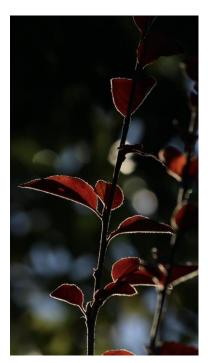
OHMES Update #17 October 2020

From the Editor

Michty me! Time flies. September and the start of the new academic year are already behind us, the summer has faded into the golden days of autumn, and we're starting to get ready for the winter. I hope that, despite the many trials and tribulations of the year so far, you were able to balance your scholarly activites with your other interests and responsibilities over the summer, and that you were able to take some time to stop and sniff the flowers along the way.

Now we are back teaching and researching, albeit in modified online and distancing kinds of ways. We are also submitting conference abstracts and research proposals with little idea how they will be impacted by the continuing COVID emergency. Indeed, uncertainty seems to be the watchword of this time. In the face of these unknowns and uncertainties we can cleave to those things that give us certainty. For me, that includes research and scholarly practice as they afford a view of the world that both transcends and embraces our human frailties. The current emergency has raised many questions and concerns as to what needs to change in medical education in the years ahead. Exploring and testing these ideas provides an opportunity, not just for personal growth, but for investing in the future of our field and in making sure the seeds we sow this Fall bear fruit in the years to come.



Dr. Rachel Ellaway



Bias and the Educator: Exploring Implicit, Explicit, and Structural Bias in Medical Education – CAME Webinar



Join presenter Dr. Javeed Sukhera on Tuesday, October 20, 2020 for a national webinar hosted by the Canadian Association for Medical Education (CAME). The same seminar will be offered live at both 10:00am and 1:00pm. Dr. Sukhera is an Associate Professor of Psychiatry and Paediatrics at the Schulich School of Medicine and Dentistry, Western University Canada. is interdisciplinary research program explores novel approaches to stigma reduction and implicit bias recognition and management in health professionals.

Bias is everywhere. Explicit biases include conscious attitudes or intentional discrimination towards certain groups. In contrast, implicit biases include attitudes or behaviours that exert powerful influence over individuals outside their awareness. This presentation will start with an introduction to the concept of implicit bias, review research on bias in health professions,

and shift to an evidence-based model for recognizing and managing biases that is relevant for educators.

OHMES better teachers, better learners, better doctors

Email ohmes@ucalgary.ca to register and receive a link.



In Our Community: Jason Waechter



OHMES is pleased to feature **Dr. Jason Waechter**, Clinical Associate Professor in the Cumming School of Medicine, and his approach to education scholarship. Dr. Waechter is also a recipient of a 2018-19 OHMES Funding Competition grant for his research project "Measuring Type 2 Thinking during the Diagnostic Process", and recently received an award from GMS Journal for Medical Education for best article of 2020 for Quantifying the medical student learning curve for ECG rhythm strip interpretation using deliberate practice (GMS J Med Educ. 2019;36(4):Doc40).

I did most of my medical training at UBC and had the exciting opportunity to give lectures to the entire medical school class in my final year of my anesthesia residency. I was immediately hooked. I loved explaining topics but also realized quickly my own gaps of

understanding, as students asked me questions that originated from perspectives I had never previously considered. The process of teaching has been one of the most valuable learning experiences for me.

Teaching medical students now for 18 years, I have had the opportunity to reflect many times on how I do what I do. As a physician, my primary and most important job is to make a correct diagnosis. If I perform this step incorrectly, everything downstream of my misdiagnosis will be wrong and often will cause patient harm.

The process of making a diagnosis is not a recital of knowledge. It is a skill; it cannot be taught in a lecture, podcast, or textbook. Like learning to play a musical instrument, skill development requires multiple iterations of practice and feedback. Knowledge obtained from a classroom is certainly required, but it is not the end of the process.

I became very curious about how much practice is needed for pre-clerkship medical students to interpret a simple form of the ECG, called a rhythm strip. This is a diagnostic test and is a core competency of graduating medical students in North America because it is required to manage a cardiac arrest. We performed a study to answer this question and our results suggested that on average, students needed to practice about 50 practice cases to score about 80% diagnostic accuracy. This represents about 3.5 exposures to each of the 14 diagnoses we were teaching.

This causes a dilemma. At the Cumming School of Medicine (and similarly at most other medical schools), there is a small number of instructors who teach ECG interpretation in the pre-clerkship phase. If you do a little math, for 150 of our students each year, providing 50 practice cases for each student creates 7,500 instances of practice and for the 3 or 4 pre-clerkship ECG instructors, providing individualized feedback to all these students would be impossible from a workload perspective. The math does not stop with ECGs; there are other important diagnostic tests such as chest x-rays and arterial blood gas analysis for which our students should also possess some competency in interpretation.

Reflecting on this data, I think it is important to consider a couple points. First, do medical students want to start their clinical clerkship rotations with skills, or without skills? When I have asked them, the answer is immediate and unanimous "with skills of course" and then usually followed by a facial expression of "why are you asking such a stupid question." Thus, in order to provide the practice and feedback, we need to first provide a library of practice cases. Second, to avoid unmanageable workloads for the instructors, we should automate the feedback process. And third, we should be providing these practice opportunities to *pre-clerkship* students in a deliberate way so that our students have opportunities to obtain skills before clinical rotations start.



OHMES Update

The Clerkship Directors of Internal Medicine (CDIM) 2013 survey asked the question: "How many ECG's do your students interpret *under supervision*?" The published results indicate that only 37% of medical school training programs were providing more than 10 ECGs during clerkship (the other 63% did not answer or indicated fewer than 10). I believe that despite much attention to "competency by design", many areas of skill development remain in the obsolete and ineffective "competency by opportunity" model and I strongly believe that this approach is inadequate for skill development for a large percentage of our medical students.

My passion for the last 9 years has been an attempt to create a solution for this problem. I philosophically believe that medical school needs to be viewed more of a "skills development camp" in addition to a graduate level academic degree.

My current research interest is focused on skill development for diagnostic clinical reasoning with the aim of reducing misdiagnosis. I am excited to study how to optimize training for clinical reasoning and then apply a deliberate practice approach using multiple iterations of practice and feedback. We have built a tool that collects approximately 100 data points per student per diagnostic case and our goal is to have 80 students complete 20 cases, creating a data count of 160,000. Data collection is expected to be completed by Summer 2021.

Jason can be contacted at <u>iwaech@yahoo.ca</u>. He is the founder of <u>teachingmedicine.com</u>.



OHMES Member Awards & Grants

Congratulations to:

Rachel Grimminck, MD, a clinical assistant professor in the CSM's Department of Psychiatry and the 2020 recipient of the <u>Royal College Award for Early-Career Leadership in Medical Education</u>.

Kent Hecker, PhD, in his new role as Chief Assessment Officer for the <u>International Council for Veterinary</u> <u>Assessment</u> (ICVA). He will serve a joint appointment with ICVA and UCalgary, and will work with the ICVA Chief Executive Officer to implement strategies, policies and operational procedures for the ICVA's assessment portfolio.

Martina Kelly, MD, PhD, on her AMEE 2020 doctoral award for *Body of Knowledge; an interpretive inquiry into touch in medical education.*

Jason Waechter, MD, on his award from GMS Journal for Medical Education for best article of 2020 for <u>Quantifying the medical student learning curve for ECG rhythm strip interpretation using deliberate practice</u> (GMS J Med Educ. 2019;36(4):Doc40). This award included a monetary prize.







OHMES Update

WISHES Update



Happy new academic year everyone! Welcome back! We hope you had a restful summer and this message finds you and your loved ones well and thriving. Much has happened since our last update in June.



We would like to welcome our new advisory committee member Chidera Nwaroh. Chidera is a 2nd year Medical Student at the Cumming School of Medicine. She serves as the VP Marketing and Social Media for the Black Medical Students Association (BMSA) at the University of Calgary and is passionate about broadening the lens through which we view learner wellness when related to minority populations. Welcome Chidera!

We are thrilled to announce that we now have our own WISHES webpage! A huge thank you to Gretchen Greer for putting this together and to all of our advisory committee members for their

input. Check out the new site here: https://cumming.ucalgary.ca/research/wishes

We had our fourth advisory committee meeting on September 10. The committee discussed event planning for 2020-21. Given that most events are likely to continue in a virtual format for the foreseeable future, we will begin planning a half day, virtual seminar for Spring 2021. This will include a "visiting" speaker as well as local presentations. We hope to showcase local work, a speaker series, and possibly dedicating OHMES journal club sessions to wellness scholarship issues. Stay tuned as more details unfold. If you have ideas for topics and speakers or would like to showcase your learner wellness work, please contact us at <u>wishes@ucalgary.ca</u>

Spirituality is an important aspect of wellness for many learners. Check out the Call for Abstracts (deadline October 9) for a virtual symposium on *Incorporating Spirituality In Education Within Health & Helping Professions*. The symposium will be held on November 12th, 2020, and is being organized by: Heather Boynton, HBPE, MSW, PhD, RSW, Faculty of Social Work and Fabiola Aparicio-Ting, MPH, PhD, Department of Community Health Sciences. Register at: <u>https://spiritualityhealthandhelpingprofessionseducat.eventbrite.ca</u>

Save the Date! On October 20, OHMES and WISHES will co-sponsor the CAME webinar presented by Dr. Javeed Sukhera entitled <u>Bias and the Educator: Exploring Implicit, Explicit and Structural Bias in Medical Education</u>. Dr. Sukhera was our invited guest speaker back in April which had to be cancelled because of COVID-19. We are so very excited to co-sponsor this event and hope you will join the webinar with fellow wellness champion Dr. Sukhera!

WISHES lab founder Dr. Aliya Kassam became the new O'Brien Institute for Public Health Equity, Diversity & Inclusion portfolio lead. This portfolio will help foster the <u>WISHES mission</u>, vision and guiding principles within Cumming School of Medicine and the broader community at large. As learners who are the healthcare providers, health policy makers and health systems planners of the future, it is essential to understand the social determinants of health and the influence they have on wellbeing. The new portfolio was launched on September 18 where Dr. Kassam presented on *Equity, Diversity and Inclusion in Public Health: Intersectionality and Implications*. The webinar was attended by over 90 participants. Find out more about the OIPH's new EDI portfolio here: https://news.ucalgary.ca/news/obrien-institute-announces-equity-diversity-and-inclusion-portfolio

Wishing all learners in CSM and beyond the best for the 2020/2021 academic year. I hope that each of you and yours stay safe and well.

With love and gratitude, Aliya Kassam, PhD

"If you have come here to help me you are wasting your time, but if you have come because your liberation is bound up with mine, then let us work together." <u>Dr. Lilla Watson - Indigenous artist, writer, educator and researcher.</u>



Selected Recent Publications from OHMES Members

Nevertheless, They Persisted: How Women Experience Gender-Based Discrimination During Postgraduate Surgical Training. Brown A, Bonneville G, Glaze S. J Surg Educ. 2020 Jul 9:S1931-7204(20)30220-8. doi: 10.1016/j.jsurg.2020.06.027. Online ahead of print.J Surg Educ. 2020. PMID: 32654996

<u>A practical guide to virtual debriefings: communities of inquiry perspective.</u> **Cheng A**, Kolbe M, **Grant V**, Eller S, Hales R, Symon B, Griswold S, Eppich W. Adv Simul (Lond). 2020 Aug 12;5:18. doi: 10.1186/s41077-020-00141-1. eCollection 2020.Adv Simul (Lond). 2020. PMID: 32817805

Learning Conversations: An Analysis of the Theoretical Roots and Their Manifestations of Feedback and Debriefing in Medical Education. Tavares W, Eppich W, Cheng A, Miller S, Teunissen PW, Watling CJ, Sargeant J. Acad Med. 2020 Jul;95(7):1020-1025. doi: 10.1097/ACM.000000000002932.Acad Med. 2020. PMID: 31365391

Critical Realism and Realist Inquiry in Medical Education.

Ellaway RH, Kehoe A, Illing J. Acad Med. 2020 Jul;95(7):984-988. doi: 10.1097/ACM.00000000003232.Acad Med. 2020. PMID: 32101916

The use of BEME reviews in the medical education literature. Horsley T, Steinert Y, Leslie K, Oswald A, Friesen F, **Ellaway RH**. Med Teach. 2020 Aug 8:1-8. doi: 10.1080/0142159X.2020.1798909. Online ahead of print. Med Teach. 2020. PMID: 32772602

<u>Global health electives: Ethical engagement in building global health capacity.</u> De Visser A, Hatfield J, **Ellaway R**, Buchner D, Seni J, Arubaku W, Najjuma JN, Hollaar G. Med Teach. 2020 Jun;42(6):628-635. doi: 10.1080/0142159X.2020.1724920. Epub 2020 Feb 21.Med Teach. 2020. PMID: 32083958

<u>Facilitating Learner-Centred Transition to Residency: A Scoping Review of Programs Aimed at Intrinsic</u> <u>Competencies</u>. Kassam A, Nickell L, Pethrick H, Mountjoy M, Topps M, Lorenzetti D. Teaching and Learning in Medicine. Published on-line September 2020. DOI 10.1080/10401334.2020.1789466.

<u>Staff physicians as learners: Answering the call to improve workplace-based learning.</u>Bannister SL, **Keegan DA**. Med Educ. 2020 Sep;54(9):778-780. doi: 10.1111/medu.14274.

Being Vulnerable: A Qualitative Inquiry of Physician Touch in Medical Education. Kelly M, Nixon L, Rosenal T, Crowshoe L, Harvey A, Tink W, Dornan T, et al. Acad Med. 2020 May 5. doi: 10.1097/ACM.00000000003488. Online ahead of print.Acad Med. 2020. PMID: 32379142

<u>Clinical educational scholarship: polarized or integrated?</u> Park S, Berlin A, **Kelly M**. Park S, et al. Perspect Med Educ. 2020 Jun;9(3):137-138. doi: 10.1007/s40037-020-00597-x.Perspect Med Educ. 2020. PMID: 32495236

<u>Medical teachers' discursive positioning of doctors in relation to patients.</u> Dornan T, Roy Bentley S, **Kelly M**. Dornan T, et al. Med Educ. 2020 Jul;54(7):628-636. doi: 10.1111/medu.14074. Epub 2020 Apr 6.Med Educ. 2020. PMID: 31991480

<u>Video Recording in Veterinary Medicine OSCEs: Feasibility and Inter-rater Agreement between Live Performance</u> <u>Examiners and Video Recording Reviewing Examiners</u>. **Tan JY**, **Ma IWY**, Hunt JA, Kwong GPS, Farrell R, Bell C, **Read EK**. Journal of Veterinary Medical Education. August 2020. <u>https://doi.org/10.3138/jvme-2019-0142</u>

<u>Oncology education for family medicine residents: a national needs assessment survey.</u> Yip SM, Meyers DE, Sisler J, **Wycliffe-Jones K**, Kucharski E, Elser C, **Temple-Oberle C**, Spadafora S, Ingledew PA, Giuliani M, Kuruvilla S, Sumar N, Tam VC. BMC Med Educ. 2020 Aug 27;20(1):283. doi: 10.1186/s12909-020-02207-0.



Local Events

Bias and the Educator: Exploring Implicit, Explicit, and Structural Bias in Medical Education – CAME Webinar Dr. Javeed Sukhera, Western University

20 October 2020, 10:00am and 1:00pm Email <u>ohmes@ucalgary.ca</u> to register and receive a link.

Incorporating Spirituality In Education Within Health & Helping Professions - A Virtual Symposium

12 November 2020 Abstracts due 9 October 2020 Register at: https://spiritualityhealthandhelpingprofessionseducat.eventbrite.ca

To Entrust or Not to Entrust, that's the Competence Question! - CAME Webinar

Dr. Carlos Gomez-Garibello, McGill University 17 November 2020, 10:00am Email ohmes@ucalgary.ca to register and receive a link.

2021 Health & Medical Education Scholarship Symposium – 18 February 2021

OHMES is excited to welcome **Drs. Chris Watling and Saleem Razack** as the keynote speakers for the event. Call for Abstracts will be announced soon.

Other Events

Sim Expo 2020 CANCELLED

AAMC Learn Serve Lead 2020 8-12 November 2020 – on-line only

<u>CCME 2021</u>

17-20 April, 2021, St. John's, Newfoundland. Abstract deadline **9 October 2020**. All those who submitted an abstract for 2020 are encouraged to resubmit their work for the 2021 CCME.

AMEE 2021

AMEE 2021 is scheduled as a Hybrid Conference from 27-30 August 2021. The face-to-face conference will be held at SEC in Glasgow, UK, with online elements integrated into the programme. Abstracts due:

- Preconference workshops and Symposia: 15 November 2020 (decisions by 15 December 2020)

- Research papers and Doctoral report: 5 December 2020 (decisions by 15 January 2021)

- Short communications, eposters and conference workshops: 5 February 2021 (decisions by 15 April 2021)

Local Funding Opportunities

OHMES Medical Education Travel Fund - SUSPENDED for 2020-21

The Medical Education Travel Fund is suspended for the 2020-21 fiscal year due to university-wide budget cuts. OHMES will not be accepting applications to the fund during this time. The action will be reviewed at the end of 2020-21, and a decision will be made for 2021-22.



Other Funding Opportunities

<u>Spencer Foundation – Small Research Grants</u> Award maximum: \$50,000 – 2020 Deadlines: 3 March, 1 July, 3 November

Arnold P. Gold Foundation

Chapter Grants – up to \$1500, intake ongoing Supports educational projects that increase humanism in medical education learning environments.

Josiah Macy Jr. Foundation

Board Grants – intake ongoing, President Grants – up to \$35,000, intake ongoing Projects related to IPE and teamwork, new curriculum content, new models for clinical education, career development in HPE, education for the care of underserved populations.

Max Bell Foundation

Project & Development Grants – up to \$200,000, intake ongoing. Funding for projects that impact public policies and practices with an emphasis on health and wellness, and education.



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