

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



Interdepartmental Division of Critical Care Medicine



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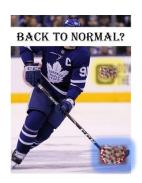
MESSAGE FROM THE DIRECTOR



Dear all,

We are proposing this Summer Newsletter at the end of another academic year and still in the midst of an unprecedented period. I hope everyone has been able to reorganize his/her own life in this extraordinarily changing environment and to cope smoothly with a complex new situation.

Critical Care in Toronto has offered a fantastic response to deliver the best care in the surge of patients, maintain academic activities at a high level and ensure safety and wellness as much as possible. Many more people in the public know a bit more about intensive care units, critical care medicine and what job the people working there are doing! This needed leadership, and we (modestly) acknowledged the work done by the critical leads in Toronto at the city and provincial level, and also wanted to thank those who participated in the huge education effort specific to this period (see Art Slutsky Day). Our blogs and websites (including new ones like the 'quickicutraining'), our own documents (see 'Management Principles of Adult Critically III COVID-19 Patients' in IDCCM website) and our courses ('Basics of Mechanical Ventilation') have been resources for thousands of people.



This pandemic is not over and whatever its future evolution things will definitely be changed, regarding our daily practice of critical care, the way we deliver education and we perform research, and a Division like ours has to adapt to this new environment.

Thank you for a large participation and attendance to our 2020 virtual **Arthur Slutsky Day** with a great talk from Art himself! This was the opportunity to thank our fellows and our education team. All the 45 abstracts (!) can be found on the site https://www.criticalcare.utoronto.ca/news/art-slutsky-research-day-2020.

CCCF this year will be a virtual event. Laveena, Eddy, Niall and a dedicated committee are working hard to make this new event a success. Many thanks for their hard work and dedication. This offers new and exciting opportunities to reach the entire world but it also needs imagination and flexibility!

During the pandemic, academic promotions continued and we wish to congratulate Laveena and Lorenzo for successfully passing the CFAR review. Congratulations to the successful nomination to Full Professor of Laura Hawryluck. Laura just published her reflections of being an ICU doctor as a book of... poetry! (An ICU Doctor's reflections) after an important book on **Law and Critical Care Medicine** (see our special book review!). Research has been performed at an incredible and impressive pace. Several projects were awarded by special COVID-19 funding from University of Toronto and from CIHR. Congratulations to Rob Fowler and his leadership of the CCCTG, when at the same time he was deeply involved in the response to COVID. Special Kudos also to John Marshall and his REMAP-CAP. As usual, you will find the list of our high impact publications for the last 6 months. I cannot resist to deliver a special Kudo to STARRT-AKI just published in New Engl J Med. Such a huge team effort, congratulations!

I hope you will all have time to enjoy the nice summer! Enjoy art, sport, cooking, gardening, music or whatever... and stay safe!

Laurent Brochard, MD

Division Director, Interdepartmental Division of Critical Care Medicine

Awards/Recognitions



Congratulations to **Dr. Claudia Dos Santos!** She received a Merit award for 2020 (Clinician Scientist Salary Support for a period of three years) from the Department of Medicine.



Congratulation to **Dr. Natalie Wong!** She has successfully completed her 5 year term as a Site Education Program Director for Medicine. She has been awarded **Teacher of the Year** by the Department of Medicine. And she took the position of Deputy Physician-in-Chief at St Mike's!







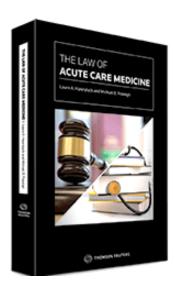
Congratulations to **Dr. Laveena Munshi** and **Dr. Lorenzo Del Sorbo** who succesfully passed the Continuing Faculty Appointment Review.



Congratulations to **Drs. Aditi Jain, Raid Sharbaf** and **Christie Lee**, in the event of **NEJM Resident 360 QI Challenge**, they were among the 12 finalists!

More info about the QI challenge: https://resident360.nejm.org/groups/qi-challenge/page/home

Book Review by Dr. Andrew Baker



The Law of Acute Care Medicine

Author: Michael Fraleigh, Laura Hawryluck

The Law of Acute Care Medicine, published this spring, is written by Professor Laura Hawryluck of our U of T IDCCM and by Michael Fraleigh a well-known health law lawyer in Toronto.

The chapters are self-contained but build on one another from standard of care and informed consent through capacity, substitute decision-making, privacy and confidentiality, and end-of-life care. The scope is essential for critical care practitioners in Ontario and beyond. This book is eminently readable and provides basic and advanced concepts with clarity.

Everyone in our Division would enjoy this book. It comes in hard and electronic format through Thomsen Reuters.

New Website: www.quickicutraining.com

Drs. Jenna Spring (IDCCM), Dr. Dominique Piquette, Dr Stella Ng, Dr Ryan Brydges and Dr Brian Cuthbertson developed an educational website (www.quickicutraining.com) to help educate non-intensive care staff to be able to work and support in the intensive care environment during the COVID pandemic. This website offers education across the breadth of critical care including narrated lectures, full lectures, and quick help guides. The website has now had 350,000 hits from 80,000 individuals around the world and has received excellent feedback on the style and content.

H.O.P.E.

"Hang On, Pandemics End"

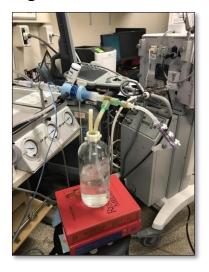
Grants Received

- ♣ Dr. Brian Cuthbertson from IDCCM (with the National team) along with Dr. Angela Jerath from the Department of Anaesthesiology and Pain Medicine were awarded \$2.1 million by CIHR in the recent CIHR COVID call to perform a randomise control trial of inhalation anaesthetic based sedation versus intravenous sedation ventilated patients with COVID disease. This will fund the 750 patients randomised trial that will be conducted in multiple centres around Canada.
- ♣ Dr. Margaret Herridge received a special COVID-19 grant from CIHR for the CANCOV Project, amount of \$2.1 million
- → Dr. Patrick Lawler and Dr. Ewan Goligher, together with Ryan Zarychanski at the University of Manitoba, have been awarded \$3.6 million from CIHR in support of the international randomized trial of therapeutic anticoagulation for COVID-19 (ATTACC). They have also just been awarded \$1.7 million from the LifeArc Foundation in the United Kingdom to support the trial.
- → **Dr. Kali Barrett** received a fund for \$500,000 from Government of Ontario Ontario Together COVID-19 Rapid Research Fund. "Ontario's response to COVID-19: balancing trade-offs and improving outcomes for all Ontarians"
- **→ Dr. Paul Dorian** together with Dr. Laurent Brochard have been awarded \$42,000 from University of Toronto, Toronto COVID-19 Action Initiative − 2020. Project name: "Evaluation of a small, gas powered, patient-responsive automated resuscitation/ventilation"
- **♣ Dr. Laurent Brochard** received 2019-2020 SMHA AFP Innovation Funds for his project name: "A strategy to improve management and prolong life without readmission for hypercapnic patients: the simplify project". Amount of \$140,000.
 - He was also awarded a grant from University of Toronto, Toronto COVID-19 Action Initiative 2020 for his "Careful Ventilation in Patients with ARDS induced by COVID-19. The CAVIARDS 19 trial" project. The amount allocated to his initiative is \$326,000.

Image: Research during COVID-19



The new PEEP setting: L. Chen, M. Sklar & T. Piraino



Back to old PEEP From: A. Jonkman, A. Schreiber & F. Vieira

"St. Michael's inaugural Scholar-in-Residence kicks off international collaboration within our walls" by Ana Gajic

A story from St. Michael's Newsroom

Dr. Marcelo Amato, a critical care scientist at the University of São Paulo in Brazil, is the first-ever Arthur S. Slutsky Scholar-in-Residence (SIR) at the Keenan Research Centre for Biomedical Science.

After world-renowned critical care researcher Dr. Art Slutsky stepped down as the Vice-President of Research in 2018, the St. Michael's Hospital Foundation helped establish the SIR program. This program honours an internationally known scientist who will work in residence at St. Michael's, providing research consultancy, mentorship and expertise to its scientists, staff members and trainees that will last beyond the period that the scholar is in Toronto.

Dr. Amato will be leading a collaboration between his lab in Brazil and other laboratories at the Keenan including the labs of Dr. Laurent Brochard and Dr. Haibo Zhang. This collaboration will see Dr. Amato and some of his students travel between Toronto and Brazil to further international knowledge in critical care research.

He arrived for the first part of his placement last month and we sat down with him to learn more about his research, collaboration and opinions of Canadian winter.

What does your research focus on?

I work on innovative and low-cost solutions to improve respiratory care, especially during mechanical ventilation. This includes technological development, like respiratory monitoring techniques, with new clinical protocols for lung protection and improved gas exchange in critically ill patients. With the collaboration underway, we have been able to trial some of this innovation in patients at St. Michael's. Our long-term goal is to find solutions to further improve the outcome of critically ill patients.

Why were you interested in visiting St. Michael's Hospital in particular as Scholar-in-Residence?

I was interested in this opportunity because of my admiration and partnership with the brilliant team of researchers and physicians working here over the last few years.

We have a long history of collaborative research and publications. The possibility of further leveraging this fruitful partnership is an exciting target. This could now involve a more direct exchange of trainees, researchers and knowledge between São Paulo and Toronto.

What are you hoping to gain from your experience at St. Michael's?

Innovation in clinical research, especially the disruptive type, is based on unmeasurable aspects. To be innovative you need excitement, freedom to express opinions, different backgrounds of the fellows and of the research team, good attitudes to face the unexpected, and an innovative local academic culture to formulate new research questions. In sum, there are many unmeasurable elements needed that go beyond academic ranks like the number of publications of a certain institution. My hope is that I can absorb such unmeasurable aspects in this new environment at St. Michael's.

What does it mean to you to be St. Michael's inaugural Scholar-in-Residence?

This is an honour and a unique opportunity. I have known Dr. Art Slutsky for over two decades and I have been thinking about an opportunity to experience Toronto for a long time.

I have wanted to get to know the research-rich atmosphere of Toronto, especially at St. Michael's, but never had the chance to make it happen because of timing, economical limitations, and also because of the lack of an academic opportunity for this. This opportunity has made it possible.

What has been most surprising to you since you started?

I'm not going to say anything about the weather – I was prepared for the cold, but not this cold! The most surprising aspect apart from weather is the general attitude, which is much kinder than I was imagining. Beyond the researchers and the research building, people are very kind to each other. Even the way people interact on the street is generally nice, which has been pleasant.

I was also pleasantly surprised to find that people at St. Michael's prioritize research, not bureaucracy. The processes are rigorous, and the focus is on research because it is understood that it will improve patient care.

What are you most looking forward to?

I would like to have these ideas and collaboration eventually result in improved outcomes for patients, and in the short term I'm hopeful it will result in some excellent published papers and ongoing collaboration. Time will be limited, but the opportunity is immense.

This story is one of many we're highlighting to share discoveries and collaborations led by our Keenan Research Centre for Biomedical Science. The Keenan is home to basic science and translational research at Unity Health. Our researchers target common and high burden illnesses that are important to patients and strive to make discoveries that will improve patients' lives. The Keenan: Driven by discovery. Share our stories using #TheKeenanDiscovery.



Dr. Art Slutsky and Dr. Marcelo Amato

Medical Humanities Curriculum PCCM

Medical humanities is the integration of art and the humanities into medical education and practice. Just as the humanities contemplate and interpret the human condition, medical humanities address the universal human experiences of health, sickness and death – for patients and for their loved ones. Therefore, studying the medical humanities can deepen our understanding of our patients and of our experiences in caring for them, such that medicine can become truly an applied humanism: by using its technology as *tecno* (from the ancient Greek: craft, art) to serve the whole person and their human values, medicine thus unifies science and art. Medicine in its core is a type of applied humanism (the application of science in recognition of human values and in the service of human needs).

Every day, Critical Care Clinicians bear witness to human experiences that are, at once, universal and exceptional. As they attend to individual patients, they actively participate in the cycles of grief, joy, sickness, and recovery that all of us encounter between the boundary points of life and death. Critical Care Clinicians occupy privileged positions in the lives of others, and as such develop a unique understanding of the complex factors informing how the paths of their patients and fellow practitioners unfold.

Made possible by the University of Toronto's Faculty of Medicine, 2019 Medical Humanities Education Grant, we developed a "Literary Art Curriculum" to allow the group to share important life experiences and emotions related to life as an intensive care clinicin that would help with our wellness and compassion for the patient we care for. Ultimately, the writers, through various styles including poems, reflections, letters, short stories and anecdotal comparisons triggered by clinician's experience ¹⁻⁹, all demonstrated how professional fulfillment can be a potent antidote to burnout and a meaningful answer to why we, as medical professionals continue to work in such a strenuous field.

Kay Min, Andrew Helmers, Melany Gaetani, Cory Anderson, Briseida Mema

- 1. Lehr AR. Life or Linen. Intensive Care Med 2020 May 28. Online ahead of print.
- 2. Mema B. Hands. Intensive Care Med 2020 May 11. Online ahead of print.
- 3. Mema B. A Grief Unobserved. Intensive Care Med 2020. Jul;46(7):1492-1493.
- 4. https://cmajblogs.com/good-luck/
- 5. Min K, Buckley L, Aravind P, Leal Barcelo A, Anderson C, Mema B. Apologia Pro Vita Sua. Accepted for Publication Pending revisions. *Acad Med*
- 6. Gaetani M, Mema B. A Human Touch. Accepted for Publication Pending revisions. Acad Med
- 7. Min K, Lehr AR, Mema B. Human Amnesia. Accepted for publication. *Chest*
- 8. Geatani M. A wind that blows. Under review. Ann Intern Med
- 9. Gaetani M The Dance of Science and Art: letter to editor. Under review. Acad Med.

Andrea Leal getting feedback on her piece "Letter to my 20-year-old self Kay Min and Anab Lehr discussing their commentary "Human Amnesia"



Briseida, Andrew, Kay, Cory, Melany

Department of Paediatrics

University of Toronto



Adult Education Update

COVID-19 pandemic:

Like all aspects of critical care our education program saw a significant impact as result of the COVID-19 pandemic. We required multiple redeployments of both our senior critical care medicine trainees as well as junior trainees to support the increased workload in our ICUs across the city. Redeployment required collaboration between multiple specialties as well as PGME and hospital leadership.

We received a tremendous support from other training programs including Anesthesia, Surgery, Respirology, and Internal Medicine. In some cases junior trainees stepped up and took on more senior roles. We owe a huge debt of gratitude the trainees who agreed to help us in a time of need. In particular I would like to thank Dr. Lisa Bahrey, Dr. Sav Brar, Dr. Ronald Levine, Dr. Jeannette Goguen, and Dr. Chris Li for helping to coordinate redeployment of their trainees to Critical Care.

Our own Critical Care Royal College trainees were all redeployed to core ICUs to support our staff and patients. These redeployments often resulted in loss of electives or scholarly time yet trainees were magnanimous in their support. Our hospital based fellows also all rose to the challenge created by the pandemic. I can hardly imagine the stress placed on our hospital based fellows being far from home in the midst of a pandemic, with many losing childcare and being distant from their support systems. Despite all of this I couldn't be prouder or more impressed by the skill and dedication of all of our trainees.

Because of the need to social distance we had to transition our academic half day to a virtual format. Dr. Dominique Piquette did a tremendous job of making this transition happen. I am happy to say that with a virtual half day our attendance has actually increased. We have had some tremendous speakers able to attend half day that would not be able to do so were it in its traditional in-person format. Thank you to everyone who has contributed to our modified academic half day curriculum in the face of multiple competing demands.

Accreditation:

This year our Adult CCM training program will undergo an onsite review by the Royal College. Due to the pandemic the review will be carried out virtually. Our review will take place between Nov 22 and Dec 4 2020. I would ask that all faculty and trainees try to be available for meetings with the accreditors. We will keep you updated as more information becomes available.

David Hall MD PhD FRCPC

Assistant Professor, Department of Medicine Program Director for Adult Critical Care Medicine University of Toronto

Intubating a COVID Patient: A Reflection



It was early March. The morning air was still cold and biting, and yet there was anticipation for the bloom of Spring. Think before redeployment of fellows or alternate staffing models for consultants. Before specialized airway management teams and PPE coaches. Before the flurry of preprints, contradictory publications, and retractions. Before spirited discussions on the utility of masking, early intubation, or awake prone position. The threat of SARS-CoV-2 was in the distance; far away and yet too close.

It was on a day like this that we were faced with our first patient with respiratory failure and concern for COVID. The case was complicated further by profound hemodynamic instability, multi-organ failure in extremis, and undisputable risk of both anatomically and physiologically challenging airway management. So many questions lay ahead: What is the best PPE to wear? How should we intubate him? What if he coughs? Is this safe? Do we have enough help? Who should be in the room?

It was evident that in situations like these, risk was magnified by significant alterations in usual pathways. Of course, some concessions were made: meticulous donning/doffing, checks, etc. But the process of care was the same: contingency planning for procedural failure, pre-briefing to ensure all team members knew each possible contingency, and de-briefing to improve the safety and process. The airway was managed successfully and without major complication, and a team member noted this was "pretty good for our first COVID intubation".

But it was not the first. I could not help but think that this didn't feel much different than any other high-risk airway I had spent an entire residency training to manage. The most difficult aspect of airway management was not the act of endotracheal intubation, but rather reducing cognitive burden for the operators, and maintaining safety for both patients and healthcare workers. To do so, one must fall back on first principles, and recognize this is exactly what we are trained to do.

Vatsal Trivedi 2nd year Royal College Critical Care Medicine Resident (PGY 6)



Virtual Art Slutsky Research Day on ZOOM!!

June 16, 2020

COVID-19 couldn't stop our Annual Art Slutsky Day!! This speaks to the irrepressible spirit of the members of our IDCCM. Virtual Art Slutsky Day was another great success and opportunity to come together after a challenging year and to celebrate our IDCCM community at the University of Toronto!

We are so delighted to again honour the legacy of Art Slutsky and to celebrate his many important contributions to our diverse pediatric, adult and interprofessional critical care community across the University of Toronto.

The AS Day had another very strong attendance this year of up to **140** faculty, trainees, and other colleagues who joined us through the ZOOM meeting. Faculty judges vetted **45** abstracts encompassing basic and clinical science, quality, physiology and education contributed by our adult and pediatric trainees. As has become the expectation now, the breadth and quality of work remains exceptional and we have so much to take pride in and celebrate within our university group.

Distinguished Speakers:

Dr. Art Slutsky: We were so delighted to have Art serve as our distinguished featured speaker this year and to give a timely and informative talk on "**Controversies in COVID-19**" This served to highlight early work that has been published about COVID-19 patients and how much more we need to learn about individual susceptibility, clinical manifestations, treatment and outcomes. **SO grateful for your insights, Art!!**

Drs. Maria Jogova (with Mike Sklar) and Melany Gaetani as the Adult and Pediatric Chief Fellows spoke about **Wellness and Connectedness during COVID-19.** They shared some wonderful videos celebrating the bravery, dedication and commitment that our fellows have shown consistently throughout the COVID-19 crisis.

We continued our yearly tribute to transitioning faculty entitled "Transitions". We were honoured to have **Dr. Steven Schwartz** pay tribute to our respected SICKKIDS faculty members. **Dr. Peter Laussen** served SICKKIDS with great distinction as its critical care leader, highly distinguished researcher and valued and committed member of our IDCCM community. He is currently leading the Critical Care Group at Boston Children's Hospital. We tragically lost our treasured colleague **Dr. Afrothite Kotsakis** in October 2019 and she was warmly remembered for her exceptional clinical expertise, and also for her compassion and enthusiasm for a life lived fully and completely. She will be greatly missed by our community.

We also continued our Tradition of the Annual Interprofessional Award. The competition for this was very stiff this year and we gave 2 awards as the candidates were each so exceptional. Dr. Lisa Burry (Mount Sinai Hospital) was recognized for her exceptional contributions to Critical Care Pharmacy through sustained excellence in Clinical and Research contributions. Ms. Karen Dryden-Palmer (SickKids) was recognized for her extraordinary 34 year leadership!! in fostering Pediatric critical care nursing as a clinical specialty. Her tireless devotion to clinical excellence for patients/families and her colleagues was widely acknowledged and celebrated.

Oral and Abstract Presentation Awards

The lead authors of the top 12 abstracts were:

Tanya Barretto
 Martin Urner
 Riddhi Kundu
 Luca Bastia
 Annemijn Jonkman
 Maha Al Mandari
 Hiroko Aoyama
 Christopher Yarnell
 Bhushan Katira
 Ayah Nayfeh
 Aditi Jain

From this group of 12 abstracts, the team of IDCCM judges awarded 2 overall prizes!

Congratulations to:

1st Place Overall Best Abstract – Dr. Martin Urner 2nd Place Overall Best Abstract – Dr. Annemijn Jonkman

We also awarded a prize for the best abstract in each category:

Congratulations to the winners from each of our abstract categories:

Best Abstract (Clinical Research) - Songqiao Liu

Best Abstract (Basic & Translational Science) -Aleksandra Leligdowicz, Chirag Vaswani

Best Abstract (Quality Improvement) - Alanna Bateman

Best Abstract (Physiology) - Irene Telias

Best Abstract (Systematic Review)- Leah Kosyakovsky

In Light of so much heroism during the COVID-19 pandemic, the IDCCM also awarded Special Achievement Awards for service under these very difficult and challenging circumstances:

Award Recipients included:

Special IDCCM Covid-19 award: Critical Care Leadership

Andrew Baker Niall Ferguson

Special IDCCM Covid-19 award: the IDCCM Education team

Alberto Goffi Ian Randall
Alya Kamani Jenna Spring
Cameron Guest Natalie Wong
Christie Lee Neill Adhikari

David Hall Simon Abrahamson
Dominique Piquette Warren Luksun

Ghislaine Doufle

Thanks to ALL of our Judges who donated their precious time to evaluate the Abstracts this Year!!

Alberto Goffi	John Marshall	Darlene Reid
Art Slutsky	Laurent Brochard	Matteo Parotto
Briseida Mema	Haibo Zhang	Laveena Munshi
Dominique Piquette	Bruno Ferreyro	Thomas Piraino
Margaret Herridge	Hannah Wunsch	Patricia Murphy

IDCCM Divisional Awards

The residents and clinical fellows awarded the <u>John Granton Award</u>, for outstanding contribution to Critical Care Education, to **Dr. Alberto Goffi** in recognition of his always enthusiastic commitment to and support of the trainees.

The Education Program Committee awarded the <u>Simon Abrahamson Award</u>, for outstanding academic performance in Critical Care Medicine to **Drs. Federico Angriman and Dr. Seth Grey** who were recognized for exceptional research productivity, wonderful collegiality and leadership.

The <u>John Laffey Award</u> was created to honour of our esteemed colleague Dr. John Laffey who made important contributions to the basic and clinical research life at St. Michaels' Hospital and throughout the University of Toronto. The winners this year were: **Dr. Michael Sklar and Dr. Melany Gaetani**

The following **Awards for Individual Teaching Excellence** were also made by the trainees:

Sunnybrook: **Dr. Cameron Guest** St. Michaels: **Dr. Karen Burns, Alberto Goffi**

Toronto General Hospital: **Dr. Eddy Fan** Toronto Western Hospital: **Dr. Victoria McCredie**

Mount Sinai: **Dr. Mike Detsky** Community Site (NYGH): **Drs. Phil Shin and Donna McRitchie**

Please take the time to congratulate your colleagues for these great distinctions. They are so deserving of this recognition and all they bring to our IDCCM that enriches our academic program.

Thanks to everyone who worked so hard to make this year's Virtual AS Day such a great success! I would like to extend a very special note of sincere appreciation to *Fahima Nasreen*!! Her expertise, energy and enthusiasm were of enormous help!!



Art Slutsky Day 2019

Thank you!

Have another great year of research and see you (in person!!) next year!

We look forward to seeing you all at the Mill St. Brew Pub night and the AS Day in June 2021!! (Fingers Crossed!) Thanks so much for supporting this day and for helping to celebrate all the exceptional achievements of our University of Toronto IDCCM community!! Wishing you all good health and continued strength as we head into the winter months.



Margaret Herridge Director of Research- IDCCM On behalf of the IDCCM Research Executive

Research: Save the dates!

First ever zoom CRIP. Tuesday, September 29th. Details to follow.

Nuts and Bolts of Research (NABOR) zoom Grant writing session. Thursday, October 15th from 3-4:30 p.m. An hour and a half with IDCCM faculty providing basic tips on grant writing. Lots of time for questions. Suitable for all trainees and junior faculty. Open to all members of the IDCCM and Department of Anesthesia.

Due to COVID we had to sadly defer our Visiting Professors for Spring and Fall 2020. We look forward to welcoming those individuals to Toronto when it is safe again for travel. However, we are planning a series of **ZOOM Visiting Professors** this fall, as a way to stay connected with our colleagues around the world. Stay tuned for details.

Hannah Wunsch Associate Director of Research- IDCCM University of Toronto

High-Impact IDCCM PUBLICATIONS (Jan-July 2020)

Timing of Initiation of Renal-Replacement Therapy in Acute Kidney Injury.

STARRT-AKI Investigators; Canadian Critical Care Trials Group, the Australian and New Zealand Intensive Care Society Clinical Trials Group, the United Kingdom Critical Care Research Group, the Canadian Nephrology Trials Network, and the Irish Critical Care Trials Group, Bagshaw SM, Wald R, Adhikari NKJ, Bellomo R, da Costa BR, Dreyfuss D, Du B, Gallagher MP, Gaudry S, Hoste EA, Lamontagne F, Joannidis M, Landoni G, Liu KD, McAuley DF, McGuinness SP, Neyra JA, Nichol AD, Ostermann M, Palevsky PM, Pettilä V, Quenot JP, Qiu H, Rochwerg B, Schneider AG, Smith OM, Thomé F, Thorpe KE, Vaara S, Weir M, Wang AY, Young P, Zarbock A. N Engl J Med. 2020 Jul 16;383(3):240-251.

Early Neuromuscular Blockade in the Acute Respiratory Distress Syndrome.

National Heart, Lung, and Blood Institute PETAL Clinical Trials Network, Moss M, Huang DT, Brower RG, Ferguson ND, Ginde AA, Gong MN, Grissom CK, Gundel S, Hayden D, Hite RD, Hou PC, Hough CL, Iwashyna TJ, Khan A, Liu KD, Talmor D, Thompson BT, Ulysse CA, Yealy DM, Angus DC. N Engl J Med. 2019 May 23;380(21):1997-2008.

COVID-19-associated acute respiratory distress syndrome: is a different approach to management warranted?

Fan E, Beitler JR, Brochard L, Calfee CS, Ferguson ND, Slutsky AS, Brodie D. Lancet Respir Med. 2020 Jul 6:S2213-2600(20)30304-0

Prone positioning in non-intubated patients with COVID-19: raising the bar.

Munshi L, Fralick M, Fan E. Lancet Respir Med. 2020 Jun 19:S2213-2600(20)30269-1

Delayed versus early initiation of renal replacement therapy for severe acute kidney injury: a systematic review and individual patient data meta-analysis of randomised clinical trials.

Gaudry S, Hajage D, Benichou N, Chaïbi K, Barbar S, Zarbock A, Lumlertgul N, Wald R, Bagshaw SM, Srisawat N, Combes A, Geri G, Jamale T, Dechartres A, Quenot JP, Dreyfuss D. Lancet. 2020 May 9;395(10235):1506-1515.

Essential care of critical illness must not be forgotten in the COVID-19 pandemic.

Baker T, Schell CO, Petersen DB, Sawe H, Khalid K, Mndolo S, Rylance J, McAuley DF, Roy N, Marshall J, Wallis L, Molyneux E. Lancet. 2020 Apr 18;395(10232):1253-1254.

Association of Noninvasive Oxygenation Strategies With All-Cause Mortality in Adults With Acute Hypoxemic Respiratory Failure: A Systematic Review and Meta-analysis.

Ferreyro BL, Angriman F, Munshi L, Del Sorbo L, Ferguson ND, Rochwerg B, Ryu MJ, Saskin R, Wunsch H, da Costa BR, Scales DC. JAMA. 2020 Jun 4;324(1):1-12.

<u>Is the Prone Position Helpful During Spontaneous Breathing in Patients With COVID-19?</u> Telias I, Katira BH, Brochard L. JAMA. 2020 May 15.

<u>Use of Temporary Mechanical Circulatory Support for Management of Cardiogenic Shock Before and After the United Network for Organ Sharing Donor Heart Allocation System Changes.</u>

Varshney AS, Berg DD, Katz JN, Baird-Zars VM, Bohula EA, Carnicelli AP, Chaudhry SP, Guo J, Lawler PR, Nativi-Nicolau J, Sinha SS, Teuteberg JJ, van Diepen S, Morrow DA; Critical Care Cardiology Trials Network Investigators. JAMA Cardiol. 2020 Apr 15;5(6):1-6.

<u>Critical Illness in Patients With COVID-19: Mounting an Effective Clinical and Research Response.</u> Cook DJ, Marshall JC, Fowler RA. JAMA. 2020 Apr 6.

Association of Low Baseline Diaphragm Muscle Mass With Prolonged Mechanical Ventilation and Mortality Among Critically Ill Adults.

Sklar MC, Dres M, Fan E, Rubenfeld GD, Scales DC, Herridge MS, Rittayamai N, Harhay MO, Reid WD, Tomlinson G, Rozenberg D, McClelland W, Riegler S, Slutsky AS, Brochard L, Ferguson ND, Goligher EC. JAMA Netw Open. 2020 Feb 5;3(2):e1921520.

Evolving Issues in Oxygen Therapy in Acute Care Medicine.

Munshi L, Ferguson ND. JAMA. 2020 Jan 24

Association Between the Implementation of Hospital-Based Palliative Care and Use of Intensive Care During Terminal Hospitalizations.

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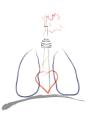








Interdepartmental Division of Critical Care Medicine



Thank you everyone and Stay safe!