Save the Date!

WINTER 2017, ISSUE 6

IDCCM Newsletter

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Save the Date!

Nuts and Bolts Of Research (NABOR) Observational Studies
March 1, 2018

IDCCM Alliance Faculty Day
March 7, 2018

Mechanical Ventilation Course
June 12-14, 2018

IDCCM End of Year Celebration
June 18, 2018

Art Slutsky Research Day
June 19, 2018

CCCF
November 6-9, 2018

IDCCM Alliance Faculty Day Photos
September 13, 2017
Connect science, education and quality of care, ...and engage patients and family

Dear colleagues and friends,

Critical Care Medicine is an exciting and highly enjoyable discipline, which benefits every day from the integration of science, education and quality of care in our academic environment. You'll find many brilliant examples of this in the following pages, reflecting the dynamism of IDCCM members and their incredibly diverse interests, skills and talents.

At St. Michael’s, we are developing the concept of being a Centre of Excellence in Mechanical Ventilation and we think that Toronto and the IDCCM has an extraordinary strength and a unique combination of talents to make this possible. Mechanical Ventilation represents a core technique “defining” what an ICU is: being a Centre of Excellence means that Mechanical Ventilation should be known, studied and practiced at the best level and likely better than anywhere else. Research and production of knowledge is needed in the laboratory, in the ICU, through epidemiological studies, and embedded into our clinical practice. To be highly attractive and competitive requires integrating research, education and care for mechanically ventilated patients- along their ICU stay and along the continuum of care of their trajectory. On December 18th, we held a retreat at St Mike’s to develop this concept: what does it mean to be a Centre of Excellence in Mechanical Ventilation (see the video announcing our meeting: http://coemv.ca/made by Tom Piraino). We were lucky enough to have a patient participating in this retreat: an “ARDS survivor” who had been enrolled in two clinical trials about mechanical ventilation during his stay (including the study called “Supernova”, NCT02282657). With his wife and his daughter, they offered an invaluable report of their experience and described their vision of our strengths and opportunities for improvement. This was extremely powerful and I cannot resist showing (with the patient’s approval) the photograph of our patient wearing his “Supernova” tee-shirt for us. The whole family strongly advocated for more patient and family engagement, including during clinical rounds, and reminded us that this should be on our agenda to be a Centre of Excellence! As recently outlined by Karen Burns regarding the design of trials, this is a novel –and really exciting- paradigm (Chest. 2017; 152(4):707. Patient and Family Engagement in Designing and Implementing a Weaning Trial: A Novel Research Paradigm in Critical Care).

I wish you all very Happy Holidays and a Fantastic New Year!!

Dr. Laurent Brochard
Announcements

Say Hello to Leo Joseph Chandy!

Born on July 22nd, 7 pounds, 9 ounces, and 20 inches long.

Proud parents, Dr. Aleks Leligdowicz and Mark Chandy.

Say Hello to Cecily Ann Barrett Rawlinson!

Born on August 19th, at a tiny but delightful 6 pounds, 1 ounce and 18 inches long.

Proud parents, Dr. Kali Barrett and Edward Rawlinson, and big brother, Harrison James Barrett Rawlinson.
MSICU is as good as gold

The Medical-Surgical Intensive Care Unit (MSICU) of St. Michael’s Hospital has been named a Gold recipient of The Beacon Award for Excellence by the American Association of Critical Care Nurses (AACN). Our MSICU is the only unit in Canada that currently holds this unique distinction.

The Gold-level Beacon Award for Excellence recognizes hospital units that set the standard for exceptional patient care and positive and supportive work environments.

St. Michael’s MSICU serves critically ill patients from downtown Toronto and all across Ontario. Our expert nurses, physicians, health disciplines professionals, and support staff work collaboratively to provide patients with the highest level of advanced or prolonged support for ventilatory or other organ support needs.

“Individually and collectively, our staff works at an incredible level to provide the highest quality care, and to support patients and families through their critical illness experience. I’m especially proud that the AACN has recognized our nurses’ commitment to continuously searching for new and creative ways to improve experiences for patients and families” says Karen Wannamaker, Clinical Leader-Manager of the MSICU.

The Beacon application is a tremendous amount of work and the evaluation of the submission is rigorous, based on both descriptions of processes as well as outcome data. Applications are subject to peer review and successful submissions are awarded one of three designations: Bronze, Silver, or Gold. Achieving the highest level of Gold signifies an effective and systematic approach to policies, procedures and processes that include engagement of staff and key stakeholders; fact-based evaluation strategies for continuous process improvement; and performance measures that meet or exceed relevant benchmarks. In their feedback report, the Beacon committee noted a number of initiatives in the MSICU that stood out including our focus on comprehensive transfer of accountability processes, our commitment to interprofessional and collaborative care, our attention to student learning and professional development, our active engagement in research, and our dedication to compassionate, end-of-life care.

“By benchmarking ourselves against the rest of the world, we have tangibly demonstrated how St. Michael's is realizing our goal of excelling in the care of critically ill patients. Our Gold status is one way of distinguishing ourselves as Canada’s premier critical care hospital across the domains of quality care, education, research, patient and family experience, and work environment” said Orla Smith, a critical care nurse and scientist who co-led the interprofessional Beacon submission working group.

Christine Schulman, AACN President, said the Beacon Award for Excellence recognizes caregivers in stellar units whose consistent and systematic approach to evidence-based care make patient outcomes better. Units that receive this international recognition serve as role models to others on their journey to excellent patient and family care.

“It is extremely rewarding for the hard work of the MSICU team to be recognized by the AACN in this way. The MSICU has paved the way for other units at St. Michael’s Hospital to embark on their own Beacon journey. The comprehensive feedback provided by the reviewers will help the MSICU, and units across the hospital, to continuously pursue excellence in care for patients and families, and in the work environment for our staff,” said Joyce Fenuta, Program Director, Specialized Complex Care.

Orla Smith & Geoff Koehler
Every year, the Specialized Complex Care program celebrates its annual Research, Education and Innovation Day (REID).

More than 200 participants attend the event every year to learn about their colleagues' collaborative and interprofessional work. Posters – co-created by researchers, clinicians and front-line staff across the SCC program – represent best practices in the areas of: education; patient and family-centred care; research and knowledge translation; and patient safety and quality improvement.

**Discovery and Innovation Award: The Brochard Lab and Critical Care Research Unit**

This award recognizes an individual and/or group who demonstrates a commitment to search for, develop, and/or implement best practices, systems, and/or processes.

*SMH Communications Office*

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**Dr. Elizabeth Wilcox**

IDCCM is pleased to announce and congratulate Dr. Elizabeth Wilcox as being the first *Toronto IDCCM Scholar*, for 2017!

She was selected among several very strong applications by an independent jury.

The IDCCM Scholars Program is to provide support and recognition for future research leaders in critical care. This represents a highly prestigious nomination.

Dr. Wilcox’s primary research focus at this time is investigating mechanisms for newly acquired brain injury after acute illness. She is the lead investigator for the COG威尔研究，一个多中心纵向研究，研究通气的幸存者（≥3 日通气）过渡到康复的轨迹从 ICU 到社区。该研究表征了电生理学、睡眠和分子领域，以探究 ICU 幸存者的长期认知损害的风险因素。
Drs. Simon Abrahamson and Alberto Goffi

Received a letter of recognition for the invaluable contributions they have made to simulation-based education in 2016-2017. The Practice, Performance and Innovation (PPI) unit of the Royal College of Physicians and Surgeons of Canada greatly appreciate the time, knowledge, and expertise that they have generously provided as contributors.

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<tr>
<th>Dr. Simon Abrahamson</th>
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Dr. Takeshi Yoshida

Received the 2017 ANZICS (Australian and New Zealand Intensive Care Society) Intensive Care Global Rising Star Award.

This award is presented to a young clinician-scientist who has pursued a well-defined and innovative research path, leading to several publications in high-impact peer-reviewed journals. This award is the society’s highest acknowledgement for a trainee, in this case for Dr. Yoshida’s outstanding research in the fields of spontaneous breathing and lung injury.

Dr. Yoshida demonstrated, during postgraduate training (PhD) at Osaka (Dr. Fujino), that lung injury can result from spontaneous effort during mechanical ventilation. Following this he completed a postdoctoral fellowship in São Paulo (Dr. Amato) where he described ‘Pendelluft’, a new mechanism of spontaneous breathing-associated lung injury. He is currently completing an additional 3-year postdoctoral fellowship in Toronto (Drs. Kavanagh & Brochard) having discovered important new insights into negative abdominal pressure, spontaneous breathing, and ARDS. Dr. Yoshida has been supported by a RestraComp training award from the Hospital for Sick Children, and has a career total of 35 published papers and multiple awards.
Grant Awards

Dr. Hannah Wunsch
Awarded the National Institutes of Health (NIH) grant.
Title: Acute Pain Management and Long-term Opioid use after Surgery
Amount: $2,000,000.00

Dr. James Downar
Awarded the Knowledge Translation Grant from Canadian Frailty Network
Title: Using an automated mortality prediction tool to focus advance care planning efforts for inpatients.
Amount: $194,395.00

Dr. Tài Pham
Received the 2018 Society of Critical Care Medicine (SCCM) Discovery Research Grant.
Title: Breathing Efforts in ARDS (BEARDS)
Amount: $35,000.00 USD

Dr. Ewan Goligher
Received the 2018 Society of Critical Care Medicine (SCCM) Discovery Research Grant.
Title: Mechanisms and Long-Term Impact of Diaphragm Weakness in ARDS: An Ancillary Study of the ROSE Trial
Amount: $75,000.00 USD

Dr. Stephen Lapinksy
Awarded the Chest Foundation Research Grant in Women’s Lung Health.
University of Toronto, Adult Critical Care Residents
July 1, 2018 – June 30, 2019

I am pleased to announce the results of this year’s CaRMS residency match for the Adult Critical Care Medicine Training Program at the University of Toronto. All 6 of our positions were filled.

Please join me in welcoming the following residents that will enter our program.

1. Dr. Thomas Bodley
2. Dr. Jasmine Grenier
3. Dr. Maria Jogova
4. Dr. Taylor Kain
5. Dr. Michael Sklar
6. Dr. Bijan Teja

Congratulations, and welcome to the program! We are delighted that you've chosen Toronto for this next phase of your training!

I would like to take this opportunity to thank all of the faculty, residents, and fellows who gave up their time to participate in the selection process. I was incredibly impressed with the quality of the applicants who applied to our program. I think this is a reflection of our truly outstanding faculty.

David Hall, MD, PhD, FRCPC

University of Toronto
Adult Critical Care Clinical Associates
July 1, 2017 – June 30, 2018

Please join me in welcoming the following Clinical Associates for our program.

1. Dr. Mike Tylee, SBH
2. Dr. Kali Barrett, UHN
3. Dr. Niall Filewod, SMH
Publications from IDCCCM Members

The “Mechanical Ventilation in ARDS” Supplement explores the guidelines presented in the Official American Thoracic Society/European Society of Intensive Care Medicine/Society of Critical Care Medicine Clinical Practice Guideline: Mechanical Ventilation in Adult Patients with Acute Respiratory Distress Syndrome. The authors of this supplement present six systematic reviews examining the literature and data used to create these guidelines.

Enjoy this special “Eddy Fan” supplement of Annals of the American Thoracic Society, following the recent publication of the ATS / ESICM Guidelines on ARDS Management and appreciate the Toronto flavor!!

AnnalsATS Supplements: Mechanical Ventilation in ARDS - Systematic Review


Association Between Immigrant Status and End-of-Life Care in Ontario, Canada

Christopher J. Yarnell, MD; Longdi Fu, MSc; Doug Manuel, MD, MSc; Peter Tanuseputro, MD, MHSc; Therese Stukel, PhD; Ruxandra Pinto, PhD; Damon C. Scales, MD, PhD; Andreas Laupacis, MD, MSc; Robert A. Fowler, MDCM, MS(Epi)

Importance People who immigrate face unique health literacy, communication, and system navigation challenges, and they may have diverse preferences that influence end-of-life care.

Objective To examine end-of-life care provided to immigrants in Canada in the last 6 months of their life.

Design, Setting, and Participants This population-based cohort study (April 1, 2004, to March 31, 2015) included 967,013 decedents in Ontario, Canada, using validated linkages between health and immigration databases to identify immigrant (since 1985) and long-standing resident cohorts.

Exposures All decedents who immigrated to Canada between 1985 and 2015 were classified as recent immigrants, with subgroup analyses assessing the association of time since immigration, and region of birth, with end-of-life care.

Main Outcomes and Measures Location of death and intensity of care received in the last 6 months of life. Analysis included modified Poisson regression with generalized estimating equations, adjusting for age, sex, socioeconomic position, cause of death, urban and rural residence, and preexisting comorbidities.

Results Among 967,013 decedents of whom 475,514 (50%) immigrated since 1985, sex, socioeconomic status, urban vs rural residence, and causes of death were similar, while long-standing residents were older than immigrant decedents (median [interquartile range]) age, 75 [64-84] vs 80 [68-87] years. Recent immigrant decedents were overall more likely to die in intensive care 65.6% vs 10.0%; difference, 5.6% [95% CI, 5.2%-5.9%] after adjusting for differences in age, sex, income, geography, and cause of death (relative risk, 1.10; 95% CI, 1.02-1.22). In the last 6 months of life, recent immigrant decedents experienced more intensive care admissions (24.9% vs 19.2%; difference, 5.7% [95% CI, 5.3%-6.1%]), hospital admissions (22.5% vs 18.2%; difference, 3.9% [95% CI, 3.3%-4.6%]), mechanical ventilation (21.5% vs 9.6%; difference, 11.9% [95% CI, 7.2%-16.6%]), dialysis (5.3% vs 3.4%; difference, 2.0% [95% CI, 1.9%-2.1%]), percutaneous feeding tube placement (5.3% vs 3.0%; difference, 2.3% [95% CI, 2.2%-2.4%]), and tracheostomy (0.6% vs 0.1%; difference, 0.5% [95% CI, 0.4%-0.6%]). Relative risk of dying in intensive care for recent immigrants compared with long-standing residents varied according to recent immigrant region of birth from 1.04 (95% CI, 0.97-1.12) among those born in Northern and Western Europe to 1.76 (95% CI, 1.69-1.83) among those born in South Asia.

Conclusions and Relevance Among decedents in Ontario, Canada, recent immigrants were significantly more likely to receive aggressive care and to die in an intensive care unit compared with other residents. Further research is needed to understand the mechanisms behind this association.

Author Affiliations and Author Contributions

Author Affiliations

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Section Editor: Rinaldo A. de Lusco, MD, MPH, Associate Editor, JAMA (rinaldo.de_lusco@mayo.edu)
Please join me in congratulating David Mazer on this publication first authored in the NEJM just released and presented as a late breaking publication at the AHA (http://www.nejm.org/doi/full/10.1056/NEJMoa1711818).

This trial titled “TRICS III - Transfusion Requirements in Cardiac Surgery” has several important attributes:

- It was a global trial that was pragmatic and is generalizable, reflecting sites in every continent in the world (except Antarctica) - 74 sites in 19 countries.
- It was the largest RCT of transfusion in cardiac surgery ever done (and unlikely to ever be repeated).
- It included more patients than all other transfusion RCTs in cardiac surgery combined.
- There were definitive results, consistent across subgroup and sensitivity analyses.

The results will form the basis of clinical practice guidelines and affect practice worldwide. David is on the guidelines committee for Blood Conservation for the Society of Thoracic Surgeons and Society of Cardiovascular Anesthesiologists and those guidelines are being revised this year.

It was funded exclusively by high level national/international peer-reviewed agencies - CIHR (first application), NHMRC (National Health and Medical Research Council of Australia - first application), CBS/Health Canada (first application) and HRC (Health Research Council of New Zealand - 2nd application)

The trial was completed ahead of schedule, within budget, with (>30%) more patients than originally proposed.

Finally, to my knowledge, this is the first time in the >60 year history of the University of Toronto Dept of Anesthesia (and SMH Anesthesia) that a UoT/SMH anesthesiologist has led a clinical trial of this size and/or has been first author of an original article/clinical trial in New England Journal of Medicine (impact factor 72.4).

Also, this may be the first time that a UoT/SMH anesthesiologist has presented at a late breaking clinical trial session of the American Heart Association meeting.

Congratulations David. This represents an incredible effort and an important piece of work for the wellbeing of patients worldwide.

Dr. Andrew Baker
Chief
SMH Department of Critical Care Medicine
Seven multidisciplinary and interprofessional series education symposia are planned starting in January and will culminate in November during CCCF.

We are launching the PRACTICAL Series with an ECLS Academic Symposium, which will showcase topics such as Long term Outcomes, Ethics, Costs, Simulation, Education, and demonstration sessions. These topics are relevant to Adult CCM, Emergency Medicine, and Resuscitation Science.

The half-day is free and for anyone who cannot attend in-person, they can register for the online webcast.

To Register:
http://www.cvent.com/d/8tqwtb

Dr. Peter Laussen
on behalf of the SickKids ECLS Program and PRACTICAL Series
Immersive Reality (IR) Program
SickKids Hospital

In March of 2017, Critical Care Medicine at SickKids launched the Immersive Reality (IR) Program. This innovative, simulation-based initiative was founded on a core belief that a team that practices and learns together, excels together. IR’s multi-disciplinary (MD, RRT, RN), unit-based facilitators consistently push creative boundaries in weekly, in-situ simulations that mirror real life in the ICU. Unique scenarios have included everything from a blocked ETT, to ECPR and air entrainment on ECMO, to inter-hospital transport of a critically ill neonate. Fellows, staff physicians, RRTs, PSAs, unit clerks and over 100 nurses have participated along with surgical (ENT, CVS, General and neurosurgery), transport and emergency personnel including the Fire Marshal.

By allowing real teams of care providers to practice within their everyday roles, spaces and systems, the program offers providers a realistic, safe environment to perfect technical and non-technical skills. In addition, it affords a forum to systematically evaluate practical methods to improve resuscitation performance and can be used to conduct formal assessments of equipment and hospital-wide systems. Key learning points gleaned from debriefing sessions are disseminated in a monthly “IR Report from the Frontlines” which details performance in three domains (individual, team, systems). As Immersive Reality continues to grow and strengthen, our hope is that further collaborations will enhance medical care for patients at SickKids and beyond.

For more information, please contact us at immersive.reality@sickkids.ca.
Empowering Critical Care Nursing Role
Reflections on Nursing volunteer work in Nepal

I thought about visiting Nepal in 2013 for volunteer work. Since Dr. Laura Hawryluck has done multiple visits to Nepal to teach fellows and nurses, she was the perfect mentor for the volunteer trip. Through Dr. Hawryluck’s guidance, my first visit came into reality in September 2013 with funding from UHN. During that trip we did needs assessments and basic training on assessments at the bedside at Tribhuvan Teaching Hospital (TUTH).

My second visit was for a month in 2014 with Laura and Mandy Tran (TWH MSNICU RN) again with funding from UHN. We worked together at TUTH in the ICU department and did basic teaching for critical care for nurses in Nepal. We developed a few checklists for the ICU team on patient safety, head to toe assessments, trauma assessments, ICU Rounds, and Spinal cord injury flashcards. We participated in World Sepsis Day on September 13th, 2014 at TUTH.

The first International Critical Care Nursing conference was held on November 18, 2017. Thanks to funding from the Krembil Foundation and UHN, two TWH nurses Ms. Ramya Satyanarayana (MSNICU/CCRT) and Ms. Jenny Simpson (NCCU/PCC) were invited as the guest speakers from Canada. We were deeply honoured to receive support from the Krembil Foundation for this trip. The Krembil family and UHN have been tireless in their support of nursing education and research and we thank them for their invaluable help in promoting nursing around the world.

Nurses in Nepal obtain a Bachelor in Nursing or Diploma after 10th grade. They do not have hands on approach to learning nor do they receive extensive training in critical care. Nurses are expected to follow the physicians’ orders strictly, and are easily intimidated. Among the Asian countries, Nepal has done a lot of work to empower critical care nurses to be treated with respect as “caretakers.” Toronto trained Nepali ICU physicians, Dr. Subhash Acharya, Dr. Gentle Shrestha, Dr. Diptesh Aryal have been exceptional in making a point of fostering nursing education, advocacy and participation in patient care. The approach is a significant change for a culture in which women are often self-effacing, diffident and reserved.

While the conference was the cornerstone of our visit, we also spent 3 weeks teaching critical care nurses at the new quaternary care Nepal Mediciti Hospital. Based on our knowledge of risk factors for critical illness in the Nepali population we developed teaching modules with the assistance of Dr. Hawryluck and in consultation with the Nepali physicians and nurses to prepare for our trip. Topics covered ranged from fundamentals of critical care nursing, patient assessment skills (including neurovitals) and critical thinking, ventricular drain care, wound care, techniques for communication and advocacy to recognize and assess stroke patients, patients post brain hemorrhage, intracranial pressure management and sepsis/shock. Teaching included case discussions, bedside teaching, simulation and creation of video tools and checklists. Key issues in treating patients with neurological illnesses and injuries, such as head to toe and stroke scale assessments were videotaped to create an ongoing educational resource. We held a two day workshop in Critical Care in Nepal Mediciti Hospital, and over 35 nurses came from across Nepal to attend. In reviewing the evaluations it gave us real pleasure when one participant commented that the main takeaway for her was how the workshop served to empower nurses as advocates.

“So never lose an opportunity of urging a practical beginning, however small, for it is wonderful how often in such matters the mustard-seed germinates and roots itself.”

Florence Nightingale
We had to give the nurses some time to become comfortable in participating actively in learning and sharing experiences. Time and gentle questioning such as “what does this change in the patient’s status mean?”, “why do you think the patient worsened?”, and “do you understand why this medication was started?” were important in opening dialogues. Case scenarios helped them reflect on communication skills, which gave us an objective view on professional interactions in Nepal and allowed reflection on how to improve patient outcomes. The education was so welcomed and successful that the Hospital’s CEO invited us to return for a 6 months to one year period to provide ongoing teaching and guidance and help develop standards to improve patient care and safety.

The main aim of the International conference was to give ICU nurses in Nepal an opportunity to build their confidence as professionals, build networks, and initiate an approach to empower, support each other regardless of the years of experience. For professional development, we strive as nurses to improve patient care and outcomes through our research work. Ramya presented her TWH research project done with Katherine Staynor under the mentorship of Rebecca Sinyi, Karen Meredith and Laura Hawryluck and funded by the Krembil Neuroscience in Nursing Awards (2016); entitled “Grab and Go” Educational Modules to Improve Nursing Knowledge and Patient Outcomes. The project involved understanding educational needs of nurses on hospital wards, perceptions of CCRT and the creation of practical educational cue cards that address assessment and initial management of patients with respiratory distress, sepsis and decreased levels of consciousness. The conference was well-organized and very well attended. It exceeded our expectations.

Our main goal of visiting Nepal was to inspire and empower Nurses in Critical Care. It is difficult to measure how impactful our time was on our own personal and professional selves … being able to share our skills with others across the world gives us incomparable and transformative experiences in our own work. Reflecting on the quote from Florence Nightingale it was a mustard seed amount effort, but the hope is that the mustard seed germinates and its roots are stronger as critical care improves in Nepal and patients get the best care possible across the world.

Jenny Simpson RN, PCC
Ramya Satyanarayana RN, CCRT
University Health Network – Toronto Western Hospital
A new partnership for IDCCM:
Toronto Addis Ababa Academic Collaboration (TAAAC)

The Toronto Addis Ababa Academic Collaboration (TAAAC; http://taaac.com) was created in 2008 as an educational initiative partnering University of Toronto (UofT) with Addis Ababa University (AAU) in Ethiopia. This initiative focuses on sustainably building postgraduate programme capacity in medical and other graduate programmes. UofT volunteer faculty members teach and co-build residency, fellowship, Masters and PhD programs in Ethiopia with our Ethiopian colleagues. In residency programmes, the volunteers provide clinical supervision and lectures and teach technical skills. Graduates are hired as faculty at AAU and at other Ethiopian universities. By establishing a critical mass of faculty in each needed specialty, TAAAC has contributed to a 90% retention rate of newly graduated medical and academic experts.

TAAAC and Critical Care

In Ethiopia, traumatic injuries, sepsis, non-communicable diseases, and obstetric-gynecologic complications are increasingly contributing to the burden of severe acute illness, and are expected to become more prominent because of urbanization and industrialization. Critical care is relatively undeveloped despite increasing patient requirements. The Ethiopian Ministry of Health has committed substantial funding to create ICUs, but a lack of trained providers is a crucial limitation. Therefore, AAU is instituting a critical care medicine fellowship training programme in 2018; trainees will have completed primary specialty training in medicine, emergency medicine, or anaesthesia.

U of T IDCCM involvement

Faculty from the U of T’s IDCCM will volunteer to teach in the new critical care medicine training programme with Ethiopian colleagues beginning in February 2018.

We plan three annual trips to Tikur Anbessa (Black Lion) Hospital in Addis Ababa. For each trip, a team of 1-2 UofT faculty members and an adult CCM resident/clinical fellow will provide bedside and formal teaching based on a curriculum developed in collaboration between UofT and AAU. IDCCM will also provide support in the form of mentorship, research collaboration and curriculum development.

Interested faculty or trainees are welcome to contact Alberto Goffi or Neill Adhikari.

Dr. Neil Adhikari
Oxygen therapy is widespread for patients with respiratory problems, but we have limited information about how it is delivered. In St. Michael’s Hospital, the Acute Lung Injury working group is co-led by Dr. Laurent Brochard (the Interdepartmental Division Director for Critical Care Medicine) and Orla Smith (Clinical Leader Manager in Cardiovascular ICU), and is building the Centre of Excellence for Mechanical Ventilation. We performed an epidemiologic survey of O₂ use in December 2016 as a part of quality improvement program, namely, the “Ward Hypoxemia and Acute Respiratory Failure - (WHARF)” project. This 1-day prevalence survey revealed interesting data. Considering SpO₂ at 98% or above under O₂, 42% of the patients across our hospital receiving O₂ were in hyperoxemic state. The situation was even more pronounced in the ICU settings, where half of the patients were in this situation (figure 1).

With this result in mind – confirmed by several subsequent audits in 2017 together with recent evidence suggesting harm of hyperoxygenation, we developed a “phase 2” project specific to ICU. A questionnaire involving all clinicians working in the ICU (e.g. nurses, respiratory therapists, MDs) is now in the analytic process. The first results show very different levels of concern regarding hyperoxemia depending on case scenarios. Many clinicians were very cautious with COPD case, but there was much less concerns in other case scenarios like cardiac arrest or brain injury (figure 2).

We believe that raising awareness of clinicians against hyperoxemia is key for a better patient care. We hope to initiate an “O₂ stewardship” program in the near future. Because in this situation, 100% doesn’t always mean perfect!

Dr. Detajin Junhasavadikul  
CCM Research Fellow

Figure 1: Prevalence of hyperoxemia from a 1-day prevalence survey in December 2016

Figure 2: Responses of clinicians working in the ICUs regarding the level of concern for hyperoxemia in various case scenarios. The histograms of Likert-scale rating of concern are shown (from “0”: no concern to “4”: very concerned). The 2-way Friedman’s analysis of variance by ranks p-values of < 0.001 for overall comparisons. TBI = traumatic brain injury, ARDS = Acute Respiratory Distress Syndrome.
Alliance Faculty Day
September 13, 2017

Thanks so much to everyone who was able to join us for the Inaugural IDCCM Alliance Day.

This was a wonderful opportunity to celebrate the depth of expertise in the IDCCM and to launch our mission to foster the development of an Interinstituitional/Interdepartmental and Interprofessional research group across the University of Toronto.

Our day featured a warm welcome by Dr. Laurent Brochard who set the stage for our first guest speaker- Dr. Michael Farkouh- the Vice-Chair of Research for the Department of Medicine who reinforced the importance and benefits of collaboration across the city and with interprofessional and translational partnerships. This was followed by a series of talks designed to outline our current infrastructure and quality initiatives highlighting the IDCCM Standard Operating Procedure (SOP) Initiative (Dr. Margaret Herridge), iCORE (Dr. Eddy Fan) and ICES (Dr. Hannah Wunsch). We were given comprehensive and timely updates on the Citywide trauma programs (Sunnybrook and St. Mike’s- Dr. Barbara Haas) and also Pediatric (Dr. Anne Marie Guerguerian) and Adult Neurocritical care (Dr. Andrew Baker) groups.

In the latter part of the morning, we were updated on two of our Inaugural IDCCM research programs including the PREMEDIC Program led by Drs. John Marshall and Claudia Dos Santos and the Choral Program led by Craig Dale and Brian Cuthbertson.

Afternoon updates included those from the Applied Respiratory Physiology Group (Dr. Laurent Brochard), ICU Outcomes (Dr. Margaret Herridge), Adult Basic Science (Dr. Claudia Dos Santos) and Pediatric Basic Science (Dr. Brian Kavanagh). Our featured speaker was Dr. Tim Girard who was visiting from the University of Pittsburgh and shared his thoughts on ‘Research Collaboration: Secrets to Success’. We closed out the day with some final program updates on large Animal Studies (Dr. Brian Kavanagh) and the Pediatric (Dr. Anne Marie Guerguerian) and Adult ECLS (Dr. Eddy Fan) groups.

Our final concluding panel discussion was lively and informative and underscored the IDCCM’s desire to move forward with full support for the Alliance with planning to focus subsequent meetings on thematic groupings to foster their further growth and development.

To that end, we hope you will join us for the next Alliance meeting on March 7th 1-5PM at the Munk Centre. The focus will be on the establishment of city-wide databases using the iCORE and T3 templates and the development of a joint Pediatric ad Adult neurocritical care group. We are delighted that Dr. Nick Hart and Dr. Bev Orser will be our speakers for the afternoon so please don’t miss this opportunity to learn and to explore collaborations with colleagues and friends.

See you on March 7th!

Margaret Herridge
Director of Research- IDCCM
On behalf of the IDCCM Research Executive
Critical Care Canada Forum 2017

The Critical Care Canada Forum is where Canada’s intensivists put the latest science into practice.

Critical Care Canada Forum (CCCF), the annual 3-day conference organized by the Interdepartmental Division of Critical Care Medicine, was again a big success this year. Internationally recognized, the Critical Care Canada Forum focuses on leading-edge science through informative and interactive sessions, dynamic speakers and numerous exhibitions. The CCCF is a place where doctors, nurses and respiratory therapists can collaborate on shared knowledge across disciplines, departments and institutions.

This year the Critical Care Canada Forum (CCCF) was held October 2nd to 4th, 2017 at the Sheraton Centre Hotel & Convention Centre. The conference proper was preceded by several pre-congress courses, including the very popular Fellows’ Day (co-sponsored by the Canadian Critical Care Society).

This year’s conference was attended by 870 participants from 20 countries and featured presentations covering many diverse topics by the excellent Canadian faculty. Several prominent international invited speakers also participated, including Luciano Gattinoni, Jean-Louis Vincent, Taylor Thompson, Martin Tobin and Marcello Amato. A featured theme was “50 years of ARDS…” and other topics covered included fluid management, frailty, sedation, ECLS, and ICU Education. The AC Bryan Symposium again featured high-level physiology by an international faculty. An Organ Donation track supported by the Trillium Gift of Life Network included speakers from the U.K. and Australia.

CCCF’s online and social media presence is increasing. Tweets from the @CCCForum account achieved 32,000 impressions with more than 150,000 impressions for the hashtag #CCCF2017. Presentations are available online, on the CCCF website at: https://criticalcarecanada.com/presentations-2017/

The organizing committee for Critical Care Canada Forum consists of: Brian Kavanagh (Chair, Organizing Committee); Niall Ferguson (Chair, Scientific Programme); Laurent Brochard, Shelly Dev; Claudia Dos Santos; Rob Fowler; Stephen Lapinsky; John Marshall; Damon Scales; and Art Slutsky. The next meeting takes place again at the Sheraton, Toronto, November 6 to 9th, 2018. More details are available at: http://www.criticalcarecanada.com.

Dr. Stephen Lapinsky
Employment Opportunities

Associate / Full Professor - Director of Critical Care at Sinai Health System – 1702150

The Interdepartmental Division of Critical Care Medicine (Departments of Medicine, Anesthesia, Surgery, Pediatrics), Faculty of Medicine at the University of Toronto, and the Critical Care Program at Sinai Health System (SHS) are seeking applications for the position of Intensivist and Director of Critical Care at Sinai Health System, one of Canada’s leading centres for the care of acutely-ill patients. The successful candidate should be eligible for a full-time clinical academic appointment at the rank of Associate or full Professor at the University of Toronto. Effective start date of appointment is July 1, 2018, or shortly thereafter.

The Mount Sinai Hospital Medical-Surgical ICU is well known locally and internationally for its expertise in caring for patients with severe respiratory failure, critically ill patients with cancer, and for obstetrical critical care. The unit also provides post-operative care for many general and orthopaedic surgery patients. Reporting to the Head of Critical Care Medicine for UHN/SHS, the SHS Director of Critical Care will oversee critical care operations at SHS, including the ICU at Mount Sinai, and will have responsibility for developing critical care program academic output at the local site level. S/he will also function as Deputy-Head of the larger UHN/SHS group

The successful applicant must hold MD and FRCPC qualifications or equivalent with training in Critical Care Medicine and have, or be eligible for licensure in Ontario. Strong academic credentials are essential and a candidate eligible for an appointment as a clinician-scientist or clinician-investigator as evidenced by peer-reviewed scholarly activity is preferred. The successful candidate must show evidence of superior leadership and team-building skills and experience.

Academic rank, salary and contractual arrangements will be commensurate with the qualifications and experience of the successful candidate. Minimum compensation will be $197,000 per year. For the successful candidate compensation will be negotiated and will be highly competitive with the usual income range for an academic Intensivist in the Province of Ontario.

Interested individuals should send a copy of their Curriculum Vitae and a letter of interest to Dr. Niall Ferguson, Head of Critical Care, Sinai Health System and University Health Network – n.ferguson@utoronto.ca. Closing date for applications: December 15, 2017, or until the position is filled.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to further diversification of ideas. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.
SAVE THE DATE

Nuts And Bolts Of Research (NABOR): Observational Studies

Thursday, March 1, 2018
1:00 p.m. – 5:00 p.m.

MaRS Discovery District
Conference Room 2
101 College Street

Limited attendance: 40 people

Moderators: Laurent Brochard and Hannah Wunsch

Speakers: TBD

- Deciding if your data collection is research or quality improvement
- Recruitment and consent concerns for observational studies
- Getting data collection forms right
- Pitfalls of surveys
- Completing data collection in resource poor settings
- Techniques to ensure follow-up and adequate response rates

RSVP: Louisa Matela
ALLIANCE FACULTY DAY

Fostering integration and research excellence across our University of Toronto Critical Care and interprofessional community

Exciting updates to follow soon!

Wednesday, March 7, 2018
1:00 P.M. – 5:00 P.M.
Vivian & David Campbell Conference Facility
Munk School of Global Affairs, Trinity Site, 1 Devonshire Place

RSVP: Louisa by Monday, February 26th
**IDCCM End of Year Celebration**

Monday, June 18, 2018
6:00 pm

Mill St. Brew Pub – The Beer Hall
The Mill Street Beer Hall
21 Tank House Lane, Distillery District

IDCCM Trainees and Faculty Welcome!

Sponsored by: IDCCM Research & Education Executive

RSVP: Louisa by Monday, June 11th

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**ART SLUTSKY RESEARCH DAY**

TUESDAY, JUNE 19, 2018
8:00 A.M. – 5:00 P.M.

The Vivian and David Campbell Conference Facility,
Munk School of Global Affairs, Trinity Site, 1 Devonshire Place

**KEYNOTE SPEAKER: Dr. Marc Moss**

Dr. Marc Moss is the Roger S. Mitchell Professor of Medicine and Vice Chair of Clinical Research for the Department of Medicine at the University of Colorado Denver – Anschutz Medical Campus.

Dr. Moss’ research focuses on ARDS, early mobility and ICU rehabilitation, the role of alcohol abuse in critical illness, and burnout syndrome. Dr. Moss is currently the President of the American Thoracic Society.

STAY TUNED TO LEARN HOW TO PARTICIPATE (ABSTRACT SUBMISSIONS, REGISTRATION, ETC) OR ATTEND THE EVENT
Happy Holidays

and all the best in the New Year!

Dr. Brochard and staff

Dec 2017