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# IDCCM Newsletter

Winter 2023



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Department News, Academic Events  
Awards, Grants, & Recognition  
Publications & many more...

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Interdepartmental  
Division of Critical  
Care Medicine



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# MESSAGE FROM THE DIRECTOR



Dear colleagues,

Welcome to this **Winter Newsletter** – so far, a relatively mild winter, and we think we know why... Thank you for everything you do in this Division – especially when some days we have the impression that the rest of the world is falling apart!

We have been so happy to be able to come altogether for CCCF this year, a very successful edition, and we plan to continue to gather with Alliance Day and Art Slustky Day in the upcoming months. Laveena, Eddy, Niall and their committee, with the Bailey group, are doing a superb job for organizing the annual meeting of the CCCS and the IDCCM. Thank you, thank you!! The meeting may “look” easy and straightforward but I can tell you that it is a huge amount of work and, in the weeks before it takes place, many people are scratching their head and sweating hard to find solutions to ...a multiplicity of problems... Thanks for everyone who make it happen before and during the meeting!

Please visit the CCCF Academy, which is becoming an incredibly rich source of audio-visual documents. When I’m eighty-four (*adapted title of Paul McCartney’s song released on the 1967 album Sgt. Pepper’s Lonely Hearts Club Band, a basic bibliography for fellows*), we may be really amused by looking retrospectively at what was said, but for today it is still a lot of up to date and useful documents!

I wanted to highlight an important series of works published in the New England Journal of Medicine, and freely accessible, about **Recognizing Historical Injustices in Medicine and the Journal**: a first one was “Slavery and the Journal — Reckoning with History and Complicity. David S. Jones, et al.” published in December 7, 2023. The journal says “this is part of an invited series by independent historians, focused on biases and injustice that the Journal has historically helped to perpetuate. We hope it will enable us to learn from our mistakes and prevent new ones”. The next one is “Indigenous Americans — The Journal’s Historical “Indian Problem” by David S. Jones, et al.” published in January 4, 2024, which I guess resonates strongly with Canadian history and modern issues here. For many of us, the NEJM is “the” scientific medical reference, a major source of our own medical culture and it has heavily influenced many of us, probably more than what we would think. Although, unfortunately, knowing the past will not impede anything bad to happen in the future, it is essential to be fully aware of what has contributed to create the biases which are part of our medical culture today. When reading it, scarily, most of the things described sound very recent...

We can continue to be proud of the work achieved in Critical Care in Toronto, to make the life of critically ill patients better here and more broadly, now and in the future.

My best wishes to you all,

**Laurent Brochard, MD**

Division Director, Interdepartmental Division of Critical Care Medicine

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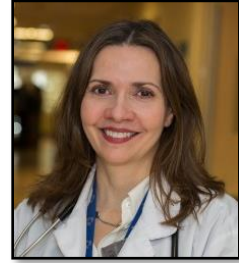
# IDCCM Promotions/Awards/Announcements

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## Award

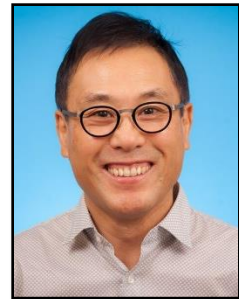
IDCCM researcher at the University of Toronto awarded a new Canada Research Chair, at the Temerty Faculty of Medicine.

**Dr. Margaret Herridge** at University Health Network and in the department of medicine in the Temerty Faculty of Medicine, Tier 1 in critical illness outcomes and the recovery continuum .



## Grants

**Dr. Haibo Zhang** was the recipient of a Fall CIHR project grant- “Aiming at a new target in endotoxin-associated lung damage: The Ig domain 3 of ICAM-1” 2023.10-2028.9, \$982,260



## IDCCM Scholar Awards 2023

IDCCM is pleased to announce **Dr. Martin Urner** as being selected as an **IDCCM Scholar for 2023**. He 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. Martin Urner graduated from the University of Zurich Medical School and completed his specialty training in Anesthesiology and Intensive Care Medicine at the Zurich University Hospital in Switzerland. He is currently working as an attending physician in the Medical/Surgical Intensive Care Unit at the Toronto General Hospital. Dr. Urner's Ph.D. thesis in Clinical Epidemiology and Health Care Research at the Institute of Health Policy, Management, and Evaluation (IHPME) of the University of Toronto investigated the association between time-varying intensity of mechanical ventilation and outcomes of patients with acute respiratory failure. His main research interest is in causal inference, longitudinal data analysis, and prediction modeling using large observational datasets for research in physiology, anesthesiology, and critical care. His current h-index is 18 with 992 total citations by 865 documents. As of this writing, his research work has resulted in 37 publications and three patent applications and has been funded with a total amount exceeding \$300,000 CADs. During his Ph.D. thesis work in Clinical Epidemiology and Health Care Research at the Institute of Health Policy, Management and Evaluation of the University of Toronto, Dr. Urner developed expertise in Joint Models for Longitudinal and Survival Data, Causal Inference using g-methods, and Causal Mediation Analysis. The results of his thesis work were successfully published in high impact journals – The Lancet Respiratory Medicine and The BMJ. A Vanier Canada Graduate Scholarship has supported Dr. Urner's thesis work.



Congratulation for this outstanding achievement!

## Announcement



We are thrilled to announce the appointment of **Dr. Christie Lee** as Medical Director of the **Mount Sinai Hospital Intensive Care Unit** and Site Director for Critical Care at Sinai Health, following a competitive search and selection committee process. Dr. Lee completed clinical training in Respiriology and Critical Care Medicine at the University of Toronto and went on to complete the Education Scholars Program through the Centre for Faculty Development. She has previously held leadership positions as the Fellowship Director for the UHN/Sinai Critical Care Medicine Program and the Education Site Director for the ICU at Mount Sinai Hospital. Since late 2020, she has served as the interim Site Director for Critical Care at Sinai Health.

Dr. Lee has a track record as an outstanding teacher and educator. Her many accolades include not only a Wightman-Berris Academy teaching award but also the University of Toronto Department of Medicine Goldie Prize for Teaching. Her scholarly work focuses on program assessment and evaluation, as well as the use of innovation in teaching. She is appointed to the Adult Critical Care Board of Examiners for the Royal College of Physicians and Surgeons of Canada and co-chairs the Annual Fellow's Day at the Canadian Critical Care Conference.

Christie has also excelled as the Interim Site Director, and led the group through major waves of the COVID-19 pandemic. She has steered the program through the recent move into its new state-of-the-art facilities where the ICU will continue to expand and support priority areas within the hospital. Dr Lee was promoted to Associate Professor in the Department of Medicine and the Interdepartmental Division of Critical Care Medicine at the University of Toronto in 2023.

Please join us in officially welcoming Dr. Lee in this regular role as Medical Director of the Kimel-Schatzky Intensive Care Unit. Dr. Lee will work closely with Dr. Matteo Parotto, the newly appointed Head of the UHN/Sinai Interdepartmental Centre for Critical Care who will take over from Dr. Niall Ferguson next month. Under her leadership the ICU will continue its excellence in Research, Quality Improvement, and Education.

### IDCCM Upcoming events... "SAVE THE DATE"

- **Alliance Day**  
April 9, 2024 (12pm -5pm)
- **Year End Celebration**  
June 17, 2024 (6pm -10pm)
- **Art Slutsky Research Day**  
June 18, 2024 (8am -5pm)

**UNIVERSITY OF TORONTO** | Interdepartmental Division of Critical Care Medicine

**In person**  
**IDCCM ALLIANCE DAY**

**Keynote Speaker: Robinder Khemani, MD**

Dr. Robinder G. Khemani MD, MsCI, is the Associate Director of Research for the Department of Anesthesiology and Critical Care Medicine at the Children's Hospital Los Angeles and joined the faculty in 2008. In addition to his medical degree, he has a Master's degree in Clinical Investigation from the University of Southern California, and undergraduate training in Statistics and Math. He has been recognized locally and nationally for his research, teaching, and mentorship of fellows, junior faculty, and multi-disciplinary trainees.

**Tuesday April 9, 2024**  
**12:00pm - 4:00pm**

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

# Adult CCM Education News

The first half of the 2023-24 has flown by! It was great to see so many of our trainees from across the city recently at the always fantastic CCCF Fellows' Day.

After feedback from all of you, we have continued with primarily virtual AHD with occasional in-person sessions. We appreciate so many of you dedicating your time and expertise to our teaching sessions, with a special thanks to Dominique Piquette for her outstanding contributions as our Curriculum Lead. Maria Jogova will be taking over this position in 2024, and we look forward to ongoing excellence in our AHD program with her in this role.

The last academic half day of the year was our annual Holiday Rounds. Thank you to our Chief Fellow, Varsha Venkataraman, and Chief Resident, Jacob Michie, for organizing a fun afternoon complete with ICU Jeopardy.



*Pic: From Last academic half day/Holiday fun round*

Following the CaRMS match, we are excited to welcome eight incoming Royal College trainees in 2024:

- Dr. Sallya Aleboyeh (Neurology at Queen's University)
- Dr. Jonathan Athayde (GIM at the University of British Columbia)
- Dr. Aadil Bharwani (IM at the University of Toronto)
- Dr. Jamie Ghossein (IM at the University of Ottawa)
- Dr. Jasper Ho (IM at McMaster University)
- Dr. Lisa Hubbs (IM at the University of Saskatchewan)
- Dr. Manveen Puri (IM at the University of Toronto)
- Dr. Christina Raykha (IM at the University of Toronto)

Thanks to our file reviewers and interviewers for taking the time to make the day such a success, and thank you to Simon Chung for all the effort that went into CaRMS coordination.

Happy New Year everyone!

**Jenna Spring, MD**  
Program Director, Adult Critical Care Medicine

# SickKids Paediatric Critical Care Medicine (PCCM)

## RECRUITMENTS

The Department of Critical Care Medicine at SickKids welcomed two newly appointed staff to our PICU this fall: Dr. Olugbenga Akinkugbe and Dr. Barney Scholefield.



**Dr. Akinkugbe** studied medicine at the University of London (UK), completed specialist training and certification in paediatrics and paediatric intensive care medicine at Great Ormond Street Hospital for Children (London) and Cambridge University Hospitals, followed by a Fellowship in Critical Care Medicine at SickKids. In parallel with clinical training, he completed a Masters in medical ethics, and certification in pediatric infectious diseases (Oxford).



**Dr. Scholefield** was previously an Intensive Care Consultant in Birmingham Women's and Children's NHS Foundation Trust and an Associate Professor & National Institute for Health Research (NIHR) Clinician Scientist at the University of Birmingham, UK.

## MEDICAL HUMANITIES

The Medical Humanities curriculum encourages participants to strengthen their appreciation for the humanistic aspects of medicine. Over the course of the academic year, we meet to share and discuss works of art, music, writing, etc. as a way to foster connection and community. We've had two medical humanities nights so far this year – one on Medical History and one on Paintings.



## TACTICS

On November 25th, SickKids hosted our annual TACTICS (Training & Assessment of Clinicians in Teams in Intensive Care through Simulation) event. This year was extra special as it was the first TACTICS we've had in person since 2019!

This year, a total of 41 trainees across eight Canadian Pediatric Critical Care Medicine training programs attended and they were divided into eight teams. Teams rotated through various stations including: ECMO, NDD, post op tetralogy of fallot, teaching, TBI, mechanical ventilation, communication, and septic shock CRRT.



Each year, one station is presented with the Afrothite Kotsakis award for the best overall station voted by the participants. This year's award recipient was the ECMO station. Congratulations to Dr. Luca Marchetto, Mark Todd, Leanne Davidson, Dr. Anne-Marie Guerguerian, and Dr. Dalal AlThubaiti, as well as Dr. Luciana Rodriguez-Guerineau and Paul Kratz, who helped organize the station!



## Cardiac POCUS

The day after TACTICS, on November 26th, we held our first ever Cardiac POCUS workshop for external participants. This is an annual workshop for our PCCM trainees, but this year we extended the invitation to the other PCCM programs across Canada. We had 17 participants rotate through various lectures and hands-on teaching sessions including ultrasound basics, the echocardiogram, hands-on Echo sessions, and cardiac anatomy. Thank you to Drs. Alex Floh and Seth Gray who helped organize the day.

## MOVING TO THE PSC

On January 8th our department administrative and staff offices move from the main hospital over to the newly completed Patient Support Tower! We will miss the offices beside the critical care unit that we've called home since 1993, but we are looking forward to working in our new, modern workspace!





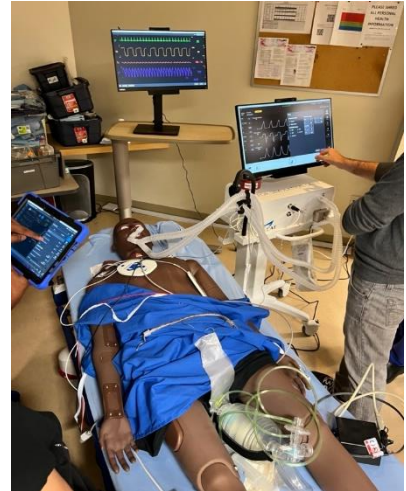
# Education and Innovation at Toronto Western ICU

## Simulation-based Education

With the support of the IDCCM, Toronto Western Hospital ICU (TW ICU) received delivery of a new *Ares* simulation mannequin. *Ares* is a high-fidelity, portable mannequin with its own ventilator and monitor, including ICP. It can mimic a variety of patient conditions: including patient-ventilator dyssynchrony and neurocritical care emergencies. In addition, it will enable Interprofessional team training for cricothyroidotomy, and U/S guided iv and io insertion.

Together, Alyssa Louis, Ian Randall, and Laura Hawryluck have developed an exciting biweekly in-situ simulation curriculum at TW ICU. They have “flipped the traditional sim format” where the team is brought into a sim-lab, and instead they bring the sim-lab to the team in the ICU environment. Alyssa describes the impact of in situ simulation as “breaking cognitive barriers and maximizing realism”.

The curriculum is centred around team-based resuscitation of deteriorating patients. Fellows and residents are called to the bedside in the ICU then given a typical ICU hand-over and a new issue requiring urgent evaluation and management. Scenarios are based on real patients currently admitted to the ICU – to maximize learning. The overall goal is to improve our trainees’ critical thinking skills, crisis resource management and ultimately bedside clinical care.



P- 1: Ian Randall puts *Ares* through its paces, and vice versa.

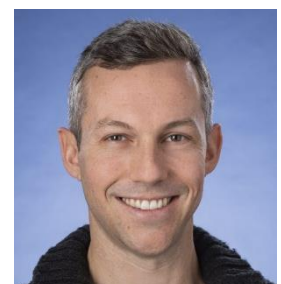
P- 2: Alyssa Louis tests her ventilation skills in the virtual OR.



P- 3: The trainer’s view from Alyssa’s headset.

## Fellowship Training Opportunities

We are pleased to announce that David McAlpine has been appointed as the inaugural *TW ICU Simulation Education Fellow*, starting in February 2024. David has been a clinical fellow, and Chief Clinical Fellow, at UHN-Sinai Health for two years. He will now focus on simulation-based education research as well as the development of an Interprofessional simulation curriculum for the new Special Pathogens Unit at TW ICU.



Pic: David McAlpine

## Virtual Reality Training

Critical Care VR simulation education is in its infancy, but as a specialty we are uniquely poised to benefit from VR simulation training. Multi-provider, inter-professional VR simulations can be used to teach and evaluate teamwork, communication, treatment strategies and decision making for each member of the ICU team as individuals and as a collective. Unlike mannequin-based simulation, VR participants can be located anywhere in the world.

In partnership with Draeger Canada, we are establishing a Virtual Reality Simulation Education Program to deliver an innovative critical care curriculum at TW ICU. Laura Hawryluck is leading the project and the first scenarios of the Interprofessional curriculum. Each scenario will engage multiple physiological principles, have different levels of resuscitation management and mechanical ventilation strategy, and challenges that are responsive to Interprofessional trainee needs and performance. Clinical cases include: sepsis, status asthmaticus, subarachnoid haemorrhage and delayed cerebral ischemia, and abdominal compartment syndrome.

**Andrew C Steel, MD**

Assistant Professor, University of Toronto

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Toronto, Canada. Photograph by Annia Schreiber, M.D

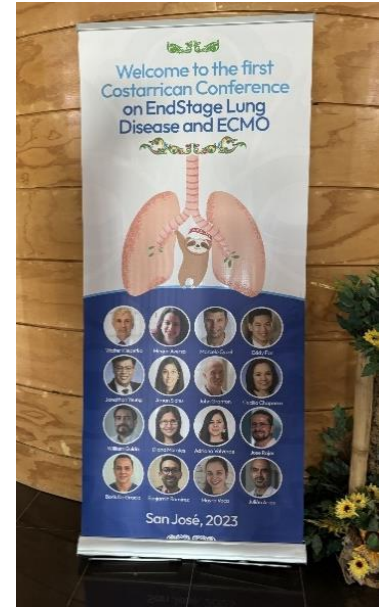
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## Two realities, one medicine

As we leave the pandemic behind, memories from the months I worked in **Costa Rica** arise. In April 2021, my dad was admitted to the ICU back home, and I had to leave Toronto without knowing when I could return. Only three intensivists were caring for the sickest patients in the Costa Rican National ECMO and Transplant ICU, and suddenly, there I was. In my dad's words: "I had to get sick because they needed you here." This opportunity allowed me to become part of the most incredible team.

My first thought goes to the extraordinary residents, nurses, psychologists and healthcare professionals who stepped up and, without a doubt, came to struggle by our side. At Toronto's ICU, the teams became larger, and more resources were allocated, but our resources were limited in Costa Rica. We witnessed patients dying due to the lack of ECMO availability; we were forced to decide which patients to support. But our team was resilient, and the 14-bed ICU became a 75-bed unit. We "tropicalized" cardiopulmonary bypass pumps to use as ECMOs and buy time; the sweep-off trials became shorter; and the dialysis runs were perfectly timed to support one patient after another. The scarcity did not limit the efforts of our restless team, and regardless of the limitations, in a small country like ours, we ran 13 simultaneous ECMOs, supported 73 ECMO patients, and cared for hundreds of COVID patients, with the same survival possibilities than the best hospitals around the world.

Luckily, the bonds built under these circumstances endured, leading to new collaborations. We have been able to bring Toronto's experience to Costa Rica and develop new research projects. On November 10<sup>th</sup>, 2023, we held the First Costa Rican Conference on End Stage Lung Disease, Lung Transplant, and ECMO, welcoming physicians from our neighboring countries, including Panama, Mexico, and Argentina. I hope these efforts are the first of many more to come. If two different healthcare systems, with such contrasting realities could deliver one medicine, the medicine of compassion towards our sickest patients, imagine what our partnership could do



**Dr. Diana Morales Castro**  
University of Toronto



# CANADA-UKRAINE SURGICAL AID PROGRAM (CUSAP)

The conflict in Ukraine has killed and wounded thousands of soldiers and civilians and shattered communities. In April 2014, the Canada-Ukraine Foundation sent a team of Canadian medical professionals to Ukraine to assess the medical requirements and priorities: Ukraine was in crisis and its health-care system was unable to handle the volume and complexity of the wounds being presented.

In response, the Canada-Ukraine Foundation sponsored five surgical missions to Ukraine. Volunteer teams of Canadian surgeons, anesthetists, nurses and physiotherapists treated as many patients as possible during each of the five-day missions, typically, those with devastating craniofacial and upper limb injuries. At the end of the first five missions, the volunteers had provided 417 medical consultations and completed surgical procedures on 178 patients.

With the broadening of the war in 2020, the need for more complex surgeries was coupled with decreasing capacity and more complex logistics of operating inside Ukraine. In collaboration with the Ukraine armed services and Ministry of Health, the Polish government and the Canada-Ukraine Foundation, Sunnybrook has



Czeladz City Hospital in eastern Poland, home of the "Canada Ward"

helped to deliver the Canada-Ukraine Surgical Aid Program from eastern Poland. Led by Dr. Oleh Antonyshyn, a craniofacial reconstructive surgeon, and program manager Julia Malaniy, CUSAP delivers bi-annual 2-week surgical missions and ongoing medical support to the injured, combined with educational training and development to clinicians in Ukraine.

CUSAP has grown to include a team of over 100 people: surgeons - plastics and craniofacial and peripheral nerve, ENT, orthopedic and neurosurgeons - anesthetists, intensivists, physicians, nurses, physical therapists, pharmacists, IT and logistics experts. In 2023, we had two missions - in April and September - at the Czeladz, Poland "Canada Ward". In addition, 15 Ukrainian doctors participated in pre-operative clinics and surgeries. At each mission, approximately 40-50 patients travel by ambulance from Ukraine for admission and operation.



Canada-Ukraine Surgical Aid Program Fall 2023

Most have complex reconstructive face, extremity and peripheral nerve injuries and many require staged, multi-trip procedures. Their injuries are typically complicated by chronic, multi-drug resistant bacterial infections (colistin is perhaps the most common antibiotic we prescribe!) and many patients have peri-operative need for some degree of intensive care, with new tracheostomies, free flaps, sepsis and airway monitoring.

Michelle Hladunewich, Neill Adhikari, and Rob Fowler from Sunnybrook, Tamara McColl from Winnipeg and Oleksa Rewa from Edmonton do their best to support patients on the ward and ICU pre- and post-op. Patients need to be sufficiently stable for transport back to Ukraine by ambulance by the end of each mission. Over the past three years, with some patients requiring multiple surgeries, you cannot help but develop strong

connections as you see how their lives are transformed as disfiguring injuries are fixed. Civilians, soldiers, and clinicians - as in too many conflict zones around the world - no different from us Canadians except for the accident of where and when we happen to live. The next mission will be in April-May 2024.



Julia Malaniy, Michelle Hladunewich, Rob Fowler, Oleh Antonyshyn, Danny Enepekides, Neill Adhikari

**Robert Fowler, MD**

Professor, Department of Medicine, University of Toronto

## RECAP 2023

### New Hires 🎉:

- Irene Telias (CS) - TWH
- Bourke Tillmann (CS) - TWH
- Maria Jogova (CT) - TWH
- Laura Dragoi (CT) – TGH
- Francois Mathieu (CA) – SMH
- Barney Scholefield - SickKids
- Olugbenga Akinkugbe – SickKids
- Bruno Ferreyro (CS) – Sinai
- Federico Angriman (CS) – SBH

### Departures 📢:

- Hannah Wunsch
- Elizabeth Wilcox
- William Darrah
- Simon Abrahamson
- Bernard Lawless
- Mjaye Mazwi

### New Roles:

- Matteo Parotto, the newly appointed Head of the UHN/Sinai Interdepartmental Centre for Critical Care will take over from Niall Ferguson next month.
- Christie Lee appointed as Medical Director of the Mount Sinai Hospital Intensive Care Unit and Site Director for Critical Care at Sinai Health
- Jamie Hutchison (Paediatric ICU faculty) stepped down from clinical work in Critical Care but will continue his research as Emeritus Scientist at the Research Institute.



This year's CCCF was a great success with over 1000 delegates from over 34 countries (in person and virtually). Highlights from the program included our keynote on the History of Mechanical Ventilation to mark the 70th anniversary of mechanical ventilation (Hannah Wunsch), a panel on Artificial Intelligence in the ICU and outstanding and a provocative discussion on Equity and Diversity in

ICU.

The CCCF had over 8 Hot Off the Press Critical Care RCTs presented over the 3 days from JAMA and NEJM, including 2 late breaking RCTs presented first at this meeting. These were all followed by commentaries by the journal editors and a faculty editorial. Furthermore, the conference was the platform for the first presentation of the latest ATS ARDS Mechanical Ventilation guidelines.

Jamie Hutchison was awarded the Institute for Respiratory and Circulatory Health Distinguished Lecture Award and presented a moving overview of his career work. We had interactive morning rounds, noon rounds and poster presentations which allowed for intimate and interactive discussions on the latest topics and controversies in critical care medicine.

We would like to thank all of the faculty who contributed to making this conference a success. It's a privilege to organize this conference given the immense talent in the division to draw from.

We look forward to seeing you Nov 18-21, 2024.

**Laveena, Eddy and Niall on behalf of the CCCF organizing committee**



*Jamie Hutchison, friends and family after receiving the **CIHR-ICRH/CCCS Distinguished Lecturer Award in Critical Care Sciences***



*Fatima Sheikh, Blair Bigham, Murdoch Leeies, Shelly Dev, John Marshall, Karen Burns after a panel on **Diversity and Inclusion***



*Rob Fowler, Damon Scales & Niall Ferguson*



*Hannah Wunsch at AC Bryan Symposium, KeyNote lecture on **History of Mechanical Ventilation***

## InFACT/ISARIC/Unity Health Colloquium on the Lessons of COVID-19 for Global Acute Care Research Collaboration

More than 100 clinical researchers from more than 40 different countries gathered in Toronto in early October to review how the COVID-19 pandemic has changed the face of investigator-led acute care clinical research. The colloquium – jointly sponsored by the International Forum for Acute Care Trialists (InFACT) and the International Severe Acute Respiratory and Emerging Infections Consortium (ISARIC) – was supported by CIHR and the St. Michael’s Hospital Foundation.

The colloquium was preceded by a discussion sponsored by the World Health Organization to assess interest in and feasibility of a globally federated platform trial to evaluate optimal modes of respiratory support for patients with acute respiratory tract infections. A lack of access to oxygen and effective modes of respiratory support contributed to the global death toll of the pandemic: the goal is to launch a clinical trial to evaluate the spectrum of options for respiratory support from the most basic to the most sophisticated, and to bring together researchers from around the world in a grand collaboration to address this most basic of needs in acute illness.

The colloquium itself addressed a variety of themes – large scale collaboration in new clinical trial designs; registries, cohort studies, and large databases; heterogeneity of treatment effect; the role of research networks and networks of networks; engaging patients and families; early career researchers; and capacity-building. The discussions were rich and the themes remarkably consistent. A highlight of the meeting was a panel discussion on global collaboration, featuring speakers associated with CERN and the Large Hadron Collider, the International Union for Cancer Control, the International Panel on Climate Change, and the OMERACT collaboration in rheumatology. Recordings of the event are available online (<https://criticalcarecanada.com/covid-colloquium/>). A summary of the discussions was presented at a recent WHO meeting on clinical trials, and a white paper summarizing conclusions and recommendations will be submitted for publication.

The experience of COVID-19 is changing the global research ecosystem. Successes highlighted the critical role played by clinician-researchers working through national and international networks, and building platform trials such as REMAP-CAP and RECOVERY. The experiences of the United Kingdom revealed the powerful role research can play in informing care in real time when it is embedded in the processes of care. Governments and policy-makers are taking note. And critical care is at the forefront of this exciting process.



**John Marshall, MD**

Professor, Department of Surgery, University of Toronto



# Transitioning, evolving, while rooting my essence.

*...an exciting rollercoaster...*

*where encouraging words, mentors, and friends mattered the most!*

*By Irene Telias*

I was asked to write about my transition from Fellow to Faculty in Toronto and my ongoing collaboration with Argentinian, and other Latin-American colleagues. I decided to tell you a story. But, where to start? From the beginning. A few scenes (now *flashbacks*) will help you understand why and how I ended up here and how serendipitous my journey was. I also hope these memories help some of you that might be struggling during their fellowship. It is hard, but we all evolve, and I hope you can find your way as I found mine.

Born and raised in Buenos Aires, very active politically during high school, University, and residency, living a tension between a strong commitment to contribute to having a society with equal access to basic needs, and passion for detailed physiological phenomena and sophisticated tools for advanced monitoring and life sustaining therapies. Proud of my Argentinian roots, did not dream with living abroad (*unlike many others from peripheral countries*), but willing to have an international experience with the hope to come back.

An email arrived promoting the UHN Clinical Fellowship, I applied (after being interviewed in the bathroom of my residency hospital, ha) ...and I, *unexpectedly*, got selected!

The first months were tough, I felt mentally retarded. As many others in this program, I was top of my class at home, and here I was just one new fellow and I felt I was not performing as I should. It was *sooo* hard to work/think in a different language. Dr Alberto Goffi told me before going home a night on call: **"I trust you"** ... and *my wings started to spread*.

Before coming to Toronto, I was already working on research related to esophageal manometry (completely *amateur*). I always liked applied respiratory physiology and mechanical ventilation, but I felt the overall general approach to mechanical ventilation at the bedside in Toronto was somewhat away from what I was used to, protocols executed only by respiratory therapists, like recipes, based on clinical trials, instead of discussing individual's respiratory physiology and adjusting settings accordingly.... During my elective time I asked to spend some time at Dr Laurent Brochard's lab at St. Michael's Hospital. This was not common, but after few emails and personal interactions, I made it happen. I shared with him my frustration. He answered: **"Don't worry. RTs don't let me touch the ventilator either, and I am Laurent Brochard"**... *ok it seemed that the prohibition to touch the vents was not personal and I had a potentially powerful ally*.

We started working on the P0.1 project with Dr Ewan Goligher's dataset and unconditional support, followed by the bench study with innumerable technical challenges... **tears** falling down the *drop in airway pressure during the first 100 msec of an occluded breath*. **Amazing friends and colleagues** in the lab and clinical fellowship that became **my family away from home** made the first two years in Toronto unforgettable. Fast forward to the end, Dr Laveena Munshi, next to a pregnant woman waiting to be transferred to the general for ECMO asked me: "What are your plans?" ... "I don't know, will go back home, my partner lives there with his kids", I answered, and she immediately replied **"Oh, I thought you were planning to stay, I don't know what you're working on, but I feel you just fit."** *I was actually feeling comfortable working here, was enjoying my work as a researcher, and I was already contributing to a change in local culture related to mechanical ventilation ... During my clinical time, I had already started to understand how to better integrate the two models (primarily clinical-trials based vs purely individualized) and the RTs were letting me touch the vents (yay!)...*

Unfortunately, having dedicated time to do a PhD while working clinically was not a realistic possibility in Argentina. I said to Laurent: "I am thinking of doing the PhD"; **"You should do it in Toronto with me"**, he answered. Suddenly, the world leader on the field I liked, was interested in being my mentor.



Went back home for a year, arranged some personal matters, and came back to Toronto with the idea of staying for the first 2 years and then come back to Argentina. I really wanted to come back and contribute to the Argentinian clinical and research community.

The COVID-19 pandemic hit, and I went back home for 6 months. I seriously considered quitting. Again, encouraging words kept me going. Dr Niall Ferguson: **“Not to worry - lots of things going on beyond anyone’s control”**, Laurent again: **“We’ll see when air becomes better to breathe, and where”**.

During those 6 months I realized how impactful the research I’d been participated in during the last years was, mostly because it was coming from a central country and done with such influential researchers. The loop started to close, I realized that there was no real tension as I initially had thought.

In the year 2020 having access to physicians trained in basic monitoring maneuvers to ensure safe mechanical ventilation was as important as some of the more basic healthcare needs. I also realized that my contribution to the Argentinian clinical and research infrastructure might be even bigger if I worked as a clinician-scientist in Canada. Furthermore, I recognized that my impact could go way beyond Argentina.

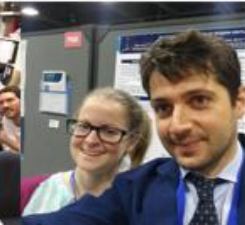
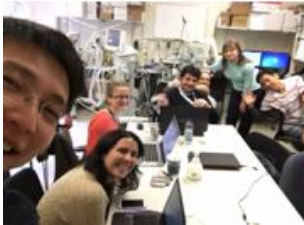
I spent many lock-down hours advancing with my PhD and studying local regulations for clinical research. I created a CRO-like infrastructure to manage clinical trials locally and started [CAVIARDS-19](#) in 4 centers in Argentina enrolling 50 patients so far with an engaged research community and specific funding that will help support local initiatives. This was followed by the generous offer of funds to coordinate [PRACTICAL](#), a more ambitious project with 15 centers involved in Argentina, aiming to recruit around 200 patients with the initial domain. The latter allowed me to hire research coordinators that will support local teams to execute their projects.

Fast-forward again... Came back to Toronto, while working as a Senior Fellow there was a prospect of new positions, I got used to travelling, and my work in Canada started to have a new philosophical/political meaning. Thanks to the unconditional support of many (with special thanks to everyone at the Western and my family!!!), I got convinced that, despite my strong accent, I had a lot to give to our local community. I was also convinced that my plan involving strong collaboration with Argentinian and other Latin-American researchers would benefit all parties. I was loyal to my convictions and ensured adequate work-life balance within this craziness (thanks to an AMAZING partner and step-kids). I “sold” my product, and here I am, a newly hired Clinician Scientist.

Transition has been smooth, I was already working as a Senior Fellow, but now my work has a different meaning. I am being recognized, mostly paid, as I believe I should. I am building my own research program and team. It obviously comes with lots of responsibilities, securing funds for salaries, getting publications done... new, *exciting*, challenges. However, I must confess that one of the nicest things about being an Assistant Professor in a renowned University and Department is showing others that look alike or might feel identified with me (e.g., petit Latin-American women), that they can, and should seek recognition for their uniqueness. My long journey to become an Academic Intensivist through this roller-coaster of experiences allows me to support empathically others in similar situations.

I evolved. I now understand that setting mechanical ventilation purely based on physiological principles ignoring evidence arising from trials is unwise...but in the era of precision medicine, coming back to my roots makes a difference, an evidence-based, individually tailored approach seems right. One size does not fit all when it comes to treatment approaches, but also scrubs for Academic Intensivists.





Dr. Irene Telias  
Toronto Western Hospital

# High-Impact IDCCM PUBLICATIONS (July to December 2023)

## [Simvastatin in Critically Ill Patients with Covid-19.](#)

REMAP-CAP Investigators; Hills TE, Lorenzi E, Berry LR, Shyamsundar M, Al-Beidh F, Annane D, Arabi Y, Aryal D, Au C, Beane A, Bhimani Z, Bonten M, Bradbury CA, Brunkhorst FM, Burrell A, Buxton M, Calfee CS, Cecconi M, Cheng AC, Cove ME, Detry MA, Estcourt LJ, Fitzgerald M, Goligher EC, Goossens H, Green C, Haniffa R, Harrison DA, Hashmi M, Higgins AM, Huang DT, Ichihara N, Jayakumar D, Kruger PS, Lamontagne F, Lampro L, Lawler PR, Marshall JC, Mason AJ, McGlothlin A, McGuinness S, McQuilten ZK, McVerry BJ, Mouncey PR, Murthy S, Neal MD, Nichol AD, O'Kane CM, Parke RL, Parker JC, Rabindrarajan E, Reyes LF, Rowan KM, Saito H, Santos M, Saunders CT, Seymour CW, Shankar-Hari M, Sinha P, Thompson BT, Turgeon AF, Turner AM, van de Veerdonk F, Weis S, Young IS, Zarychanski R, Lewis RJ, McArthur CJ, Angus DC, Berry SM, Derde LPG, Webb SA, Gordon AC, McAuley DF. *N Engl J Med.* 2023 Dec 21;389(25):2341-2354.

## [Prone Positioning During Venovenous ECMO for Severe ARDS.](#)

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## [Intravenous Vitamin C for Patients Hospitalized With COVID-19: Two Harmonized Randomized Clinical Trials.](#)

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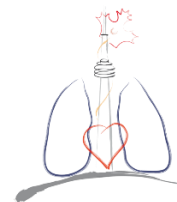
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*Thank you everyone. Stay safe and take care!*