

ANNUAL REPORT

CENTRE FOR EDUCATION RESEARCH & INNOVATION





QUESTIONS THAT MATTER



ANSWERS THAT IMPACT

DIRECTOR'S MESSAGE



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I'm delighted to share this brief report highlighting some of CERIE's key activities during 2023.

Our team of scientists, researchers, and affiliates are dedicated to exploring critical questions related to education and practice in health care, to creating and implementing innovations that make education and practice better, and to mentoring and developing the next generation of educators, researchers, and leaders. I am enormously proud of this team and its accomplishments. In this short report we celebrate some of the highlights of 2023, including awards, publications, grants, and presentations.

But while these metrics are important markers of a research centre's success, they do not fully capture the heart of CERIE. At its core, CERIE is about community. Individuals with a passion for education scholarship often feel isolated within their home departments. Lacking peers and colleagues, they may be unsure how to move forward. CERIE brings these scholars together and provides them with an academic home. CERIE supports, challenges, and mentors learners and faculty interested in education scholarship to fulfil their potential. It has been my honour to be a part of this community.

OUR MISSION



1. To **develop** high-calibre, programmatic research in health professions education that contributes to the advancement of knowledge
2. To **foster** the growth of clinical and basic science faculty through consultation, collaboration, training, and mentorship
3. To **promote** interdisciplinary inquiry through collaborations both within and outside of Schulich and Western.





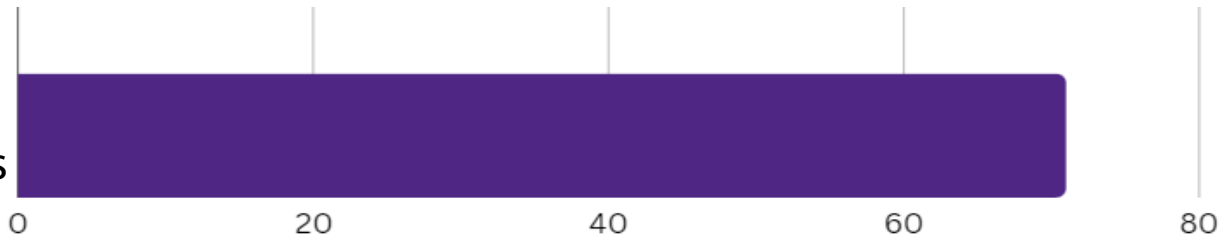
IMPACT BY THE NUMBERS

\$327,208

in NEW grant funding

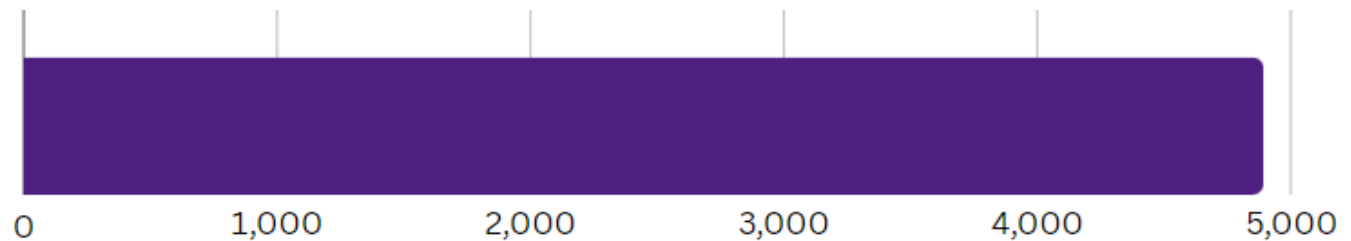
71

Publications



4893

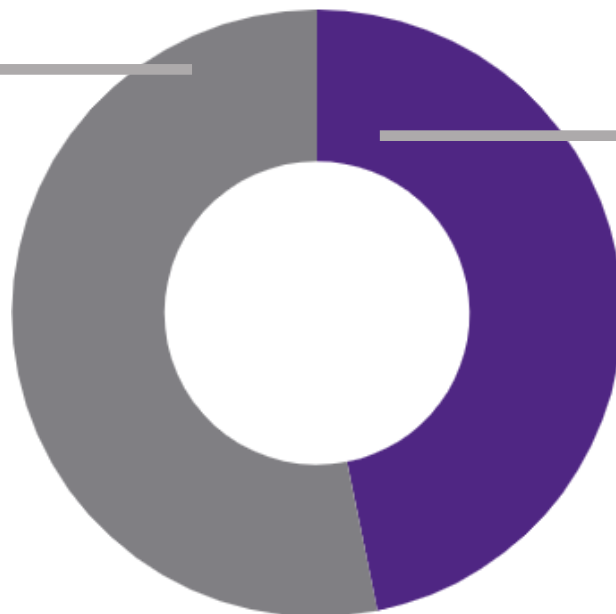
Citations



Students Supervised

42

Medical Students
and Residents



37

Graduate Students

OUR CORE TEAM

Scientists and Researchers are sustaining the advancement of CERI's vision.



SCIENTISTS



CHRISTOPHER WATLING
MD, MMed, PhD, FRCPC

LORELEI LINGARD
PhD

MARK GOLDSZMIDT
MD, MHPE, PhD, FRCPC

Dr. Watling was the 2023 recipient of the Duncan Graham Award for Outstanding Contribution to Medical Education from the Royal College of Physicians and Surgeons of Canada. Dr. Watling was a visiting scholar at McGill University's Institute for Health Sciences Education in May, 2023.

Dr. Lingard was awarded the Distinguished University Professor Award. This award recognizes sustained excellence in scholarship over a significant career at Western.

Dr. Goldszmidt was invited to deliver the plenary session, redesign the clinical teaching unit: a vision for the present, at the Canadian Society of Internal Medicine, Oct 13th 2023.

Dr. Robin Mackin, an MHPE student who was supervised by Dr. Watling was awarded a Robert Maudsley Fellowship for Studies in Medical Education in 2023.

She was also given the AFMC President's Award for Exemplary National Leadership in Academic Medicine

Through 2023 Dr. Goldszmidt's was able to supervise 8 graduate students. As well as co-supervisor and/or mentoring with Dr. Erin Spicer 15 trainees (medical student and residents), 13 faculty.

Dr. Watling mentored an outstanding group of medical students (Nikita Ollen-Bittle, Asaanth Sivajohan, Joshua Jesin, and Majid Gasim) through a rigorous research project exploring the effect of virtual learning on medical students' wellbeing during COVID, resulting in a publication in Perspectives on Medical Education."

Dr. Lingard continues to explore three key areas:

1. Collective competence on healthcare teams, with particular attention to developing novel assessment approaches that can capture the individual trainee's contribution to team performance;

2. Clinical supervisory relationships and practices, with emphasis on understanding the role of struggle and failure in learning; and

3. Scientific writing, with a focus on challenging some tired conventions and articulating the rhetorical and linguistic features that support clarity, engagement, and persuasion

His Research Associate Dr. Kristen Bishop was nominated for Western Award of Excellence.

Zoe Lau, a medical resident supervised by Drs. Goldszmidt and Spicer, won first place in the QI poster competition at the Canada Canadian Society of Internal Medicine Annual Meeting. Her poster was titled "Preventing progression of frailty amongst hospitalized older adults: a quality improvement initiative".

Dr. Watling studies why doctors can be difficult to coach, why feedback frequently misses the mark, and why professional culture so often undermines the best laid curriculum plans. His research brings a sociocultural lens to key challenges in medical education, shifting attention from this learner and that teacher to the educational culture within which they must operate. He explores how that culture shapes their relationships, their conversations, and the learning outcomes that are possible. By making culture visible, he hopes to enable us to better equip teachers and learners to navigate the tricky educational milieu of clinical medicine.

Dr. Goldszmidt's work combines active clinical practice, education research, and supervision, quality improvement and innovation and education leadership. His research and innovation work focuses on the complex relationship between clinical care and clinical education.

OUR CORE TEAM

Scientists and Researchers are sustaining the advancement of CERl's vision.



SCIENTISTS



SAYRA CRISTANCHO
PhD

Dr. Cristancho was awarded the KIPRIME fellowship from the Karolinska Institute. The Karolinska Institute Prize in Medical Education (KIPRIME) aims to nourish the next generation of medical education researchers through an inspirational curriculum of mentoring and development activities. Nominated by past KIPRIME winners, Sayra represents an elite group of highly promising global talents.

She was the keynote speaker at RIME (Research in Medical Education) conference in Seattle, Nov 6th, 2023. The title of her keynote was: "From airplanes to ants: using sociobiology to promote resilient teaming".

Erin Kennedy, whose PhD Dr. Cristancho supervised, won the award for best research paper at the AMEE conference (Association on Medical Education in Europe), which is the largest medical education research conference in the world.

Dr. Cristancho's research program investigates the nature of teamwork during crisis, in particular, how action teams navigate unexpected situations. Her goal is to shed light on how best to support training and practice of rapid response teams in healthcare. To that end, she integrates qualitative research, sociobiology and systems engineering principles with insights from various industries, including healthcare, tactical, emergency response and business.



TARYN TAYLOR
MD, PhD, FRCSC

Dr. Taylor was awarded the Best Research in Medical Simulation 2023 by AMEE Simulation Committee for her manuscript "Maybe I'm not that approachable": Using simulation to elicit team leaders' perceptions of their role in facilitating speaking up behaviours"

Dr. Nicole Wiebe a trainee supervised by Dr. Taylor achieved her first primary-author publication. Her paper "everything new is happening all at once": A qualitative study exploring early career obstetrician/gynaecologists' preparedness for the transition to independent practice" was accepted for publication Sept 26 by Canadian Medical Education Journal medical education research conference in the world.

Dr. Taylor is currently exploring novel applications of simulation for qualitative research that explores team performance when team dynamics are disrupted by a struggling team leader. She is looking forward to expanding this program of research, to explore how Continuing Professional Development can support team leaders in learning how to "listen down" when team members speak up.



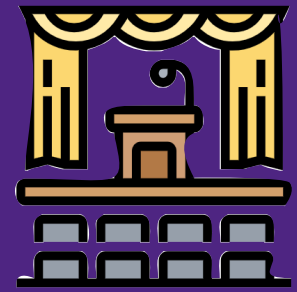
JACQUELINE TORTI
PhD

Dr. Torti was the Keynote speaker at the Danish Society for Medical Education's Annual Meeting. She also took on the role of President of the Early Career Medical Educators, part of the Canadian Association for Medical Education.

Alongside Dr. Lingard, she co-supervised Fabienne Schwitz, a master's student who published her thesis entitled "What About Happiness? A Critical Narrative Review with Implications for Medical Education" in Perspectives on Medical Education. This publication was featured as a 'Must Read' by the Bayview Division of General Internal Medicine at John Hopkins School of Medicine.

Dr. Torti's research program explores the influence of a character-development program on the resiliency and wellbeing of medical trainees. Her innovative course uses a multipronged approach including mentorship, reflective-based learning, targeted workshops, small-group discussion and experiential learning to develop leadership skills informed by a character lens. A better understanding of the relationship between character and well-being will enable residency programs to better prepare their trainees to adhere to their morals and values while navigating the complexity of our health care system.

CERI SEMINARS AND SYMPOSIUM



In 2023 CERI hosted 18 Research Seminars both virtual and in person. Our research seminar is something that we hold close to us. We had scientists from across the globe come and present. Research seminars play a pivotal role at CERI because they foster intellectual growth and innovation. These gatherings allowed our community to connect, share, and discuss the latest in medical education. The collaborative nature of research seminars encourages the exchange of diverse perspectives. Our research seminar provides networking opportunities, allowing participants to establish connections with peers, mentors, and experts in their respective fields.

In 2023 we hosted our Annual Research Symposium and it was a great success -an extraordinary gathering of thought leaders, innovators, and educators, all converging to explore the frontiers of knowledge and exchange ideas. The Wayne Weston Lecture was delivered by Dr. Will Bynum, who has an international reputation for his groundbreaking work on shame in medical education.

The symposium included 28 presentations and 9 virtual poster presentations. The award for Outstanding Poster Presentation went to Dr. Lorelei Lingard, while the David Hollomby Award for Outstanding Oral Presentation was shared between Dr. Anita Cheng and Dr. Sarah Blissett. The event surpassed all expectations, fostering a vibrant and collaborative atmosphere where participants engaged in spirited discussions, shared insights, and forged meaningful connections.

SELECTED PUBLICATIONS FROM 2023



Bearman M, Ajjawi R, Castanelli D, Denniston C, Molloy E, Ward N, Watling C. "Meaning-making about performance: a comparison of two specialty feedback cultures". *Med Educ* 2023;57(11):1010-1019. This collaboration with colleagues in Melbourne, Australia, begins to unravel how different medical and surgical disciplines create different environments for feedback to succeed or to fail.

Bowker D, Tort Ji, Goldszmidt M (2023). "Documentation as composing: how medical students and residents use writing to think and learn" *Advances in Health Sciences Education* 28 (2), 453-475. The purpose of this study was to explore how trainee composing practices shape learning.

Calvert S, Goldszmidt M, Liu L, Burm S, Cristancho S, Torti J, Sukhera J (2023). "Exploring the process of care for people who inject drugs in hospital settings" *Drugs: Education, Prevention and Policy* 30 (6), 583-592. In recent years, hospitals have experienced alarming increases in admissions of people who inject drugs (PWID), which present unique challenges to the care process. Untangling the complexity of care can be difficult due to interactions that occur between human and non-human elements including hospital systems, policy, technology, time, and space. Dr. Goldszmidt's team explores relations between social and material elements within the acute care environment, to better understand how care is enacted and to identify novel approaches for improvement.

Cristancho S., & Thompson G, (2023). "Building Resilient Healthcare Teams: Insights from Analogy to the Social Biology of Ants, Honey Bees and Other Social Insects". *Perspectives on Medical Education*, 12(1), 253. Dr. Cristancho together with Biology Professor Dr. Graham Thompson, they posit that plasticity, as exemplified by the collective behavior of bees and ants, can serve as a productive analogy that healthcare teams might find useful during moments when safety and adaptability have the potential to conflict.

Lingard L. "Writing with ChatGPT: An Illustration of its Capacity, Limitations & Implications for Academic Writers". *Perspect Med Educ*. 2023 Jun 29;12(1):261-270. doi: 10.5334/pme.1072. PMID: 37397181; PMCID: PMC10312253. PA (E) This paper, part of Dr. Lingard's writing scholarship program of work, was the first academic publication to describe how GenAI such as ChatGPT might serve as a resource for researchers to improve their scholarly writing. It is the second most popular manuscript in the journal's history, with >500 downloads in six months.

Madrazo L, Zhang G, Bishop KA, Appleton A, Joneja M, Goldszmidt M, "It's What We Can Do Right Now": Professional Identity Formation Among Internal Medicine Residents During the COVID-19 Pandemic" 2023 *Academic Medicine* 98 (12), 1428-1433. Dr. Goldszmidt team studied how the COVID-19 pandemic represents a consequential moment of disruption for medical training that has far-reaching implications for professional identity formation.

Ollen-Bittle N, Sivajohan A, Jesin J, Gasim M, Watling C. "Examining the effect of virtual learning on Canadian pre-clerkship medical student well-being during the COVID-19 pandemic". *Perspect on Med Educ* 2023 (in press). Dr. Watling is proud of having mentored this exceptional group of medical students to produce and publish this work on how virtual learning impacts medical student wellbeing.

SELECTED PUBLICATIONS FROM 2023



Pack R, Columbus L, Duncliffe TH, Banner H, Singh P, Seemann N, and Taylor T. ““Maybe I’m not that approachable”: using simulation to elicit team leaders’ perceptions of their role in facilitating speaking up behaviors.” *Advances in Simulation* 7, no. 1 (2022): 31. This paper was awarded Best Research in Medical Simulation in 2023 by the AMEE Simulation Committee. Recognized as an “Article of Influence” by the Society for Simulation in Healthcare . Chosen as a Virtual Journal Club paper by ASPiH Featured on Simulcast, 283 downloads in the first 24 hours. This work was discussed during the Australian Gold Coast Health EDGE program and it was featured at The Bond University Simulation Reconnect Event - a one day symposium for simulation specialists. Featured in the ICE blog - an international blog which promotes discussion among Clinician Educators from around the world. Secured a competitive Royal College MERG to support exploring the transferability of our original project findings in other context. Overall, it’s clear this project has sparked a great deal of conversation and interest across the spectrum of simulation educators in health professions education because it challenges existing dogma about “speaking up” within healthcare teams. This work is meant to inspire team leaders to reflect on their own approachability to ensure that team members can reasonably speak up if safety concerns arise, without threat of interpersonal risk or conflict.

Peebles ER, Pack R, Goldszmidt M (2023) “From helplessness to transformation: An analysis of clinician narratives about the social determinants of health and their implications for training and practice” *Medical Education* 57 (11), 1054-1067. Dr. Goldszmidt and team looked at four storylines that described the physician experience and strategies for coping with the social determinants of health.

Sebok-Syer S, Lingard L, Panza M, Van Hooren T, Rassbach C. “Supportive and collaborative interdependence: Distinguishing individuals’ contributions within healthcare teams”. *Med Educ.* 2023; 57(10): 921-931. doi:10.1111/medu.15064. Funded by the National Board of Medical Examiners, this paper continues Dr. Lingard’s Team work to develop an instrument to assess postgraduate trainees’ collective competence as they contribute to healthcare teamwork.

Shepherd, L., Chilton, S., & Cristancho, S. (2023). “Residents, Responsibility, and Error: How Residents Learn to Navigate the Intersection”. *Academic Medicine*, 10-1097. CERl’s researchers Dr. Lisa Shepherd, Dr. Cristancho and emergency medicine resident Dr. Stephanie Chilton, embarked on an exploration of how residents experience medical error and learn to become responsible for patients who have faced a medical error.

Vo A, Torti J, Haddara W, Sultan N. (2023). “Exploring Medical Students’ Perspectives of Physician Leadership”. *BMC Medical Education*, 23(10). DOI: <https://doi.org/10.1186/s12909-022-03971-x> . Dr. Torti is particularly proud of this paper because this work was the result of a Summer Research Training Program position through the Schulich School of Medicine and Dentistry. Albert Vo was a medical student at the time of this study and since has started his residency in family medicine. Albert worked hard over the course of two summers to explore medical students’ perspectives on what makes an effective physician leader and provided some novel insights into what matters from a student lens. She is very proud that with the support of a wonderful research team that Albert was able to be first author on this manuscript.

Watling C. “The art of revising”. *Perspect Med Educ* 2023;12(1):247-252. This entry in TheWriter’s Craft series continues Dr. Watling work as a teacher of academic writers.

Watling C, Shaw J, Field E, Ginsburg S. ““For the most part it works’: Exploring how authors navigate peer review feedback”. *Med Educ* 2023;57(2):151-160. This paper uses the peer review process as a key example of how feedback might work under especially trying conditions.

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