

CONFÉRENCE CANADIENNE POUR L'AVANCEMENT DE L'ÉDUCATION CHIRURGICALE



CANADIAN CONFERENCE FOR THE ADVANCEMENT OF SURGICAL EDUCATION

CANADIAN CONFERENCE FOR THE ADVANCEMENT OF SURGICAL EDUCATION (C-CASE)

POST-PANDEMIC and BEYOND

VIRTUAL CONFERENCE

September 30 & October 1, 2021

Accreditation

Royal College of Physicians and Surgeons of Canada – Section 1
This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, approved by Continuing Professional Development, Temerty Faculty of Medicine, University of Toronto.

You may claim a maximum **7.0 hours** (credits are automatically calculated).

Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

CANADIAN CONFERENCE FOR THE ADVANCEMENT OF SURGICAL EDUCATION (C-CASE)

CONFERENCE LEARNING OBJECTIVES:

Upon completion of this program, participants will be able to:

- Describe current topics in undergraduate surgical education; such as, virtual teaching and learning, medical student preparation for residency, diversity in undergraduate surgical education and surgery clerkship challenges;
- Describe current topics in postgraduate surgical education; such as, virtual teaching and learning, resident selection for surgical programs, diversity in residency education and assessment tools;
- Describe competency-based medical education in undergraduate and postgraduate education;
- Incorporate simulation in undergraduate and postgraduate surgical education;
- Discuss learner and surgeon wellbeing, coaching and mentorship;
- Determine how artificial intelligence can be applied within a surgical setting;
- Describe award-winning basic science and innovative surgical research occurring across Canada;
- Describe types of surgical culture and approaches to redefining it.

ALL TIMES LISTED IN EST

Thursday, September 30, 2021

1:00 pm – 1:05 pm	Welcome C-CASE 2021 <i>Dr. Abdollah Behzadi, CUSEC Chair, Department of Surgery, University of Toronto</i>																														
1:05 pm – 2:00 pm	<p>Scientific Session I: Theme: AI and Technology</p> <p>Moderators: Dr. Chris Smith, <i>Associate Professor of General Surgery, Memorial University</i> Dr. Casey Thorburn, <i>Surgery Resident, Memorial University</i></p> <p><u>Learning Objectives:</u> At the end of this session participants will be able to:</p> <ol style="list-style-type: none"> 1. Estimate the capabilities and limitations of AI technology in surgical education; 2. Identify possible applications of AI in surgery; 3. Appraise the application of AI in surgical education during the Covid-19 pandemic. <p><i>(3 min Presentation; 3 min Q&A)</i></p> <p style="color: red;"><i>Interactive Learning: 3 minutes for Q&A from audience for each poster presenter</i></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 10%;">TIME</th> <th style="width: 30%;">PRESENTER</th> <th style="width: 60%;">TITLE</th> </tr> </thead> <tbody> <tr> <td>1:05</td> <td>Zeeshan Ahmed</td> <td>Blended learning using augmented reality glasses during the Covid-19 pandemic: the present and the future.</td> </tr> <tr> <td>1:11</td> <td>Clarissa Lau</td> <td>Activating emotions enhance surgical simulation performance: a cluster analysis.</td> </tr> <tr> <td>1:17</td> <td>Meredith Poole</td> <td>Training in soft-tissue resection using real-time visual computer navigation feedback from the Surgery Tutor: a randomized controlled trial.</td> </tr> <tr> <td>1:23</td> <td>Danielle Arshinoff</td> <td>SonoGames: delivering a point of care ultrasound curriculum through gamification.</td> </tr> <tr> <td>1:29</td> <td>Ryaan EL-Andari</td> <td>Teaching heart valve surgery techniques using simulators: a review.</td> </tr> <tr> <td>1:35</td> <td>Abigail White</td> <td>Portable, adjustable simulator for cardiac surgical skills.</td> </tr> <tr> <td>1:41</td> <td>Garret Johnson</td> <td>Design and validity evidence for a unique endoscopy simulator using a commercial video game.</td> </tr> <tr> <td>1:47</td> <td>Veronique Doucet</td> <td>Comparison of a novel silicone flexor tendon repair model to a porcine tendon repair model.</td> </tr> <tr> <td>1:53</td> <td>Recai Yilmaz</td> <td>Development and validation of a surgical technical skills continuous monitoring and assessment system using deep learning.</td> </tr> </tbody> </table>	TIME	PRESENTER	TITLE	1:05	Zeeshan Ahmed	Blended learning using augmented reality glasses during the Covid-19 pandemic: the present and the future.	1:11	Clarissa Lau	Activating emotions enhance surgical simulation performance: a cluster analysis.	1:17	Meredith Poole	Training in soft-tissue resection using real-time visual computer navigation feedback from the Surgery Tutor: a randomized controlled trial.	1:23	Danielle Arshinoff	SonoGames: delivering a point of care ultrasound curriculum through gamification.	1:29	Ryaan EL-Andari	Teaching heart valve surgery techniques using simulators: a review.	1:35	Abigail White	Portable, adjustable simulator for cardiac surgical skills.	1:41	Garret Johnson	Design and validity evidence for a unique endoscopy simulator using a commercial video game.	1:47	Veronique Doucet	Comparison of a novel silicone flexor tendon repair model to a porcine tendon repair model.	1:53	Recai Yilmaz	Development and validation of a surgical technical skills continuous monitoring and assessment system using deep learning.
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2:00 pm – 2:55 pm

“Beyond the Scalpel, Embracing the Future of Surgery”



Dr. Dave Williams, *Former Director of Space and Life Sciences at NASA, Astronaut, Emergency Physician and Hospital CEO*

Learning Objectives:

1. Participants will learn how disruptive technologies, in particular augmented reality and artificial intelligence will change surgical practice.
2. Derived from the aerospace sector, a strategy for lifelong maintenance of clinical competency will be presented to help participants build judgement, skills and knowledge throughout their careers while striving for balance in their lives.
3. Individual and team strategies to reduce error and mitigate surgical risks.

Interactive Learning: Q&A following lecture – 15 minutes

2:55 pm – 3:00 pm

Break

3:00 pm – 3:55 pm

Scientific Session II: Theme: Technology and CanMED Roles

Moderators: **Dr. Megan Cashin**, *Assistant Professor of Paediatric Surgery, Memorial University in St. John’s, Newfoundland*

Dr. Lydia Goff, *Surgery Resident, Memorial University in St. John’s, Newfoundland*

Learning Objectives:

At the end of this session participants will be able to:

1. Plan applications of technology in undergraduate and postgraduate surgical education;
2. Apply simulation in undergraduate and postgraduate surgical education;
3. Evaluate equity and diversity in medical student and resident education.

(3 min Presentation; 3 min Q&A)

Interactive Learning: 3 minutes for Q&A from audience for each presentation.

TIME	PRESENTER	TITLE
3:00 pm	Ge Shi	Extended reality applications in surgical education.
3:06 pm	Sharif Natheir	Machine learning distinguishes between skilled and less-skilled psychological performance in virtual neurosurgical performance.
3:12 pm	Jonathan Hampshire	A powerful new tool for learning anatomy as a medical student.
3:18 pm	Ali Fazlollahi	Development and the effectiveness of a tele-mentoring approach for neurosurgical simulation training of medical students.
3:24 pm	Fatemeh Ramazani	A team-based learning approach to general otolaryngology in undergraduate medical education.
3:30 pm	Lina Elfaki	Student-led surgery interest group outreach for high school mentorship: a diversity driven initiative.
3:36 pm	Lily Wang	Retrospective evaluation of novel case-based teaching series for first-year otolaryngology residents.
3:42 pm	Tristan Desrosiers	Harassment in surgery: assessing differences in perception.
3:48 pm	Michael Lee	Factors associated with medical student interest in pursuing a surgical residency: a cross-sectional survey study.

3:55 pm – 4:00 pm

Break

4:00 pm – 4:30 pm

“The Integration of the principles of Equity, Diversity, and Inclusion (EDI) in surgical training and practice: Where do we start?”

Dr. Laura Snell, *Co-Director of the Equity, Diversity and Inclusion (EDI) Program, Department of Surgery, University of Toronto*



Learning Objectives:

At the end of this session participants will be able to:

1. Describe current key principles related to EDI in surgery;
2. Describe the importance of equity and diversity in surgery in the provision of quality patient care and advancement of academic medicine;
3. Plan how to incorporate EDI principles in surgical practice and training on a daily basis.

Interactive Learning: Q&A following lecture – 10 minutes

4:30 pm – 5:40 pm

Scientific session III: Theme: Education and CanMED Roles

Moderator: **Dr. Melinda Musgrave**, *Director of Evaluation and Teaching Innovation, Department of Surgery, University of Toronto*

Learning Objectives:

At the end of this session participants will be able to:

1. Develop wellbeing, coaching and mentorship amongst surgical educators and learners;
2. Describe best practices in patient care and sustainability;
3. Apply methods in fostering leadership among surgical trainees.

(3 min Presentation; 3 min Q&A)

Interactive Learning: 3 minutes for Q&A from audience for each presentation.

TIME	PRESENTER	TITLE
4:30 pm	Mahrukh Nisar	Understanding surgical education experiences: an examination of two mentorship models.
4:36 pm	Dhruvin Hirpara	Leadership development programs for surgical residents: a narrative review of the literature.
4:42 pm	Samuel Larrivé	Validation of knee arthroscopy simulator scoring system against subjective video analysis scoring.
4:48 pm	Abigail White	Characterizing the level of autonomy in Canadian cardiac surgery residents.
4:54 pm	Jobanpreet Dhillon	Mentorship patterns amongst medical students successfully matched to a surgical specialty.
5:00 pm	Shirley Deng	Staying safe with laparoscopic cholecystectomy: the use of landmarking and intraoperative time-outs.
5:06 pm	Saad Balamane	Endovascular aneurysm repair has changed the training paradigm of vascular residents.
5:12 pm	Victoria Lee-Wing	Implementation of a standardized handover in pediatric surgery.
5:18 pm	Hellmuth R. Muller Moran	Procedure-specific assessment in cardiothoracic and vascular surgery: a scoping review.
5:24 pm	David Lee	Longitudinal mentorship-based programs for junior medical students increases exposure, confidence, and interest in surgery.
5:30 pm	Yseult Gibert	Creating a green-shift in surgical education: an analytical essay of initiatives and methods to make perioperative care more sustainable.

Friday, October 1, 2021

11:00 am – 1:00 pm



Golden Scalpel Presentation

Moderator: **Dr. Mary Brindle**, *Chair, Canadian Association of Chairs of Surgical Research (CACSR)*

Golden Scalpel Keynote Speaker

“Mentorship and Leadership in Academic Surgery”

Dr. Liane S. Feldman, *Edward W. Archibald Professor and Chair, Department of Surgery, McGill University*



Learning Objectives:

At the end of this session participants will be able to:

1. Define characteristics of an effective mentor in academic surgery;
2. List factors related to early career success as a surgeon-scientist;
3. Summarize the differences between mentorship and sponsorship.

Golden Scalpel Abstracts

12 abstracts will be presented (details forthcoming)

(3 min Presentation; 3 min Q&A)

Interactive Learning: 3 minutes for Q&A from audience for each presentation.

1:00 pm – 2:00 pm

Lunch Break

2:00 pm – 2:50 pm

C-CASE 2021 Keynote Speaker



“Preparation of Residents for Surgical Practice: Challenges, Opportunities, and Innovations”

Dr. Ajit K. Sachdeva, *Director, Division of Education, American College of Surgeons*



Learning Objectives:

Upon completion of this program, the learner will be able to:

1. Discuss challenges associated with training surgery residents in the current environment.
2. Outline approaches to adequately prepare residents for individual practice.
3. Highlight new methods to assess the knowledge and skills of individuals entering practice and provide the requisite support.

Interactive Learning: Q&A following lecture – 10 minutes

2:50 pm – 3:25 pm	<p>Round-table discussion:</p> <p>“What is the optimal length for a surgery clerkship rotation?”</p> <p>Moderator: Dr. Abdollah Behzadi, <i>CUSEC Chair, Department of Surgery, University of Toronto</i></p> <p><u>Learning Objectives:</u></p> <p>At the end of this round-table discussion participants will be able to:</p> <ol style="list-style-type: none"> 1. Describe and discuss solutions to surgery clerkship challenges; 2. Compare and contrast clerkship education in various Canadian universities; 3. Determine the optimal length and content of surgery clerkship rotation. <p>Panelists: Dr. Ioana Bratu, UME director, Department of Surgery, University of Alberta Dr. Roy Kirkpatrick, Chair, Department of Surgery, Northern Ontario School of Medicine David Levi, Medical Student, University of Montreal Dr. Saad Shakeel, Surgery Resident, University of Western Ontario Dr. Laurie Simard, UME director, Department of Surgery, University of Sherbrooke</p> <p><i>Interactive Learning: Panel Discussion with Audience, moderated session 35 Minutes</i></p>																																	
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3:30 pm – 4:30 pm	<p>Scientific Session IV: Theme: Novel Approaches to Surgical Education</p> <p>Moderator: Dr. Tim Davies, <i>Associate Professor of Urology, McMaster University</i></p> <p><u>Learning Objectives:</u></p> <p>At the end of this session participants will be able to:</p> <ol style="list-style-type: none"> 1. Assess and evaluate innovative educational tools in surgical education; 2. Assess and evaluate new research techniques in surgical education; 3. Appraise well-being among surgical residents in relation to the challenges of the Covid-19 pandemic. <p><i>(3 min Presentation; 3 min Q&A)</i></p> <p><i>Interactive Learning: 3 minutes for Q&A from audience for each presentation.</i></p> <table border="1" data-bbox="354 1207 1479 1927"> <thead> <tr> <th>TIME</th> <th>PRESENTER</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>3:30 pm</td> <td>Valerie Gervais</td> <td>A novel plastic surgery residency bootcamp: structure and utility.</td> </tr> <tr> <td>3:36 pm</td> <td>Ryan Daniel</td> <td>Video-based coaching for surgical residents: a systematic review and meta-analysis.</td> </tr> <tr> <td>3:42 pm</td> <td>Sam Minor</td> <td>Virtual patient cases aligned with EPAS provide innovative e-learning strategies.</td> </tr> <tr> <td>3:48 pm</td> <td>Gary Ko</td> <td>Achieving competency in the CanMEDS roles for surgical trainees in the Covid-19 era: What have we learned and where do we go?</td> </tr> <tr> <td>3:54 pm</td> <td>Matthew Castelo</td> <td>Profiles of burnout and response to the Covid-19 pandemic among general surgery residents at a large academic training program.</td> </tr> <tr> <td>4:00 pm</td> <td>Scott Zablony</td> <td>Learner-driven telemedicine curriculum during the Covid-19 pandemic.</td> </tr> <tr> <td>4:06 pm</td> <td>Valérie Lemieux</td> <td>Centralized basic orthopaedic surgery virtual examinations – assessment of examination environment.</td> </tr> <tr> <td>4:12 pm</td> <td>Eileen Roach</td> <td>Effect of the Covid-19 pandemic on surgical resident training: a nationwide survey of Canadian program directors.</td> </tr> <tr> <td>4:18 pm</td> <td>Jessica Ho</td> <td>Exploring the transition to virtual care in surgery and its impact on clinical exposure, teaching, and assessment during Covid-19.</td> </tr> <tr> <td>4:24 pm</td> <td>Ishita Aggarwal</td> <td>Impact of Covid-19 on procedural skills training and career preparation of medical students.</td> </tr> </tbody> </table>	TIME	PRESENTER	TITLE	3:30 pm	Valerie Gervais	A novel plastic surgery residency bootcamp: structure and utility.	3:36 pm	Ryan Daniel	Video-based coaching for surgical residents: a systematic review and meta-analysis.	3:42 pm	Sam Minor	Virtual patient cases aligned with EPAS provide innovative e-learning strategies.	3:48 pm	Gary Ko	Achieving competency in the CanMEDS roles for surgical trainees in the Covid-19 era: What have we learned and where do we go?	3:54 pm	Matthew Castelo	Profiles of burnout and response to the Covid-19 pandemic among general surgery residents at a large academic training program.	4:00 pm	Scott Zablony	Learner-driven telemedicine curriculum during the Covid-19 pandemic.	4:06 pm	Valérie Lemieux	Centralized basic orthopaedic surgery virtual examinations – assessment of examination environment.	4:12 pm	Eileen Roach	Effect of the Covid-19 pandemic on surgical resident training: a nationwide survey of Canadian program directors.	4:18 pm	Jessica Ho	Exploring the transition to virtual care in surgery and its impact on clinical exposure, teaching, and assessment during Covid-19.	4:24 pm	Ishita Aggarwal	Impact of Covid-19 on procedural skills training and career preparation of medical students.
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4:35 pm – 5:25 pm	<p>Scientific Session V: Theme: Virtual Learning</p> <p>Moderators: Dr. Erica Patocskai, <i>Head of Surgical Oncology, University of Montreal</i> Dr. Leamarie Meloche-Dumas, <i>Surgery Resident, University of Montreal</i></p> <p><u>Learning Objectives:</u> At the end of this session participants will be able to:</p> <ol style="list-style-type: none"> 1. Describe key principles that can guide an overall approach to adapting to virtual teaching and learning; 2. Choose practical strategies for virtual teaching and learning in surgical education; 3. Describe pandemic-driven innovation in surgical education. <p><i>(3 min Presentation; 3 min Q&A)</i></p> <p><i>Interactive Learning: 3 minutes for Q&A from audience for each presentation.</i></p> <table border="1" data-bbox="354 640 1479 1270"> <thead> <tr> <th>TIME</th> <th>PRESENTER</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>4:35 pm</td> <td>Max Solish</td> <td>Virtual surgical shadowing for undergraduate medical students amidst the Covid-19 pandemic.</td> </tr> <tr> <td>4:41 pm</td> <td>Jong Min Lee</td> <td>Educational impact of Covid-19 third wave on a competency-based orthopaedic surgery program.</td> </tr> <tr> <td>4:47 pm</td> <td>Luckshi Rajendran</td> <td>Virtualization of post-graduate residency interviews – a transforming practice in healthcare education.</td> </tr> <tr> <td>4:53 pm</td> <td>Shaishav Datta</td> <td>An informational podcast about Canadian plastic surgery training programs: "Doctority Canada: Plastic Surgery."</td> </tr> <tr> <td>4:59 pm</td> <td>Peter Gariscsak</td> <td>Virtual vs on-person suture training: an evaluation of synchronous and asynchronous teaching paradigms.</td> </tr> <tr> <td>5:05 pm</td> <td>Garrett Johnson</td> <td>Merged virtual reality teaching of the fundamentals of laparoscopic surgery: a randomized controlled trial.</td> </tr> <tr> <td>5:11 pm</td> <td>Rosephine Del Fernandes</td> <td>Should surgical skills be evaluated during virtual CaRMS residency interviews? A Canadian survey of CaRMS applicants and selection committee members during the Covid-19 pandemic.</td> </tr> <tr> <td>5:17 pm</td> <td>Anser Daud</td> <td>Impact of the Covid-19 pandemic on surgical education for medical students: perspectives from Canada's largest faculty of medicine.</td> </tr> </tbody> </table>	TIME	PRESENTER	TITLE	4:35 pm	Max Solish	Virtual surgical shadowing for undergraduate medical students amidst the Covid-19 pandemic.	4:41 pm	Jong Min Lee	Educational impact of Covid-19 third wave on a competency-based orthopaedic surgery program.	4:47 pm	Luckshi Rajendran	Virtualization of post-graduate residency interviews – a transforming practice in healthcare education.	4:53 pm	Shaishav Datta	An informational podcast about Canadian plastic surgery training programs: "Doctority Canada: Plastic Surgery."	4:59 pm	Peter Gariscsak	Virtual vs on-person suture training: an evaluation of synchronous and asynchronous teaching paradigms.	5:05 pm	Garrett Johnson	Merged virtual reality teaching of the fundamentals of laparoscopic surgery: a randomized controlled trial.	5:11 pm	Rosephine Del Fernandes	Should surgical skills be evaluated during virtual CaRMS residency interviews? A Canadian survey of CaRMS applicants and selection committee members during the Covid-19 pandemic.	5:17 pm	Anser Daud	Impact of the Covid-19 pandemic on surgical education for medical students: perspectives from Canada's largest faculty of medicine.
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Sponsors

This program has received an educational grant from:

