, embrace it! Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Ross S. Giving feedback to residents: Best practices from motivation literature. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Schipper S, Nichols D, Janke F, Humphries P, Donoff M, Ross S. A program directors' perspective on the utility of a novel competency-based achievement system (CBAS) for assessing resident progress. Canadian Conference on Medical Education. Toronto, ON. May 7-11, 2011.

Ross S, Koppula S. Posters, presentations, and publications, oh my! Finding scholarship in your teaching and clinical work. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Vancouver, BC. October 15, 2010.

Donoff M, Ross S, Humphries P, Steiner I. Catch of the day: CBAS (Competency-Based Achievement System) in resident training. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Vancouver, BC. October 15, 2010.

Nichols D, Schipper S, Janke F, Ross S, Donoff M, Humphries P, Steiner I. Where the rubber hits the road: How the competency-based achievement system (CBAS) helps program directors sleep better. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Vancouver, BC. October 15, 2010.

Ross S, Poth C, Donoff M, Humphries P. The competency-based achievement system (CBAS) in family medicine residency training: Development, implementation, and monitoring of impact. Annual Meeting of the Society of Teachers of Family Medicine. Vancouver, BC. April 25-28, 2010.

Janke F, Humphries P, Ross S, Schipper S, Donoff M, Steiner I. Using the competency-based achievement system (CBAS) to guide the learning of family practice residents. Canadian Conference on Medical Education. St. John's, NF. May 1-5, 2010.

Humphries P, Ross S, Donoff M, Steiner I. The competency-based achievement system: A framework for assessing competency in family medicine. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

**Oral Presentations** (does not include oral presentations listed as published abstracts above)

Schultz K, Ross S, Lawrence K, Bethune C, van der Goes T, Hanel E, Wilson K. A Conceptual Model of Adaptability in Family Medicine. Family Medicine Forum virtual event, November 14-16, 2023, online only.

Ross S, Fowler N, Cupido N, Lawrence K, Bethune C, van der Goes T, Hess B, Hanel E, Wilson K. The What, Why, and “So What?” of Adaptive Expertise. Family Medicine Forum virtual event, November 14-16, 2023, online only.

Brody Z, Ross S. How are chest pain symptoms described in female vs. male patients during clinical teaching of family medicine residents? Annual meeting of the North American Primary Care Research Group, November 18-22, 2022, Phoenix, Arizona.

Morros M, Horvey S, Ross S, Hurst Radke N, Donoff C. Is selection working? An examination of the relationship between selection and outcome in a family medicine residency program. (Oral Presentation) October 27, 2022. International Conference Family on Residency Education. Montreal, Quebec, Canada. October 27-29, 2022.

Ross S, Donoff C, Dhillon K, Fortier A, Lee JR, Humphries P, Morros M, Nichols D. Comparing patterns in low-stakes (formative) workplace-based assessments prior to and during COVID-19. Oral presentation at The Ottawa Conference on Assessment of Competence in Medicine and the Healthcare Professions, August 27-28, 2022, Lyon, France.

Poth C, Ross S, Aquilina A. What do a journey, a guide, and signposts have to do with developing mixed methods research proficiency. Oral presentation at 2022 Mixed methods International Research Association Global Virtual Conference, August 5 2022. Virtual

Lee JR, Ross S. Using learning analytics to examine predictors of documented feedback quality in low-stakes workplace-based assessments. Oral presentation at the Canadian Conference on Medical Education, April 24-27, 2022, Calgary AB.

Lee A, Du Plessis L, Ross S. Faculty and resident perceptions of the relationship between continuity of supervision and assessment. Oral presentation at the Canadian Conference on Medical Education, April 24-27, 2022, Calgary AB.

Du Plessis L, Lee A, Ross S. An exploration of faculty and resident perspectives on the impact of the COVID-19 pandemic on continuity of education. Oral presentation at the Canadian Conference on Medical Education, April 24-27, 2022, Calgary AB.

Cupido N, Ross S, Hess B, Fowler N, Schultz K, Lawrence K, van der Goes T, Pelissier-Simard L, Bethune C, Potter M. A scoping review of adaptive expertise in health professions education. Oral presentation at the Canadian Conference on Medical Education, April 24-27, 2022, Calgary AB.

Lee A, Ross S. Comparing field notes written by continuous versus episodic supervisors. Family Medicine Forum, November 4-7 2020, virtual delivery.

Ross S, Aquilina A, Hamza D, Kiddell R, Milford T, van der Goes T, Poth C, Schipper S. Examining self-regulated learning behaviours of incoming PGY1 residents in two Canadian family medicine programs. Health Professions Education Scholarship Day, University of Alberta, Dec 5, 2019.

Ross S, Kvern B, Sonnenberg L. Health professions education: The musical! Fringe presentation at the Annual meeting of the Association for Medical Education – Europe, August 24-28, 2019, Vienna, Austria.

Hamza D, Chapman E, Ross S. Patient-centered care specific to treatment of substance misuse and mental health conditions: An examination of trends in data from a family medicine residency program. Society of Teachers of Family Medicine, April 26-May 1, 2019, Toronto, ON.

Chapman E, Hamza D, Ross S. An examination of trends in patient-centered care, specific to the treatment of substance misuse and mental health conditions, using data from a family medicine residency program. Canadian Conference on Medical Education, April 13-16, 2019, Niagara Falls, ON.

Ross S, Humphries P, Donoff M, Schipper S, Hamza D. Examining trends in low stakes assessment information collected in a competency-based residency program. Canadian Conference on Medical Education, April 13-16, 2019, Niagara Falls, ON.

Wiebe D, Zulla R, Ross S. A Shared Definition of Feedback is Essential in Faculty Development for Improving Teaching. Family Medicine Forum, November 14-17, 2018, Toronto, ON.

Ross S, Schipper S, Kaur P, Stobart J, Donoff M, Humphries P. An examination of changes in assessment information pre- and post-implementation of Competency-Based Achievement System (CBAS). Family Medicine Forum, November 9-12, 2016, Vancouver, BC.

Ross S, Svystun O, Donoff M, Humphries P, Schipper S. Detection of residents in difficulty is enhanced when assessors write more and better comments. Family Medicine Forum, November 9-12, 2016, Vancouver, BC.

Ross S, Schipper S, Kaur P, Stobart J, Donoff M, Humphries P. Examining changes in assessment information following implementation of the Competency-Based Achievement System (CBAS). Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions. Perth, Australia. March 19-23, 2016.

Ross S, Svystun O, Donoff M, Humphries P, Schipper S. Improving comments on assessments leads to better detection of residents in difficulty. Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions. Perth, Australia. March 19-23, 2016.

Ross S, Donoff M, Humphries P, Schipper S. Competency-Based education and assessments: Program evaluation five years post-implementation. Annual Scientific Assembly of the Alberta College of Family Physicians, Banff, AB. March 4-6, 2016.

Ross S, Svystun O, Donoff M, Humphries P, Schipper S. All rotations are not created equal: Identifying clinical experiences where residents are most likely to encounter difficulty. Annual Scientific Assembly of the Alberta College of Family Physicians, Banff, AB. March 4-6, 2016.



Lee A, Ross S, Robertson S, Khera S. Relational Continuity Experiences of Residents and Preceptors in a Family Medicine Residency. Family Medicine Forum, November 11-14, 2015, Toronto, ON.

Ross S, Svystun O, Schipper S, Humphries P, Donoff M. Trends in Resident Rotation Flags Before and After Implementation of the Competency-Based Achievement System. Family Medicine Forum, November 11-14, 2015, Toronto, ON.

Morros M, Ross D, Chmelicek J, Humphries P, Janke F, Donoff M, Schipper S, Ross S. Using Archived Resident Data to Improve CaRMS Selection Through Evidence-Based Interview Questions. Family Medicine Forum, November 11-14, Toronto, 2015, ON.

Morros M, Zulla R, Steblecki L, Robertson S, Ross S. Examining Past Resident Files to Improve CaRMS Selection Through an Evidence-Based File Review Process. Family Medicine Forum, November 11-14, 2015, Toronto, ON.

Ross S, Huie M, Schipper S. Use words that count: A content analysis to identify words and phrases that commonly appear in effective formative feedback. International Conference on Residency Education, October 22-24, 2015, Vancouver BC.

Morros M, Ross S, Chmelicek J, Humphries P, Koppula S, Janke F, Donoff M, Ross D, Schipper S. Asking the right questions: An evidence-based revision of interview questions to improve CaRMS selection. International Conference on Residency Education, October 22-24, 2015, Vancouver BC.

Morros M, Zulla R, Steblecki L, Robertson S, Ross S. Learning from the past to avoid repeating it: Data-mining resident files to improve CaRMS selection. International Conference on Residency Education, October 22-24, 2015, Vancouver BC.

Schipper S, Huie M, Ross S. Five key words for effective feedback: A content analysis of excellent written formative feedback. Association for Medical Education-Europe, Glasgow, Scotland. September 4-9, 2015.

Humphries P, Donoff M, Schipper S, Ross S. Competency-Based Education and Assessment: Program evaluation five years post-implementation. Association for Medical Education-Europe, Glasgow, Scotland. September 4-9, 2015.

Svystun O, Ross S. Examining the effectiveness of the Competency Based Achievement System for early identification of residents experiencing difficulty. Canadian Conference on Medical Education, Vancouver, BC. April 24-27, 2015.

Ross S, Oandasan I, Archibald D, Authier L, Lawrence K, McEwen. Evaluating the New Canadian Family Medicine Triple-C Competency-Based Curriculum. STFM San Antonio, Texas. May 4-6, 2014.

Ross S, Donoff M, Humphries P, Schipper S. Every day language for competency-based assessment: The Sentinel Habits. STFM San Antonio, Texas. May 4-6, 2014.

Ross S, Oandasan I, Archibald D, Authier L, Lawrence K, McEwen L. Are we producing what Canada needs? Evaluating the new Canadian Family Medicine triple-C competency-based curriculum. Canadian Conference on Medical Education, Ottawa, ON. April 26-30, 2014.

Zulla R, Ross S, Donoff M, Humphries P, Schipper S. Exploring documented formative feedback within a competency-based residency program. Canadian Conference on Medical Education. Ottawa, ON. April 26-30, 2014.

Ross S, Dennis A, Shannon S, Parent R. Evaluating the impact of a global health project: The SSHARE program in South Sudan. Canadian Conference on Medical Education. Ottawa, ON. April 26-30, 2014.

Koppula S, Ross S. What the teachers told us – Results of a faculty development needs assessments survey. Canadian Conference on Medical Education. Ottawa, ON. April 26-30, 2014.

Donoff M, Ross S, Humphries P, Schipper S. The Competency-Based Achievement System (CBAS): A Process for Practical and Trustworthy Assessment. Canadian Conference on Medical Education. Ottawa, ON. April 26-30, 2014.

Humphries P, Donoff M, Schipper S, Ross S. Using Sentinel Habits to clarify competencies for workplace-based assessment. Western Group on Educational Affairs Annual Meeting, Honolulu, HI, March 25-28, 2014.

Humphries P, Donoff M, Schipper S, Ross S. The Competency-Based Achievement System (CBAS): A process for practical and trustworthy assessment. Western Group on Educational Affairs Annual Meeting, Honolulu, HI, March 25-28, 2014.

Ross S, Donoff M, Schipper S, Humphries P. Beyond assessment: Exploring secondary uses of data in the competency-based achievement system (CBAS). Annual Scientific Assembly of the Alberta College of Family Medicine. Banff, AB. February 27-March 1, 2014.

Ross S, Manca T, Donoff M, Schipper S, Humphries P. The relationship between implementation fidelity and resident perceptions of an assessment innovation. Annual Scientific Assembly of the Alberta College of Family Medicine. Banff, AB. February 27-March 1, 2014.

Hegstrom A, Ross S, Humphries P, Donoff M. Evidence-based targeted coaching for clinical preceptors. Annual Scientific Assembly of the Alberta College of Family Medicine. Banff, AB. February 27-March 1, 2014.

Donoff M, Humphries P, Nichols D, Schipper S, Ross S. Framing Competencies in Everyday Language for Workplace Assessment: The sentinel habits. Family Medicine Forum. Vancouver, BC. November 6-9, 2013.

Ross S, on behalf of the CFPC Working Group on Survey Development. Evaluating the Triple-C competency-based curriculum: a longitudinal outcomes-based program evaluation. Family Medicine Forum. Vancouver, BC. November 6-9, 2013.

Ross S, Humphries P, Schipper S, Donoff M. The Competency-Based Achievement System (CBAS): More than just FieldNotes. Family Medicine Forum. Vancouver, BC. November 6-9, 2013.

Ross S, Donoff M, Schipper S, Humphries P. Making competencies make sense for workplace-based assessment: The Sentinel Habits. The International Conference on Residency Education. Calgary, AB. September 26-28, 2013.

Ross S, Manca T, Donoff M, Schipper S, Humphries P. The impact of varying levels of implementation fidelity on resident perceptions of an assessment innovation. The International Conference on Residency Education. Calgary, AB. September 26-28, 2013. **Winner of Top Paper at ICRE.**

Ross S, Poth C, Humphries P, Donoff M. Competency-Based Education: One Program's Experience. Annual Meeting of the Canadian Society for the Study of Education. Victoria, BC. June 1-5, 2013.

Ross S, Kirwan P, White J. Facebook and professionalism: What healthcare students see and do online. Annual Meeting of the Association for Medical Education in Europe. Lyon, France. August 25-29, 2012.  
Humphries P, Ross S, Nichols D, Hegstrom A, Donoff M. Coaching the coaches - Use of a novel faculty development tool to improve feedback to medical residents. Annual Meeting of the Association for Medical Education in Europe. Lyon, France. August 25-29, 2012.

Donoff M, Ross S, Humphries P, Nichols D. The Competency-Based Achievement System (CBAS): Using formative feedback to teach and assess competencies with Family Medicine residents. Annual Meeting of the Association for Medical Education in Europe. Lyon, France. August 25-29, 2012.

Campbell-Sherer D, Schipper S, Ross S. Resident perceptions of the utility and validity of an in-training benchmarking examination. Annual Meeting of the Society of Teachers of Family Medicine. Seattle, WA. April 25-29, 2012.

Dennis A, Ross S, Crutcher R. Clinical skills assessment of Sudanese-Canadian physicians in South Sudan: challenges and possibilities. Canadian Conference on Medical Education. Banff, AB. April 14-18, 2012.

Tan A, Ross S. Benefits of implementation of an online virtual patient clinical case in palliative care for year 3 family medicine clerkship. Canadian Conference on Medical Education. Banff, AB. April 14-18, 2012.

Schipper S, Ross S. Tips for teachers from the front lines: Residents and preceptors report the best teaching practices and tools. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Spooner GR, Ross S. Creating an educational research culture in a Department of Family Medicine. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Forge S, Walton J, Ross S. Laptops in lectures: How engaged are connected students? Canadian Conference on Medical Education. Toronto, ON. May 7-11, 2011.

Donoff M, Humphries P, Nichols D, Ross S. Making competencies make sense: Reconciling the varied ways of viewing competency with the day-to-day task of assessing what residents are doing in the workplace. Canadian Conference on Medical Education. Toronto, ON. May 7-11, 2011.

Poth C, Ross S, Papile C, Georgis R. Assessing competency in medical education: using evidenced-based decision making during development and piloting of an innovative program. Annual Meeting of the American Educational Researchers Association. New Orleans, LA. April 8-12, 2011.

Ross S, Donoff M, Humphries P. Making sense of Can-Meds competencies and CFPC skill dimensions: Teaching and assessing sentinel habits. Annual Scientific Assembly of the Alberta College of Family Physicians. Banff, AB. February 24-26, 2011.

Ross S, Donoff M, Humphries P. The competency-based achievement system (CBAS): Using formative feedback to teach and assess competencies with family medicine residents. Annual Scientific Assembly of the Alberta College of Family Physicians. Banff, AB. February 24-26, 2011.

Schipper S, Humphries P, Donoff M, Koppula S, Ross S, Spooner GR. Challenges associated with moving to an integrated 3-C curriculum in a family medicine residency program. Annual Scientific Assembly of the Alberta College of Family Physicians. Banff, AB. February 24-26, 2011.

Milford T, Ross S. Home language, immigrant status, socio-economic status, and academic achievement: Exploring relationships using PISA 2006. Annual Meeting of the American Educational Researchers Association. Denver, CO. April 30-May 4, 2010.

Nichols D, Peterson K, Ross S, Steiner I, Donoff M, Humphries P. Implementing the competency-based achievement system (CBAS) for assessment in an emergency medicine-family medicine residency program. Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions. Miami, FL. May 15-20, 2010.

Chiodo M, Donoff M, Ross S, Humphries P. The development of an electronic web-based folder to support competency-based assessment. Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions. Miami, FL. May 15-20, 2010.

Campbell-Scherer D, Schipper S, Ross S. Implementation of an academic bench-marking examination in a family medicine residency program. Annual Meeting of the Society of Teachers of Family Medicine. Vancouver, BC. April 25-28, 2010.

Poth C, Ross S, Georgis R, Donoff M, Humphries P, Steiner I. The development and implementation of a competency-based assessment system: Systematic documentation and analysis of the process as an integral part of program design. Annual Meeting of the Association for Medical Education in Europe. Glasgow, Scotland. September 4-8, 2010.

Ross S, Donoff M, Humphries P, Poth C, Steiner I, Georgis R. Results of pilot implementation of a novel competency-based assessment framework. Annual Scientific Assembly of the Alberta College of Family Physicians. Banff, AB. February 25-27, 2010.

Poth C, Ross S, Georgis R, Donoff M, Humphries P, Steiner I. Enhancing evaluation quality and use for dynamic organizations: Lessons learned from a developmental evaluation of a competency-based medical education innovation. Annual Meeting of the American Evaluation Association Conference. San Antonio, TX. November 10-13, 2010.

Milford T, Ross S. Examining the relationships between immigrant status, language spoken in the home, and student academic achievement. Annual Meeting of the Canadian Society for the Study of Education. Ottawa, ON. May 28-30, 2009.

Poth C, Ross S. Meta-analysis, systematic review, or scoping review? Comparing methodologies in educational research. Annual Meeting of the Canadian Society for the Study of Education. Ottawa, ON. May 28-30, 2009.

Donoff M, Humphries P, Ross S. Developing competency-based assessment and evaluation of family medicine residents. Canadian Conference of Medical Education. Edmonton, AB. May 2-6, 2009.

Shavit I, Peled S, Steiner I, Harley DD, Ross S, Tal-Or E, Lemire A. Outcome of two teaching methods on lay-rescuers' short-term retention of infant BLS skills: Review of videotaped independent practice, compared to conventional teaching. 14<sup>th</sup> Annual Scientific Assembly of the Israeli Association of Emergency Medicine. Tel Aviv, Israel. May 19-20, 2009.

Ross S. Comparing the relationship of self-efficacy and academic achievement across six countries using the PISA 2003 dataset. Annual Meeting of the American Educational Researchers Association. San Diego, CA. April 13-17, 2009.

Donoff M, Humphries P, Ross S. Improving effective formative and summative assessment of family practice residents: The education support program. Olive Yonge Teaching and Learning Scholarship Day. Edmonton, AB. March 27, 2009.

Ross S, Humphries P, Donoff M. Progress to practice for family practice residents: Guiding the development of competence through formative assessment. Annual Scientific Assembly of the Alberta Family Practice Research Network. Banff, AB. February 26-March 1, 2009.

Ross S, Milford T. Measuring motivation in the PISA 2003 dataset. Annual Meeting of the Canadian Society for the Study of Education. Ottawa, ON. May 22-25, 2009.

Donoff M, Humphries P, Ross S. Education support program: Competency-based assessment in Family Medicine. Family Medicine Forum. Toronto, ON. November 27-29, 2008.

Ross S. Cultural differences in motivation as measured by the PISA 2003 dataset. Annual Meeting of the American Educational Researchers Association. New York, NY. March 24-28, 2008.

Reis G, Ross S, Carolsfeld C. Motivation theory in action: Using saltwater aquaria to teach science in schools. Annual Meeting of the National Association of Research in Science Teaching. Baltimore, MD. March 30-April 2, 2008.

Ross S. Motivation correlates of academic achievement: Exploring how motivation influences academic achievement in the PISA 2003 dataset. Annual Meeting of the Canadian Society for the Study of Education. Saskatoon, SK. May 26-29, 2007.

Ram A, Milford T, Huang J, Ross S. An introduction to the PISA dataset. Annual Meeting of the Canadian Society for the Study of Education. Saskatoon, SK. May 26-29, 2007.

Goh M, Ross S. A multilevel analysis of mathematics literacy: The effects of intrinsic motivation, teacher support, and student-teacher relations. Annual Meeting of the Canadian Society for the Study of Education. Saskatoon, SK. May 26-29, 2007.

Milford T, Ram A, Ross S, Huang J, Hsu J, Goh M. Using large scale datasets to enhance and extend knowledge: the value of PISA to educational research. Annual Meeting of the Canadian Society for the Study of Education. Saskatoon, SK. May 26-29, 2007.

Anderson J, Milford T, Ross S, Ram A, Huang C. Hierarchical linear modeling: comparing results from different statistical programs. Connections 2007, Annual Research Conference of the University of Victoria Faculty of Education. Victoria, BC. May, 2007.

Ross S. Secondary data analysis: How alternative approaches to methodology and analysis can improve educational research. Hawaii International Conference on Education. Honolulu, HI. January 7-9, 2007.

Ross S. Achievement motivation: What we know, and how we can use that knowledge in the classroom. Hawaii International Conference on Education. Honolulu, HI. January 7-9, 2007.

Ross S, Hadwin AF. Goal orientation and task understanding: influences of personal goal orientation on how students interpret assigned academic tasks. Annual Meeting of the Canadian Society for the Study of Education. Toronto, ON. February 16-18, 2006.

Ross S. A critical examination of measurement issues in goal orientation research. Annual Meeting of the National Council on Measurement in Education. San Francisco, CA. April 2006.

Anderson JO, Gress CLZ, Ross S, Gu Z, Sze Goh M, Hsu J. Exploring the correlates of learning outcomes: The COLO project 2005. Connections – University of Victoria Faculty of Education Annual Research Conference. Victoria, B.C. February 2005.

Ross S. Measurement issues in achievement goal theory. Annual Meeting of the Canadian Society for the Study of Education. London, ON. May 28-31, 2005.

Gress CLZ, Ross S. Student and school indices in SAIP questionnaires. Annual Meeting of the Canadian Society for the Study of Education. London, ON. May 28-31, 2005.

English M, Ross S, Gress C. Correlates of mathematics achievement: a meta-synthesis. Annual Meeting of the Canadian Society for the Study of Education. London, ON. May 28-31, 2005.

Ross S, van Winkel L. An exploration of goal orientation and affect: evidence for the dispositional nature of goal orientations. Annual Meeting of the Canadian Society for the Study of Education. London, ON. May 28-31, 2005.

Hadwin A, Gress C, Page J, Ross S. Computer Supported Collaborative Work: A review of the research 1999-2004. Annual Meeting of the Canadian Society for the Study of Education. London, ON. May 28-31, 2005.

Hadwin A, Tevaarwerk K, Ross S. Are we teaching students to strategically self-regulate learning? A content analysis of 100 study skills textbooks. Annual Meeting of the American Educational researchers Association. Montreal, QB. April 11-15, 2005.

Mueller S, Skelton R, Ross S. Dissociating gender differences in spatial abilities using virtual environments. Annual Meeting of the International Neuropsychological Society. Dublin, Ireland. July 5, 2005.

Ross S, Skelton R, Mueller S. Spatial learning transfer between virtual and real environments. Annual Meeting of the Western Psychological Association. Portland, OR. April 2005.

van Winkel L, Ross S. Emotion regulation and responses to success and failure. The Canadian Society for the Study of Education. Winnipeg, MB. May 31, 2004.

Ross S, van Winkel L. Goal orientation and emotion: correlations of goal orientation, ability beliefs, anxiety and depression. The Canadian Society for the Study of Education. Winnipeg, MB. May 31, 2004.

Ross S. An Emotional Approach to Motivation: Goal Orientation and Emotional Responses to Failure. Connections – University of Victoria Faculty of Education Annual Research Conference. Victoria, B.C. May, 2003

Skelton R, Ross S. Deficits in spatial cognition after TBI revealed by virtual Morris Water Maze. Annual Meeting of the International Neuropsychological Society. Honolulu, HI. February 5-8, 2003

Skelton R, Ross S. Glucose facilitates acquisition and reduces hippocampal deficit in the Morris Water Maze in rats. Society for Neuroscience. Miami Beach, FL. November 13-18, 1994.

## **Posters**

Kostov S, Horvey S, Wicijowski T, Ross S, Chiodo M. Developing a New FM Obstetrics Assessment Tool: Work-in-Progress. Family Medicine Forum. Toronto, Ontario, Canada. November 16-19, 2022 (Virtual). Poster Presentation.

Morros M, Horvey S, Ross S, Hurst Radke N, Donoff C Examining the Relationship Between Selection and Outcomes in Residency: Work-in-progress. Family Medicine Forum. Toronto, Ontario, Canada. November 16-19, 2022 (Virtual). Poster Presentation.

Lee JR, Ross S, Nichols D, Donoff C, Fortier A, Dhillon K, Morros M, Humphries P. Exploring patterns in low-stakes workplace-based assessments submitted prior to and during COVID-19. Poster presentation at Canadian Conference on Medical Education, April 24-27, 2022, Calgary, AB.

Lawrence K, Schultz K, Ross S, Bethune C, van der Goes T, Pélissier-Simard L, Dhillon K, Potter M, Fowler N. Adaptability in family medicine education and practice. Poster presentation at Family Medicine Forum, November 10-13, 2021. Virtual delivery.

Ross S, Schultz K, Lawrence K, Bethune C, van der Goes T, Péliissier-Simard L, Dhillon K, Potter M, Ching J, Fowler N. Decoding guidelines, frameworks, and jargon in competency-based assessment. Poster presentation at Family Medicine Forum, November 10-13, 2021. Virtual delivery.

Lebrun C, Manca T, Fischer L, Donoff M, Ferbey S, Shaw S, Ross S. Change management in health professions education: Challenges with implementing competency-based assessment. Annual Scientific Assembly of the Alberta College of Family Physicians, Banff, AB. March 4-6, 2016

Schipper S, Ross S, Belle-Brown J, Brailovsky C. Performance of Family Medicine Residents on the CFPC Certification Exam. Family Medicine Forum, November 11-14, Toronto, ON, 2015.

Kolber M, Ross S. Endoscopic Knowledge, Skills, and Practice Patterns of Canadian Family Physician Endoscopists. Family Medicine Forum, November 11-14, Toronto, ON, 2015.

Humphries P, Ross S, Donoff M, Schipper S. Competency-based education and assessment: program evaluation five years post-implementation. International Conference on Residency Education, October 22-24, 2015.

Svystun O, Ross S. Examining the effectiveness of the Competency Based Achievement System for early identification of residents experiencing difficulty. Canadian Conference on Medical Education, Vancouver, BC. April 24-27, 2015.

Ross S, Zulla R. Motivation theories: A primer for health professions educators. Canadian Conference on Medical Education, Vancouver, BC. April 24-27, 2015.

Huie M, Schipper S, Ross S. Because, Suggest and Next Time: A Content Analysis of Effective Formative Feedback. Canadian Conference on Medical Education, Vancouver, BC. April 24-27, 2015.

Mian Q, Chu J, Ross S, Forgie S. Optimizing World Health Organization Model United Nations – Health Care Debates for Global Health Education. Canadian Conference on Medical Education, Vancouver, BC. April 24-27, 2015.

Lee A, Khera S, Ross S. The Role of Electronic Medical Records in a Family Medicine Postgraduate Program. Canadian Conference on Medical Education, Vancouver, BC. April 24-27, 2015.

Svystun O, Ross S. Remediation Patterns Pre- and Post-implementation of the Competency-Based Achievement System (CBAS). Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Ortynski J, Schipper S, Ross S. Revising Performance Rating Scales: Examining the relationship between language and expert ratings. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Huie M, Ross S. What Does Good Formative Feedback Really Look Like? A content analysis of excellent written formative feedback. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.



Lebrun C, Manca T, Fischer L, Donoff MG, Ferbey S, Shaw S, Ross S. What is the point? Divergent perspectives on implementation of CBAS in two Sports Medicine Clinics. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Ross S, Manca T, Fischer L, Donoff MG, Ferbey S, Shaw S, Lebrun C. Old Challenges and New Strengths: Transforming the Burdens of Teaching into Routine Habits. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Schipper S, Brown JB, Ross S. IMG performance on the CFPC certification exam. Family Medicine Forum, Quebec City, QC. November 13-15, 2015.

Schipper S, Ross D, Loeffler K, Allan M, Westbury C, Ross S. Predicting Performance of Family Medicine Residents Using a Critical Thinking Skills Test. Family Medicine Forum, Quebec City, QC. November 13-15, 2014.

Forgie S, Ross S. Leave them laughing or crying? Debating effective approaches to teaching. Canadian Conference on Medical Education, April 27-30, 2014.

Klein D, Ross S. Do what I say vs do what I do: a survey of lifestyle behaviors among medical trainees and faculty. Canadian Conference on Medical Education, April 27-30, 2014.

Svystun O, Ross S. Remediation Patterns among Family Medicine residents pre-and post-implementation of the competency-based achievement system (CBAS). Canadian Conference on Medical Education, April 27-30, 2014.

Belozar C, Forgie S, Ross S. What's your motivation? An examination of medical students' enjoyment levels and motivations behind the extracurricular activities entered on their medical school application. Canadian Conference on Medical Education, April 27-30, 2014.

Ross S, Poth C, Donoff M, Humphries P. Using participatory action research (PAR) to track the development and implementation of an educational innovation. Canadian Conference on Medical Education. Banff, AB. April 14-18, 2012.

Ross S, Donoff M, Humphries P, Poth C, Papile C, Stasiuk S, Georgis R. Rigour in medical education research: A case study of the Ottawa Consensus Statement on research in assessment. Annual Meeting of the North American Primary Care Research Group. Banff, AB. November 12-16, 2011.

Tan A, Ross S. Development and implementation of an online virtual patient clinical case in palliative care for year 3 family medicine clerkship. Annual Meeting of the North American Primary Care Research Group. Banff, AB. November 12-16, 2011.

Stasiuk S, Ross S, Poth C. Documenting the process: Tracking the development, implementation, and uptake of a novel competency-based assessment tool. Annual Meeting of the North American Primary Care Research Group. Banff, AB. November 12-16, 2011.

Hegstrom A, Ross S, Donoff M, Humphries P, Barber A. Teaching the teachers: Using written formative feedback as a basis for improving preceptor teaching. Annual Meeting of the North American Primary Care Research Group. Banff, AB. November 12-16, 2011.

Edwards A, Salvalaggio G, Ross S, Koppula S. Inter- and intra-observer variation in symphysis-fundal height measurements among first year family medicine residents. Annual Meeting of the North American Primary Care Research Group. Banff, AB. November 12-16, 2011.

Stasiuk S, Ross S. The link between quality of feedback and resident perceptions of a novel assessment tool. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Forgie S, Ross S. How engaged are connected students: the perils of wireless classrooms. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Ross S, Donoff M, Humphries P. The competency-based achievement system (CBAS): using formative feedback to teach and assess competencies with family medicine residents. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Schipper S, Tan A, Koppula S, Levy M, Ross S, Spooner GR. University of Alberta Family Medicine Education: Really good stuff. Family Medicine Forum, Annual Meeting of the College of Family Physicians of Canada. Montreal, QC. November 3-5, 2011.

Ross S, Donoff M, Humphries P. Making sense of Can-Meds competencies and CFPC skill dimensions: Teaching and assessing sentinel habits. Annual Scientific Assembly of the Alberta College of Family Physicians. Banff, AB. February 24-26, 2011.

Ross S, Donoff M, Humphries P. The competency-based achievement system (CBAS): Using formative feedback to reach and assess competencies with family medicine residents. Annual Scientific Assembly of the Alberta College of Family Physicians. Banff, AB. February 24-26, 2011.

Schipper S, Humphries P, Donoff M, Koppula S, Ross S, Spooner GR. Challenges associated with moving to an integrated 3-C curriculum in a family medicine residency program. Annual Scientific Assembly of the Alberta College of Family Physicians. Banff, AB. February 24-26, 2011.

Ross S, Donoff M, Poth C, Humphries P, Steiner I, Georgis R. Results of a pilot implementation of competency-based assessment in family medicine. Annual Meeting of the Association for Medical Education in Europe. Glasgow, Scotland. Sept 4-8, 2010.

Ross S, Donoff M, Humphries P, Steiner I, Poth C. Integrating research and program development: Using participatory action research to inform the development of a competency-based assessment program. Annual Meeting of the North American Primary Care Research Group. Montreal, QC. November 14-19, 2009.

Janke F, Bromley J, Millar B, Ross S. Development of an online curriculum to teach professionalism to family medicine residents. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Smith L, Flook N, Cave A, Ross S. SOO-Things: An educational innovation to ease anxiety about SOOs for family medicine residents. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Nichols D, Ross S, Peterson K. Academic Full Days: An innovative use of increased protected time in a family medicine - emergency medicine program. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Schipper S, Ross S. Using a new chart-stimulated recall worksheet for structured teaching and assessment. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Bromley J, Lindblad A, Janke F, Millar B, Ross S. Developing a pharmacology and therapeutics curriculum in family medicine training. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Behn Smith D, Cardinal C, Ross S. Investigating the practical issues around implementing the First Nations, Inuit, Métis core competencies into the undergraduate medical education curriculum. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Levy M, Tan A, Ross S, Steiner I. Developing a new curriculum for third year clerkship in family medicine. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Korownyk T, Aaron S, Ross S, Allan GM. A brief evidence-based assessment of research: Are we helping residents become evidence-users? Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Janke F, Bromley J, Millar B, Ross S. Improving resident engagement in their research/ practice quality improvement project during second year of residency. Family Medicine Forum. Calgary, AB. October 29-31, 2009.

Goh M, Ross S. A multilevel analysis of mathematics literacy: The effects of intrinsic motivation. Hawaii International Conference on Education. Honolulu, HI. January 7-9, 2007.

Anderson JO, Ross S, Goh M, Gu Z, Hsu J, Huang J, Ram A, Milford T. Hierarchical linear models of student and school indices of writing, numeracy, and reading in Grades 4 and 7. Hawaii International Education Conference. Honolulu, HI. January 7-9, 2007.

Ross S, Gress C, Anderson J. Student and school indices in SAIP 2001 mathematics questionnaires. International Conference of Gold Standard(s) of Quality Research in Science Literacy. Victoria, B.C. October 28, 2005.

Ross S, van Winkel L. Exploring the dispositional nature of goal orientations. Annual Meeting of the Western Psychological Association. Portland, OR. April 2005.

Ross S, van Winkel L, Massie K, Martin J, Roberts J. Pectus excavatum: a review of the literature, and an introduction to Pectus related psychosocial and quality of life issues. Connections - University of Victoria Faculty of Education Annual Research Conference. Victoria, B.C. May 6, 2004.

## **GRANTS**

<b>Project name</b>	<b>Funder</b>	<b>Role</b>	<b>Value</b>	<b>Year</b>
Examining trends in teaching about women's health related topics experienced by learners during family medicine residency training from 2013 to 2023	Northern Alberta Academic Family Medicine Fund	PI	\$6500	2023

Examination of faculty and resident experiences of continuity of supervision and assessment during family medicine residency training	Northern Alberta Academic Family Medicine Fund	Co-PI	\$4500	2023
Using fieldnotes to explore differences in feedback behaviours between continuous and episodic preceptors	Northern Alberta Academic Family Medicine Fund	Co-PI	\$4500	2023
Using data to answer questions about outcomes of our residency program: Updating the residency graduates tracking database	Northern Alberta Academic Family Medicine Fund	PI	\$6500	2023
Improving assessment in Family Medicine Obstetrics: Development and implementation of a new tool	Northern Alberta Academic Family Medicine Fund	Co-I	\$3600	2022
Faculty and Resident Perspectives on the Relationship of Continuity of Supervision and Assessment during family medicine residency training	Northern Alberta Academic Family Medicine Fund	Co-PI	\$5525	2022
eBook - Musculoskeletal (MSK) Practical Examination Techniques	College of Family Medicine Member Interest Groups Section	Co-I	\$5000	2021
Development and Evaluation of an eBook - Musculoskeletal (MSK) Practical Examination Techniques	Northern Alberta Clinical Family Medicine Fund	Co-I	\$25000	2021
Taking a closer look at local data from the Family Medicine Longitudinal Survey: Implications for undergraduate and postgraduate programs in the University of Alberta Department of Family Medicine	Northern Alberta Academic Family Medicine Fund	PI	\$4200	2021
To what extent do the Rank Order List, file score, and interview score predict for resident success or difficulty in the UofA Family Medicine program?	Northern Alberta Academic Family Medicine Fund	Co-PI	\$3600	2021
2021 Enhanced Skills graduates' survey	Northern Alberta Academic Family Medicine Fund	Co-I	\$7500	2021
Medical students' perceptions of palliative care and their evaluation of a virtual palliative care module during family medicine clerkship: A mixed-methods study	Northern Alberta Academic Family Medicine Fund	Co-I	\$7500	2021
Faculty and resident perspectives on continuity of supervision	Northern Alberta Academic Family Medicine Fund	Co-PI	\$7250	2021

## Medicine Fund

Measurement of critical thinking skills in practicing family physicians: A comparative study to family medicine residents	Northern Alberta Academic Family Medicine Fund	Co-I	\$3100	2019
Residents as Teachers: Examining student evaluations of quality of resident teaching	Northern Alberta Academic Family Medicine Fund	Co-PI	\$5000	2018
Exploring learning experiences of Canadian family medicine residents in addiction and mental health clinical domains: A scoping review	Northern Alberta Academic Family Medicine Fund	Co-PI	\$3900	2018
Examining changes to self-regulated learning during competency-based professional training	Social Sciences and Humanities Research Council of Canada	PI	\$91,348	2018
The Alberta International Medical Graduates (AIMG) Experience: A Case Study	Health Sciences and Medical Education Research & Innovation Fund	Co-I	\$10,000	2017
Enhancing the information in the residency graduates tracking database	Northern Alberta Academic Family Medicine Fund	PI	\$5000	2017
Building on Existing Tools to Improve Cancer and Chronic Disease Prevention and Screening in Primary Care for Wellness of Cancer Survivors and Patients: The BETTER WISE project	Alberta Innovates – Health Solutions	Collaborator	\$2.7 million	2016
Examination of the outcomes of competency-based medical education in family medicine training in Canada	MITACS Postdoctoral Fellowship funding program	PI	\$45,000	2016
Perceptions of feedback in workplace based training: Developing teaching materials based on evidence from an observational study	Teaching and Learning Enhancement Fund	PI	\$51,000	2016
Exploring goal orientations of learners in professional education and of practicing professionals	Social Sciences and Humanities Research Council	Co-I	\$35,000	2016

Qualitative Understanding and Evaluation Study of Triple C (QUEST) Study	College of Family Physicians of Canada	Co-I	\$50,000	2015
Applying Findings From Research to Improve Formative Feedback Shared with Learners	Northern Alberta Academic Family Medicine Fund	PI	\$5000	2015
Residency program graduates database	Northern Alberta Academic Family Medicine Fund	PI	\$5000	2015
Examining the influence of language on assessment in competency-based education	SSHRC funded VP Research grants, University of Alberta	PI	\$10,000	2014
Development of an Evidence-Based CaRMS File Review Process	Northern Alberta Academic Family Medicine Fund	Co-PI	\$4000	2014
CCFP exam performance of international medical graduates	Northern Alberta Academic Family Medicine Fund	Co-I	\$5000	2014
Effectiveness of an academic benchmarking examination in a family medicine residency program	Northern Alberta Academic Family Medicine Fund	Co-PI	\$5000	2014
Practical application of motivation theory to health professions education: a scoping review and examples for practice	Society of Directors of Research in Medical Education	PI	\$3000 USD	2013
Coaching the coaches - Use of a novel faculty development tool to improve feedback to medical learners	Janus grant (College of Family Physicians of Canada)	CoI	\$5000	2012
Refining the Competency-Based Achievement System (CBAS): Ensuring Program Effectiveness in Family Medicine Residency Education	Teaching and Learning Enhancement Fund	PI	\$36,532	2012
Evaluating the Competency-Based Achievement System (CBAS): Implementation beyond Family Medicine	Teaching and Learning Enhancement Fund	PI	\$22,837	2011
Evaluating the Impact of an Innovative	Teaching and	PI	\$14,500	2010

The Competency-Based Achievement System (CBAS)	Killam SSHRC 4A Award, University of Alberta	PI	\$7500	2009
--	--	----	--------	------

## **AWARDS & DISTINCTIONS**

<b>Award Name</b>	<b>Granted By</b>	<b>Category</b>	<b>Value</b>	<b>Year</b>
Most Cited Paper in <i>Journal of Evaluation in Clinical Practice</i>	Journal of Evaluation in Clinical Practice	Research Award (International)	N/A	2022
Honorary Membership	College of Family Physicians of Canada	Major Award (National)	N/A	2021
Future Thinker Award	Academic Women's Association, University of Alberta	Award (Local)	N/A	2019
Best of Oral Presentations, HPE Scholarship Day	IDEAS Office, University of Alberta	Research Award (Local)	N/A	2019
Annual Scientific Assembly Reviewer's Choice Award – Top Poster	Alberta College of Family Physicians	Research Award (Provincial)	N/A	2018
Annual Scientific Assembly Reviewer's Choice Award – Oral Presentation (2 <sup>nd</sup> Place)	Alberta College of Family Physicians	Research Award (Provincial)	N/A	2017
Information Technology Excellence Award (CBAS team)	University of Alberta	Award (Local)	N/A	2015
Accredited CPD Provider Innovation Award	Royal College of Physicians & Surgeons of Canada	Award (National)	N/A	2015
Top Paper, International Conference on Residency Education	Royal College of Physicians & Surgeons of Canada	Research Award (National)	\$250	2013
David Cook Award for Education Innovation (as CBAS team member)	University of Alberta	Award (Local)	N/A	2012
Recognition of Excellence	Alberta College of	Award	\$500	2011

Award	Family Physicians	(Provincial)		
President's Research Award	University of Victoria	Research Award (Local)	\$2000	2008
President's Research Award	University of Victoria	Research Award (Local)	\$2000	2007
Doctoral Fellowship	Social Sciences and Humanities Research Council	Fellowship (National)	\$20,000	2007
Student Research Award	Western Psychological Association	Research Award (International)	\$400 USD	2005
Doctoral Fellowship (3 years)	University of Victoria	Fellowship (Provincial)	\$15,000/year	2004

## **TEACHING**

Canadian Association for Medical Education CAME-PACCC course	2016 - present
Canadian Association for Medical Education SIME workshop	2015
Accredited workshops on assessment, education research, and program evaluation at multiple local, national, and international conferences	2012 - present
Undergraduate Medical Education Discovery Learning (Facilitator; 2-3 blocks/year)	2008 - present
Reproductive medicine	
Evidence-Based medicine	
Pulmonary Block	
Cardiology Block	
Musculoskeletal	
Psychiatry	
Community Health	

## **GRADUATE STUDENT SUPERVISION**

(No graduate program in the Department of Family Medicine)

### **Supervision**

Ann Lee, Maastricht University Doctoral Program (Local Supervisor)	2022-present
Shirley Schipper, Western University (Co-supervisor)	2014-2019
Nicole Kain, University of Alberta (Member, PhD Supervisory Committee)	2012-2018

### **External reviewer**

Kathryn Hodwitz, University of Toronto (External reviewer, Master's thesis)	April 2018
---	------------



Cynthia Weijs, University of Guelph (External reviewer, Doctoral dissertation)	February 2016
--	---------------

### **SERVICE (NATIONAL)**

<b>Postgraduate Education Committee</b> (appointed member) College of Family Physicians of Canada	2020 - present
<b>UBC Postgraduate Accreditation Site Visit</b> (team member) College of Family Physicians of Canada/Royal College of Physicians & Surgeons of Canada	2020 (March)
<b>Certification Process and Assessment Committee</b> (appointed member) College of Family Physicians of Canada	2017 - present
<b>CCME Abstract Selection Committee</b> (appointed member) Canadian Conference on Medical Education	2017 - present
<b>Triple C Evaluation Advisory Group</b> (appointed member) College of Family Physicians of Canada	2015 - present
<b>PREEP Action Group</b> (appointed member) College of Family Physicians of Canada	2014 - present
<b>Medical Education research representative, Research Communities of Practice</b> College of Family Physicians of Canada	2014 - present
<b>Clinical Assessor Training Program</b> (invited member) Medical Council of Canada National Assessment Collaboration	2013 - 2015
<b>Triple-C Evaluation Survey Development Working Group</b> (appointed member) College of Family Physicians of Canada	2011-2013
<b>Editorial Board, <i>Canadian Journal of Education</i></b>	2010-2017

### **SERVICE (LOCAL)**

<b>MD Admissions Committee</b> (elected member)	2021 - present
<b>FoMD Strategic Planning Core Team</b> (appointed member)	2020 - 2021
<b>Faculty Learning Committee</b> (appointed member)	2021 - present
<b>Faculty Learning Committee</b> (elected member at large)	2013 - 2021
<b>MD Admissions Committee</b> (elected member)	2013 - 2017

<b>Faculty Learning Committee</b> (School of Community-Based Medicine representative)	2009 - 2013
<b>Department of Family Medicine Departmental Strategic Planning Committee</b> (Education Strategic Planning Lead representative)	2011 – present
<b>Department of Family Medicine Departmental Strategic Planning Committee</b> (elected non-physician representative)	2009 - 2011
<b>Department of Family Medicine Department Business Group</b>	2008 - present
<b>Department Council of the Department of Family Medicine</b>	2008 - present
<b>Faculty Council of the Faculty of Medicine &amp; Dentistry</b>	2008 - present

### PEER REVIEW ACTIVITIES

<i>Canadian Journal for Medical Education</i>	2016-present
<i>BMC Medical Education</i>	2016-present
Canadian Association for Medical Education Wooster Grant reviewer	2015 - 2017
Association for Medical Education – Europe annual meeting abstract reviews	2014 - present
Canadian Conference on Medical Education (conference abstract reviews)	2012 - present
Alberta College of Family Physicians annual meeting abstract reviews	2012 - present
<i>Academic Medicine</i>	2011-present
<i>Canadian Family Physician</i>	2011-present
American Educational Researchers Association	2010-2018
<i>International Journal of Science and Mathematics Education</i>	2009-2012
<i>Canadian Journal of Mathematics and Science Education</i>	2009-2012
Canadian Society for the Study of Education	2008-2012
<i>Canadian Journal of Education</i>	2008-2010

### PROFESSIONAL MEMBERSHIPS

Member of the International Competency-Based medical Education Collaborators (ICBME)  
 Society of Teachers of Family Medicine (STFM)  
 Canadian Association for Medical Education (CAME)  
 College of Family Physicians of Canada (CFPC) – Associate Member, Research  
 Canadian Society for the Study of Education (CSSE)

American Educational Researchers Association (AERA)  
Alberta College of Family Physicians (ACFP)  
Association for the Study of Medical Education (ASME)  
Canadian Studies Network (CSN)  
Academic Women's Association, University of Alberta