

# FACULTY DEVELOPMENT DAY 2017

MONDAY NOVEMBER 13<sup>TH</sup>

BEING THE BEST WE CAN BE:  
FINDING THE BALANCE

8:00AM - 3:45PM

89 Chestnut Residence and Conference Centre  
University of Toronto  
2nd Floor (Colony Grand Ballroom)

KEYNOTE SPEAKER:

**DR. JASON FRANK** MD, MA (Ed.), FRCPC

Director,  
Specialty Education, Strategy and Standards  
*Office of Specialty Education, Royal College of Physicians and Surgeons of Canada*

## Anesthesia Abstracts



## Faculty Development Day 2017

DEPARTMENTS OF ANESTHESIA, SURGERY &  
OTOLARYNGOLOGY-HEAD AND NECK SURGERY  
UNIVERSITY OF TORONTO

MONDAY, NOVEMBER 13, 2017  
89 CHESTNUT RESIDENCE & CONFERENCE CENTRE

### 07:00 Breakfast & Registration

LOCATION: COLONY GRAND BALLROOM, 2<sup>ND</sup> FLOOR

### 08:00 Welcome and Introductions Remarks

LOCATION: COLONY GRAND BALLROOM, 2<sup>ND</sup> FLOOR

**Beverley Orser**, Chair, Department of Anesthesia  
**Trevor Young**, Dean, Faculty of Medicine  
**Jim Rutka**, Chair, Department of Surgery  
**Ian Witterick**, Chair, Department of Otolaryngology

### 08:20 Plenary Session

LOCATION: COLONY GRAND BALLROOM, 2<sup>ND</sup> FLOOR

**COMPETENCE BY DESIGN – TOWN HALL MEETING**  
**Dr. Jason Franks**, Royal College of Physicians and Surgeons of Canada  
**Moderators: Lisa Bahrey and Najma Ahmed**

### 09:15 – 10:30 Parallel Workshops – Session A

- 1 Competence By Design  
**Jason Frank**
- 2 Physician Health and Wellness (Staff and Residents)  
**Julie Maggi, Giuseppe Papia & Alex Effer**
- 3 Perioperative DNR  
**Richard Mimeault**
- 4 Healthcare Communication and Social Media – The Ethics of Privacy in an Electronic World  
**Clyde Matava & Dennis Desai**
- 5 Beyond The Checklist: A Culture of Safety in the OR  
**Carol-Anne Moulton & Eric Monteiro**
- 6 Financial Planning & Management: Fiscal and Pragmatic Considerations  
**Zane Cohen, Yvonne Chan & Barry Rubin**
- 7 Innovative Job Models  
**Danielle Bischof & Hans Kreder**
- 8 Teaching Tips – Engaging Your Learners  
**Debbie Kwan, Brenda Mori, Raed Hawa & Zoe Unger**

- 9 Negotiating the Non Negotiable: Transforming Conflict into Opportunity  
**John Oesch**

**10:30 – 11:10 Poster Session and Refreshments**

LOCATION: COLONY GRAND BALLROOM, 2<sup>ND</sup> FLOOR

- 1 From learning objectives to competencies, connecting the dots: Introducing our Bariatric body suit modification in UME Simulation  
**Anita Sarmah**, Sunnybrook Health Sciences Centre
- 2 Ultrasound Guided Regional Anesthesia Courses: Barriers along the road from course to clinical practice  
**Sarah Tierney**, UHN-Toronto Western Hospital
- 3 Competency By Design Program Evaluation: Complexity Theory  
**Gianni Lorello**, UHN-Toronto Western Hospital
- 4 Retrospective Analysis of Respiratory and Airway Complications in Developmentally Delayed Patients Undergoing General Anesthesia  
**Hala Baithoun**, Sinai Health System
- 5 Applying Anesthesia Expertise as a First Responder in Pre-hospital Care: A Global Health Elective  
**Susan Bragg**, St. Michael's Hospital

**11:10 – 12:25 Parallel Workshops – Session B**

- 1 Competence By Design  
**Jason Frank**
- 2 Physician Health and Wellness (Staff and Residents)  
**Julie Maggi, Giuseppe Papia & Alex Effer**
- 3 Succeeding at Undergraduate Medical Education  
**Stacey Bernstein & Ahtsham Niazi**
- 4 Perioperative DNR  
**Richard Mimeault**
- 5 Healthcare Communication and Social Media – The Ethics of Privacy in an Electronic World  
**Clyde Matava & Dennis Desai**
- 6 Beyond The Checklist: A Culture of Safety in the OR  
**Carol-Anne Moulton & Eric Monteiro**
- 7 Financial Planning & Management: Fiscal and Pragmatic Considerations  
**Zane Cohen, Yvonne Chan & Barry Rubin**

- 8 Innovative Job Models  
**Danielle Bischof & Hans Kreder**
- 9 Teaching Tips – Feedback  
**Debbie Kwan, Brenda Mori, Raed Hawa & Zoe Unger**
- 10 Negotiating the Non Negotiable: Transforming Conflict into Opportunity  
**John Oesch**

**12:25 – 1:30 Lunch**

LOCATION: COLONY GRAND BALLROOM, 2ND FLOOR

**Department of Anesthesia – Afternoon Program**

LOCATION: COLONY GRAND BALLROOM, 2<sup>ND</sup> FLOOR

**1:30 – 2:20 Scientific Oral Presentations (Anesthesia)**

Gender, Power and Leadership: The Effect of a Superior’s Gender on Ability to Challenge Wrong Decisions

**Nisha Patel**, Sinai Health System

The new CEA work-based assessment tool mitigates central tendency bias in assessment of anesthesia trainees and captures increasing trainee independence with progression through post-graduate training

**Rebecca Dube**, The Hospital for Sick Children

A competency-based anesthesia performance assessment tool identifies underperforming trainees more frequently than Daily Evaluations

**Rebecca Dube**, The Hospital for Sick Children

Patient assessment and critical thinking, insight and judgment, predict trainee overall level of independence using the CEA work-based assessment tool

**Rebecca Dube**, The Hospital for Sick Children

**2:20 – 2:40 Awards (Anesthesia)**

- The Dr. John Desmond Award (for excellence in undergraduate teaching)
- The Dr. Gerald Edelist Award (for excellence in postgraduate teaching)
- The David Fear Award (for excellence in continuing medical education and professional development)
- The U of T Anesthesia Interprofessional Teaching Award (for outstanding teaching both within – *and outside* – the anesthesia community)
- Best Oral Presentation Award: Faculty Development Day 2017

- Best Poster Presentation: Faculty Development Day 2017
- People's Choice Awards: Best Poster and Best Oral presentations, Faculty Development Day, 2017

**2:40 – 2:45 Closing Remarks (Anesthesia)**

**New Faculty Orientation Session**

LOCATION: COLONY GRAND BALLROOM, 2<sup>ND</sup> FLOOR

**2:45 – 3:00 Responsibilities and Expectations of Faculty, Dr. Beverley Orser**

**3:00 – 3:15 Teaching and the Problem Residents, Dr. Mark Levine**

**3:15 – 3:30 CPSO Issues, Dr. Robert Byrick**

**3:30 – 3:40 Q & A**

**3:45 – 4:25 Joint New Faculty Reception with Surgery**

**4:25 – 4:50 Promotion, Dr. Mary Jane Esplen**

**5:00 Departure**

**Department of Surgery – Afternoon Program**

**1:30 – 3:45**

<b>Division</b>	<b>Location</b>
General Surgery	St. Lawrence
Neurosurgery	St. Patrick North
Thoracic Surgery	St. David

**Department of Otolaryngology – Afternoon Program**

**1:30 – 5:30 Faculty Retreat**

LOCATION: ELM, ARMOURY AND CARLTON ROOMS

**5:30 onwards – Promotion Celebration**

LOCATION: GIOVANNI

## ORAL PRESENTATIONS

### Oral Presentation 1: Gender, Power and Leadership: The Effects of a Superior's Gender on Ability to Challenge Wrong Decisions

**Nisha Patel**

Sinai Health System

#### **Introduction:**

Effective communication within teams is crucial, especially in crisis situations. Hierarchy gradients between team members can contribute to communication failures and are influenced by many factors. The effect of gender on team performance has not been well studied. The objective of this study was to examine the effect of the physician's gender on respiratory therapists' ability to effectively challenge clearly incorrect clinical decisions during a life-threatening crisis.

#### **Methods:**

Respiratory therapists were recruited to take part in a high-fidelity simulation of can't-intubate can't-oxygenate scenarios. They were randomized into 2 groups, either assisting a male or a female anaesthetist in managing an airway crisis during which the anaesthetist made incorrect clinical decisions. Two independent raters scored the performances using the modified Advocacy-Inquiry Score (min 1, max 6).

#### **Results:**

Twenty-nine subjects completed the study. The median best challenge score when the staff anaesthetist was female was 4 (3-5 IQR [2-6 range]) compared to 3 (3-3[0-3]) for challenges to a male anaesthetist ( $p=0.017$ ). The median of the total challenges against a female staff member 11 (7.3-14.8 [2-18]) was significantly higher compared to 4 (3.5-7 [2-11.5]) for a male staff ( $p=0.006$ ).

#### **Conclusions:**

The study showed a significant effect of superiors' gender on a respiratory therapist's ability to challenge leadership. A female staff anaesthetist was challenged more often and with greater assertiveness and effectiveness. This has implications for an educational intervention targeting the ability to challenge a wrong decision by a supervisor and emphasizing the effect of gender on the willingness to speak up.

## **Oral Presentation 2: The new CEA work-based assessment tool mitigates central tendency bias in assessment of anesthesia trainees and captures increasing trainee independence with progression through post-graduate training**

**Rebecca Dube**

The Hospital for Sick Children

### **Introduction:**

The new CEA work-based assessment tool mitigates central tendency bias in assessment of anesthesia trainees and captures increasing trainee independence with progression through post-graduate training years.

On July 1 2017, the Anesthesiology postgraduate program at the University of Toronto launched Competency by Design (CBD), a competency-based education initiative from the Royal College of Physicians and Surgeons of Canada. Our program had been using workplace-based assessments for more than a decade, and decided to update our assessment scale to reflect the independence scale used in CBD. Rather than faculty judging resident performance in relation to the "expected level of performance", the scale of our new clinical encounter assessment (CEA) was based on the extent to which a faculty trusted the resident to independently manage various case elements. We sought to validate the performance of the CEA tool versus the old Daily Evaluations tool. We examined each tool's central tendency bias, and sought to determine if the CEA tool detected improvement in performance as residents progressed in training.

### **Methods:**

We retrospectively analysed data from the CEA tool from August 1 to October 1, 2017, and from the Daily Evaluation tool from August 1 to October 1, 2013. We examined the distribution and central tendency bias of both tools for all domains. Domains in the Daily Evaluation tool were matched as closely as possible to CEA tool domains.

### **Results:**

550 CEA assessments were completed in two months, versus 312 Daily Evaluations over the same time period. The CEA tool data was normally distributed in all domains, while the Daily Evaluations were skewed to the right. The CEA assessment data demonstrated a lower overall performance mean (3.12 +/-0.8), compared to the Daily Evaluation tool (4.2 +/- 0.3), indicating overuse of high performance anchors with the Daily Evaluation tool. The median overall level of independence of trainees increased from 2/5 ("DIRECTION: Required some guidance and/or coaching for this case") in PGY1 to 4/5 ("AUTONOMOUS: Did not require coaching or guidance for this case") in PGY5. Regression analysis in the CEA tool demonstrated that trainee overall level of independence was correlated with post-graduate training year ( $R^2=0.18$ ,  $p<0.05$ ). The Daily Evaluation tool demonstrated no change in scores according to year of training.

### **Conclusions:**

Introduction of the new CEA assessment tool led to a 176% increase in resident assessments over a period of two months. Use of this tool also led to wider use of assessment anchors, mitigating central

tendency bias and allowing for more accurate assessment of trainee performance. The CEA assessment tool captures increasing trainee independence with progression through post-graduate training years.

### **Oral Presentation 3: A competency-based anesthesia performance assessment tool identifies underperforming trainees more frequently than Daily Evaluations**

**Rebecca Dube**

The Hospital for Sick Children

#### **Introduction:**

A competency-based anesthesia performance assessment tool identifies underperforming trainees more frequently than Daily Evaluations.

On July 1 2017, the Anesthesiology postgraduate program at the University of Toronto launched Competency by Design (CBD), a competency-based education initiative from the Royal College of Physicians and Surgeons of Canada. Our program had been using workplace-based assessments for more than a decade, and decided to update our assessment scale to reflect the independence scale used in CBD. Rather than faculty judging resident performance in relation to the "expected level of performance", the scale of our new clinical encounter assessment (CEA) was based on the extent to which a faculty trusted the resident to independently manage various case elements.

We sought to determine whether the new CEA assessment tool identified underperforming trainees more frequently or earlier than the old Daily Evaluations tool.

#### **Methods:**

We retrospectively analysed data from the CEA tool from August 1 to October 1, 2017, and from the old Daily Evaluation tool from August 1 to October 1, 2013. We examined the proportion of trainees identified as underperforming with each tool, as defined as a score greater than 2 standard deviations (SD) below the mean adjusted for year with the new CEA assessment tool, or 1/5 or 2/5 with the old Daily Evaluation tool.

#### **Results:**

Across all years, the CEA assessment tool identified 5.1% of anesthesia trainees as underperforming compared to their peers in the overall level of independence domain, as compared to 0.3% for the old Daily Evaluation tool. With the CEA tool, trainees were most likely to be identified as underperforming overall in PGY3, and in the technical skills domain regardless of year of training, with 10.0% and 6.3% of residents assessed as greater than 2 SD below the mean, respectively. The CEA tool could not identify underperforming residents in the PGY1 year in five of the eight domains assessed, as a score of 2 SD below the mean was lower than the lowest possible score of 1/5.

#### **Conclusions:**

The CEA assessment tool is more effective than the Daily Evaluation tool in identifying underperforming trainees. However, using a score of 2 SD below the mean to identify underperforming trainees in PGY1 was ineffective, as performance data was shifted to the left in PGY1, and the lowest possible score (1/5) was frequently higher than 2 SD below the sample mean.

## **Oral Presentation 4: Patient assessment and critical thinking, insight and judgment, predict trainee overall level of independence using the CEA work-based assessment tool**

**Rebecca Dube**

The Hospital for Sick Children

### **Introduction:**

Patient assessment and critical thinking, insight and judgement, predict trainee overall level of independence using the CEA work-based assessment tool.

On July 1 2017, the Anesthesiology postgraduate program at the University of Toronto launched Competency by Design (CBD), a competency-based education initiative from the Royal College of Physicians and Surgeons of Canada. The College provided guidelines for assessing specific milestones and entrusted professional activities (EPAs), which are residency-stage specific. In addition to EPAs, our program decided to continue our pre-existing work-based assessments, but changed the assessment scale to assess resident independence and competence, instead of “meeting expectations” by faculty. This clinical encounter assessment (CEA) was used for regular assessment of all residents in our program. We sought to identify factors in the CEA that would predict high evaluations for independence practice as resident progress over time toward the goal of independent specialist practice.

### **Methods:**

We retrospectively examined CEA assessment data for PGY1 to PGY5 trainees obtained from July 1, 2017 to October 1, 2017. Univariate and multivariate analysis were used to identify factors and a model predicting overall independence. A  $P < 0.05$  was taken as significant.

### **Results:**

550 CEA assessments of University of Toronto anesthesiology residents were performed between July 1 and October 1 2017. After adjusting for site, on call status and case complexity, trainee performance in the Patient assessment ( $P=0.01$ ) and Critical thinking, insight and judgement ( $P=0.03$ ) domains predicted trainee overall level of independence ( $R^2=0.87$ ). Anesthesia plan creation ( $P=0.07$ ) trended towards predicting trainee overall level of independence but was not statistically significant. Patient and family communication, team collaboration, technical skills, situational awareness, and organization were not predictive of trainee overall level of independence.

### **Conclusions:**

We have identified that resident performance in two domains, patient assessment, and critical thinking, insight and judgement, correlate with a trainee’s overall level of independence. Evaluating trainees’ performance in these two domains may be taken as predictors of overall level of independence. Within the context of competency-based training, it will be important for educators to assess resident performance including these two domains, to facilitate early identification of underperforming and high performing residents.

## POSTERS

### **Poster 1: From learning objectives to competencies, connecting the dots: Introducing our Bariatric body suit modification in UME Simulation**

**Drs. Nicholas Valenzuela, Jordan Tarshis, Agnes Ryzynski, Susan DeSousa,  
Anita Sarmah**

Sunnybrook Health Science Centre

#### **Background:**

All 252 University of Toronto Anesthesia clinical clerks participate in two days of Simulation with specific learning objectives and competencies.

The second day involves anesthetizing an obese patient. Station objectives include recognition of a potentially difficult airway. Competencies include optimum positioning, availability of intubation adjuncts and video laryngoscopy.

Learners are instructed to consider the patient obese when planning airway management, however the learners consistently forgot this consideration when faced with the slim Laerdal SimMan.

#### **Summary of Innovation:**

This gap in cognitive transference from briefing to active simulation, impaired the curriculum's ability to achieve the desired competencies.

We hypothesized that learners would more likely reposition an obese patient if presented with an obese mannequin. A bariatric body suit originally designed as a confederate costume for live Standardized patients was purchased.

However, due to the bulky suit we were unable to perform cardiac monitoring or defibrillation, both required in the scenario, as the pegs on the mannequin's chest were inaccessible.

The solution was to perform simple incisions on the suit over the peg areas. As with any fabric, these incisions had the risk of unraveling and ruining the suit, so a sealing stitch was performed. Where the suit was too thick, hand stitching in combination with heated adhesive was applied.

#### **Impact:**

Results were overwhelming positive with learners immediately recognizing an obese patient and acting appropriately, thus diminishing the "suspension of disbelief" requirements. We see bariatric body suit modification facilitating further complex scenario development involving obese patients in simulation.

## Poster 2: Ultrasound Guided Regional Anesthesia Courses: Barriers along the road from course to clinical practice

### Dr. Sarah Tierney

UHN-Toronto Western Hospital

#### Introduction:

Ultrasound guided regional anesthesia (USGRA) has become an essential component of anesthesia practice over the last decade. However, acquiring the proficiency to perform blocks, particularly for physicians who trained without ultrasound, remains a challenge. Successful knowledge translation relies on a foundation of sonoanatomy, scanning technique and hand-eye coordination. Many courses of varying design have been offered to help bridge this gap. Pre- and post-testing of participants at our institution's course has demonstrated significant improvement in knowledge, however long-term retention of this skill-set has not been evaluated. Our survey hopes to determine the overall value to clinical practice that can be gained by participating in these intensive, hands-on USGRA courses.

#### Methods:

Our institution has offered a 3-day basic USGRA workshop with 2 days of hands-on practice since 2004. An e-mail survey was sent to participants who had completed the course in 2010, 2011 and 2017, to assess for comfort with USGRA techniques and the impact it had to participants' practices. It consisted of 12 questions and took ~10 minutes to complete. All data was analyzed in summary format to ensure anonymity.

#### Results:

At present, 54 people have replied, from which 60% are community-based, 88.5% are staff physicians, and 11.5% are trainees. Prior to the course 85.2% had performed  $\leq 50$  USGRA blocks and 72.2% did not feel confident with USGRA. Since the course 63.0% had performed  $> 50$  USGRA blocks and 71.7% felt confident in performing USGRA. 90.6% felt the course had a significant impact on their practice. Following the course 64.2% did seek out further USGRA training including fellowships (13.2%), other workshops (20.7%), self-taught learning (18.9%) and colleague assistance (11.3%). In assessing barriers to using USGRA, adequate training (25.5%), insufficient surgical procedures requiring blocks (15.7%); decay of skill (13.7%); lack of surgical colleague buy-in (13.7%) and inadequate time (11.8%) or mentors (9.8%) were listed as the most important, respectively.

#### Discussion:

Our 3 day USGRA course promoting hands-on practice had a positive influence on both confidence and ability in performing USGRA blocks in daily practice. However, there remain barriers to incorporating USGRA into clinical practice, including knowledge and skill decay which may be reflective of inadequate time, space or surgical buy-in to USGRA techniques. USGRA courses may be an important way to help practitioners gain technical skills as new techniques develop and technology evolves. The ideal frequency or duration of these courses to maintain this competency has not been determined.

## Poster 3: Competency By Design Program Evaluation: Complexity Theory

**Dr. Gianni Lorello**

UHN – Toronto Western Hospital

The Royal College of Physicians and Surgeons of Canada mandate a paradigm shift from a traditional, Flexnerian, time-based residency program to a competency-based medical education (CBME) program. Educational programs are in a state of flux, and any dynamic change in an educational program should be designed to determine whether or not change occurs.

Educational program evaluation entails the “systematic collection and analysis of information related to the design, implementation, and outcomes of a program, for the purpose of monitoring[,] ...improving the quality and effectiveness of the program” (ACGME 2010). We aim at outlining the theoretical basis against the University of Toronto, Department of Anesthesiology residency program and outline models in the context of theory.

Theories that inform educational program evaluation include: reductionism, system theory, and complexity theory. Theoretically-contextualized models include: experimental and quasi-experimental models; Kirkpatrick’s four-level model; the Logic model; and the Context-Input-Process-Product model. Given the ever-changing nature of our program, we will utilize the Context-Input-Process-Product model with multiple feedback loops informing each stage while using complexity theory that assumes non-linearity from implementation to outcome.

## Poster 4: Retrospective Analysis of Respiratory and Airway Complications in Developmentally Delayed Patients Undergoing General Anesthesia

**Dr. Hala Baithoun**

Sinai Health System

### **Introduction:**

Because of the high incidence of poor cooperation, which may include aggressive antagonistic behavior, many developmentally delayed (DD) patients are scheduled for dental care under general anesthesia with an incomplete preoperative medical assessment. In this retrospective study we aim to assess respiratory and airway complications in DD patients undergoing anesthesia for dental surgery.

### **Materials and Methods:**

This is a retrospective chart review of scanned anesthesia records of DD patients undergoing general anesthesia for dental procedures between January 2014-December 2016. After institutional REB approval, 616 anesthesia records were analyzed for respiratory and airway complications: these include preoperative airway assessment; failed intubation defined as 3 or more attempts of intubation, difficult bag mask ventilation, oral intubation after failed nasal intubation, use of airway adjuncts (video laryngoscope, fiberoptic bronchoscope, supraglottic device), intraoperative events (aspiration, desaturation, laryngospasm, and/or bronchospasm) and postoperative events (delayed extubation, apnea, stridor episode, and/or hospital admission).

### **Results:**

During the three-year period a total of 616 dental procedures were performed under general anesthesia for 495 DD patients. Repeated procedures were done in 120 patients. The majority of patients were males (62.02%). Airway assessment was done completely for 116 (23.4%), partially for 176 (35.5%), and not performed for 324 (65.4%) patients. Successful intubation was achieved in 602/616 (97.7%) procedures. Failed intubation occurred in 14/616 (2.6%) procedures with general anesthesia. Difficult BMV was encountered in 26/616 (4.2%), oral to nasal intubation in 53/616 (8.6%), and use of airway adjuncts in 34/616 (5.52%) procedures. Intra operative events occurred in 41/616 (6.65%) of all procedures. Two patients (0.4% or 1:248) died from airway and respiratory complications.

### **Conclusions:**

Although airway exam was not performed for more than half of the patients, intubation was successful in 97.7% of attempts. Failed intubation of 2.6% in the DD patients was similar to the non-DD patient population.<sup>1</sup> However, mortality rate of 1 in 248 patients (0.4%) in our patient population was significantly higher than the described rate of 1:200,000 – 885,000 in non-DD patients undergoing general anesthesia or sedation for dental procedures.<sup>2,3</sup> Airway management in the DD patients undergoing dental procedures can be successfully performed, however, these patients are at increased risk of respiratory and airway mortality.

### **References:**

Can J Anaesth. 2013; 60: 1089–1118.

2013. [http://www.aaoms.org/docs/papers/advocacy\\_office\\_based\\_anesthesia.pdf](http://www.aaoms.org/docs/papers/advocacy_office_based_anesthesia.pdf)

J Oral Maxillofac Surg. 2003; 61: 983-995.

## Poster 5: Applying Anesthesia Expertise as a First Responder in Pre-hospital Care: A Global Health Elective

**Susan Bragg**

St. Michael's Hospital

### **Background:**

Pre-hospital and Emergency care offers trainees opportunities to:

1. Provide rapid assessments and acute resuscitation care
2. Triage patients and manage multiple competing demands
3. Formulate a prompt differential diagnosis and management plan
4. Operate in a low-resource environment without the benefit of a fully equipped hospital and specialist staff

While these are skills that are useful for an anesthetist to have, there is currently no opportunity for residents to gain this experience in the University of Toronto Anesthesia Curriculum. Through the Pre-hospital Emergency Service in Parma, Italy, anesthesia residents can participate in training in pre-hospital care.

### **Method:**

The goal of this project was to develop an elective in pre-hospital care for anesthesia trainees. This was achieved by creating a Protocol for International Cooperation Agreement for Educational and Scientific Purposes between the Department of Emergency Medicine (University of Parma), and the Department of Anesthesia (University of Toronto).

### **Results:**

The Protocol of International Cooperation Agreement was developed in July of 2016, with a Memorandum of Understanding for 5 years.

This two-week elective is designed for senior anesthesia residents; to date, four residents have completed the elective. Residents rotate at the Parma University Hospital, in the Department of Emergency Medicine, Pain Clinic, ICU, and OR, and they deliver a scholarly presentation to their colleagues. The pre-hospital care is undertaken at the Ambulance Emergency Service, 118 – Assistenza Pubblica, with one-on-one faculty supervision. Residents complete a daily log of their clinical encounters, and debrief each case with their supervisor.

Evaluation of the elective is undertaken with an anonymous survey, and has a consistent overall rating of Very Good (4/5) across the CanMEDS roles. Limitations cited include adapting to language and cultural differences in resource allocation and healthcare goals.

### **Discussion:**

Internationalization is a priority for the University of Toronto, as well as part of the overall academic mission. The creation of a new affiliation between the University of Parma and the University of Toronto promotes these goals, and affords residents a unique opportunity for cultural exchange and learning.

This elective provides residents with experience working in fast-paced, low-resource environments that are otherwise not available in their training. The elective was perceived as a valuable opportunity, and was highly rated by the residents.

**Conclusion:**

The pre-hospital elective is an opportunity for residents to develop skills in acute care in a global health environment. It has been well rated by previous participants, and there continues to be a high demand for requests. We plan to expand the program to be offered every six months.

## Acknowledgements

The University of Toronto, Departments of Anesthesia and Surgery wish to thank the following sponsors for their contributions in the form of unrestricted educational grants to support Faculty Development Day 2017:



This event is an Accredited Group Learning Activity as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada, approved by Continuing Professional Development, Faculty of Medicine, University of Toronto.

### Faculty Development 2017 Planning Committee

#### Anesthesia

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Kristina Khanduja  
Clyde Matava  
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#### Surgery

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Nancy Condo  
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#### Otolaryngology – Head and Neck Surgery

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