



IDCCM Newsletter

Summer 2021

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



Interdepartmental
Division of Critical
Care Medicine



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MESSAGE FROM THE DIRECTOR



Dear colleagues and friends,

We are very pleased to present the IDCCM Newsletter of a very special summertime.

Summer is here and everyone feels the need for some vacation after the considerable workload imposed by the pandemic, especially this terrible third wave. Again, the remarkable response of the whole critical care community merits thanks and admiration. COVID cases are now going down considerably in our ICUs and Canada has one of the best possible rates of vaccination worldwide. Our ICUs are going back to 'normal', very busy but normal.

The coronavirus is still here, 'adapted' to become more transmissible and possibly reaching younger people. Following what's happening across the world, one can look at Brazil, Vietnam, Catalonia or the US, clearly indicating that the pandemic is far from over, unfortunately. We hope the vaccine offers a good protection as shown in trials but we are not sure for how long, how often and who may not be well protected. We still need to act cautiously and continue to be prepared. And there is the rub. Nurses and other allied health professionals are tired. Fellows need to spend time with their family. Parents need to be with their kids out of a stressful context. We all need to be well! This is a recommendation for the summer: relax and have some rest!

In addition, the world around us is not looking great, with some catastrophic consequences of climate changes [including COVID-19? (1)], of brutal racism and of different forms of discrimination. The unthinkable loss felt by indigenous people is just starting to emerge. We want IDCCM to continue to grow and innovate, making science and education better and improving the care of our patients; in Toronto, we commit ourselves in doing it within equity, diversity and inclusion. Please read a nice recent commentary discussing medicine and activism (2).

We have proven during the pandemic that by working together research and education could not only be maintained at the highest level but could immediately impact the care of our patients and be transformative (3). Research is however a long road, and many aspects are needed from the bench ('cells come from cells...' Virchow) to clinical quality, education and implementation initiatives. Toronto is promoting this continuity. One of our goal is to help young investigators launching their projects through several initiatives such as the IDCCM Scholar program and the grants for fellows and clinical associates. More opportunities are coming soon, thanks to the generosity of H. Barrie Fairley (4) and the commitment of Rob Fowler, the first H Barrie Fairley IDCCM professor.

I am proud and humble to serve this fantastic group. Thank you again for your enthusiasm and commitment, and stay safe.

Laurent Brochard, MD

Division Director, Interdepartmental Division of Critical Care Medicine

1 Beyer et al. Shifts in global bat diversity suggest a possible role of climate change in the emergence of SARS-CoV-1 and SARS-CoV-2. *Science of The Total Environment*, 767, 2021, 145413

2 Mangione and Tykocinski. Virchow at 200 and Lown at 100 — Physicians as Activists. *New Engl J Med* 2021, July 17.

3. REMAP-CAP Investigators. Interleukin-6 Receptor Antagonists in Critically Ill Patients with severe Covid-19 pneumonia. *N Engl J Med* 2021; 384:1491-1502

4. <https://criticalcarecanada.com/speaker/dr-barrie-fairley/>

Awards/Recognitions



Congratulations to **Dr. Andrea Rigamonti** on designation as a Fellow of the Neurocritical Care Society (FNCS). He is only the fourth Canadian to receive this. The Neurocritical Care Society offers a program that denotes “letters” to recognize exceptional service, academic excellence, and leadership in the field of Neurocritical care. This program is called Fellow of Neurocritical Care Society (FNCS).



Congratulations to **Dr. Patricia Houston**, recipient of the 2021 Canadian Association for Medical Education (CAME) Ian Hart and Meredith Marks Awards. Ian Hart Award for Distinguished Contribution to Medical Education: Established in 1992 in honour of Dr. Ian Hart, founder of CAME, this award recognizes senior faculty who have made an exceptional contribution to medical education throughout their academic career. CAME is delighted to present the 2021 Ian Hart Award for Distinguished Contribution to Medical Education to Dr. Patricia Houston, University of Toronto.



Congratulations to **Dr. Natalie Wong**, recipient of the 2019-20 MD Program Teaching Excellence Awards from the Temerty Faculty of Medicine. The University of Toronto medical students introduced the MD Program Teaching Award for Excellence in 2017-2018. The award recognizes faculty, residents, graduate student teachers and clinicians in the MD Program that have attained Teaching Evaluation Scores in the top 10% in one or more of the teaching activities to which they have contributed.



Congratulations to **Dr. Maha Al Mandhari**, recipient of the 2021 Postgraduate Medical Trainee Leadership Award.



Congratulation to **Dr. Catherine Proulx** PGY 5, Pediatric Critical Care Medicine trainee, she was selected as the inaugural recipient of the new Dr. Michael (Mickey) Lester Award. This award recognizes an outstanding performance of a resident in enhancing the patient and family experience in Paediatrics and demonstrating excellent communication skills, humour and congeniality, (Sick Kids has hundreds of trainees).

The committee wrote the following: *“It was delightful to read the letters supporting your nomination. Your nominators have emphasized your passion and commitment in caring for patients and their families and how you are able to form deep and meaningful bonds with them. They wrote about your congeniality, optimistic approach, humour and your unique ability to lift the spirits of caregivers when at their lowest ebb, how families keep asking for you, even when you are post-call and how your heart is big enough to support many in need.”*

Congratulations to Dr. Olugbenga Akinkugbe, he received the SickKids **Clinician Scientist Training Program Award** to support his PhD studies. His supervisor is Dr. Chris Parshuram. This is a very competitive process, and it is a testimony to his hard work and potential.

Congratulations to four Sunnybrook fellows and University of Toronto CCM residents **Elif Çizmeci, Andrew Achilles, Shaurya Taran, and Casey Park** as part of a team that developed recommendations for COVID-19 inpatient management in LMICs. Their work is now published as a supplement to Am J Trop Med Hygiene (https://www.ajtmh.org/view/journals/tpmd/104/3_Suppl/tpmd.104.issue-3_Suppl.xml)

IDCCM Trainee Research Award

We were delighted to announce the recipients of the first IDCCM Trainee Research Awards in March, 2021. Designed to provide research support for those not yet in a faculty position, the IDCCM gave out four \$10,000 awards. Thank you to all the applicants and the review committee for their time and effort. The winners are:

Dr. Bruno Ferreyro (Clinical Associate) for “Critical Illness in Patients with Hematologic Malignancies” (supervisor: Professor Damon Scales)

Dr. Federico Angriman (Senior Fellow/Clinical Associate) for “Long term cardiovascular outcomes in adult sepsis survivors” (supervisor: Professor Damon Scales)

Dr. Irene Telias (Research Fellow) for “Mechanism and Consequences of Dyssynchronies During Early Respiratory Failure” (supervisor: Professor Laurent Brochard)

Dr. Sabri Soussi (Research Fellow) for “Identifying clinical subphenotypes in sepsis survivors with different epigenetic signatures and one-year outcomes: A secondary latent class analysis of the FROG-ICU cohort” (supervisor: Professor Claudia dos Santos) **Congratulations to everyone!**

Grants Received

- ✚ **REMAP-CAP** – the Randomized Embedded Multifactorial Adaptive Platform Trial in Community-Acquired Pneumonia – received \$1 million in funding this June through the recent CIHR COVID-19 Variant Gap grant competition. REMAP-CAP is a multinational trial, led in Canada by **John Marshall** at Unity Health, in collaboration with multiple colleagues from the IDCCM and the Canadian Critical Care Trials Group. The trial uses a Bayesian adaptive design, studying multiple interventions of potential benefit to patients with severe COVID-19. With more than 7000 patients recruited so far, REMAP-CAP has already reported benefit for corticosteroids (JAMA), IL-6 receptor antagonists (NEJM), and anticoagulation in moderate disease (NEJM), as well as establishing a lack of benefit for anticoagulants in severe disease (NEJM), antiviral agents (lopinavir/ritonavir and hydroxychloroquine, Intensive Care Med), and convalescent plasma. As importantly, REMAP-CAP is demonstrating the power of a novel trial design, and of large-scale international collaboration in acute care research. The 324 sites recruiting to the trial include not only ICUs in Canada, the UK, the US, the EU, and Australia and New Zealand, but also units in Saudi Arabia, Colombia, Nepal, India, and Pakistan, with more countries about to join.
- ✚ **Dr. Ewan Goligher** received the National Sanitarium Association Scholar’s Award. \$1,000,000 over 5 years (2021-2025) “Adaptive Platform Trial Pipeline for Lung- and Diaphragm-Protective Ventilation”.
- ✚ **Dr. Claudia Dos Santos** received the National Research Council Canada (NRC) Pandemic Response Challenge Program grant. Total Funding - \$500,000. She also received the U of T Centre for Research and Applications in Fluidic Technologies (CRAFT) and NRC CRAFT Project Award. Total Funding - \$203,000

Education Update for Adult CCM

It is hard to believe that for the second Summer Newsletter in a row we are still discussing the COVID pandemic. Our educators and trainees adapted, redeployed, and rose to the challenge. Whereas once the pandemic felt like a fully loaded semi barreling towards us it now feels a bit more like something in our rearview mirror, still there, but hopefully something we are moving past. The summer is a time for us to look forward and plan for the year to come.

We are excited to welcome our incoming cohort of Adult CCM residents for 2021:

- **Karishma Desai**-Internal Medicine, Western
- **Candice Griffin**- Internal Medicine, MacMaster
- **Naheed Jivraj**- Anesthesia, Toronto
- **Eugenia Lee**-Internal Medicine, Toronto
- **Francois Mathieu**-Neurosurgery, Toronto
- **Varuna Prakash**-Internal Medicine, Toronto
- **Nasim Zamir**-Internal Medicine, Saskatchewan
- **Abdullah Sakkat** Respiriology, MacMaster

This academic year's curriculum is almost fully planned thanks to the hard work of Dominique Piquette. One of the highlights will be a series of Summer Bootcamp sessions for our incoming trainees. Topics this year include chest tube and bronchoscopy, basic cardiac and lung ultrasound, difficult airway simulation, surgical airway simulation, and common ICU procedure simulation. We will also have case based discussions on ICU best practices, sepsis, ARDS, and sedation.

Along with all other Royal College programs at the University Adult Critical Care Medicine underwent an external review for accreditation. This was our first accreditation cycle under the new CanERA (Canadian Excellence in Residency Accreditation) standards and, as a result of the pandemic, was conducted virtually. I am thrilled to report that we received full accreditation with regular review in 8 years. This was the culmination of a tremendous amount of work from many of our faculty. Special thanks and recognition must go to our Program Administrator Simon Chung. Simon plays an integral role in our program and he was central to our successful accreditation.

I would like to thank our Chief Resident **Dr. Vatsal Trivedi**, as well as our Chief Fellow, **Dr. Elif Cizmeci**. They demonstrated excellent leadership in representing our trainees and were wonderful ambassadors for the IDCCM Resident and Fellowship programs. We would also like to welcome our new Chief Resident, **Dr. Cameron Landry** and Chief Fellow, **Dr. Stephan von During** for the upcoming 2021-2022 year!

David Hall, MD

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

Medical Humanities at SickKids' Critical Care Unit: A Human Touch

The medical humanities encompass a broad interdisciplinary field, but the discipline's essential mission is to strengthen its practitioners' appreciation of the humanistic aspects of medicine. Over the course of the year, we met virtually and produced works of music, creative writing, and visual arts including painting and photography, which then we generously shared and discussed with each other. These art pieces served as both the substance and the spark for engaging conversations between colleagues, about our professional lives, that dove beyond the superficial, and addressed and grappled with complex underlying questions about ethics, meaning and purpose.

Since 2019, our Medical Humanities curriculum has encouraged participants to strengthen their sense of purpose, community, and professional identity through the arts. We'd like to express our gratitude to the University of Toronto's Faculty of Medicine Medical Humanities Education Grant, that has supported our project for the past years.

Catherine Proulx, Kay Min, Andrew Helmers, Briseida Mema

1. Proulx C, Mema M, Helmer A. Donning of the Head, Doffing of the Heart. Accepted for publication. *CMAJ*.
2. Proulx C. Chrysalis. *Intensive Care Med*. 2021 June 6.
3. Mema B, Helmers A, Anderson C, Min KS, Navne LE. From the inside out: personal journeys in intensive care. *Intensive Care Med*. 2021 Feb;47(2):242-243.
4. Mema B, Helmers A, Min K, Navne LE: Arts and ARDS: a critical need for humanities in critical care. Accepted for publication *Chest*.
5. Buckley L. Sand and water. Submitted for publication
6. C. Maratta. Unmasking: a letter to my adult intensive care colleagues. Submitted for publication
7. C. Maratta. B. Mema. The weighing. Submitted for publication.

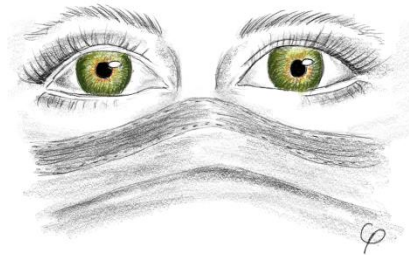


Life in, Life out
Catherine Proulx



Patient in, patient out.
Needle in, needle out.
Tube in, tube out.
Feed in, feed out.
Fluid in, fluid out.
Vitals in, vitals out.
Help in, help out.
Press in, press out.
Epi in, epi out.
Breathe in, breathe out.
Tears in, tears out.
Family in, family out.
Clean in, clean out.
Life in, life out.
Grief in.

Insight out of our eyes
Véronique Masy



[...]

We then drop our glasses for our eyes to see clearly ...
Hiding our doubts and fears, to appear an infallible medical encyclopedia
Realizing our uncertainty and limits; we conclude we are humans
Above our masks, our eyes meet the suffering
We embrace the darker shades of the painter's palette to create a world of dimensions and contrasts.
To restore the intensity of the colors in the paintings of all our lives
To look at each other with our clear humble eyes

Little Bird
Cory Anderson



Bright notes fill the morning air
With motes of gold and green
The melody a welcome sight
As my little bird preens,
Singing her sweet song
Above the beat of her wings
As they flutter and flap,
Such a loving gaze that cuts
Through the dawn's haze,
Setting the room ablaze
With feathers aflame in brass
Light, as she takes flight
High above her empty nest
[...]

Transitions
Prasant Dev Aravind



| | |
|-------------------------|--|
| Why do some transcend? | Its not the money |
| Why do some descend? | Its your honey |
| Who decides the end? | Its not the miles travelled to the horizon |
| What decides the means? | Its the smiles unravelled as you enlighten |
| What matters? | It's the warm hand that grasps |
| Life in tatters? | It's the gracefulness that clasps |
| Career in splatters? | It's the fulfillment that you obtain |
| Happiness on a platter? | Its never the name that you gain |

“Unmasking”: A poem by Christina Maratta

Unmasking

A letter to our Adult Critical Care colleagues from a Pediatric Intensivist

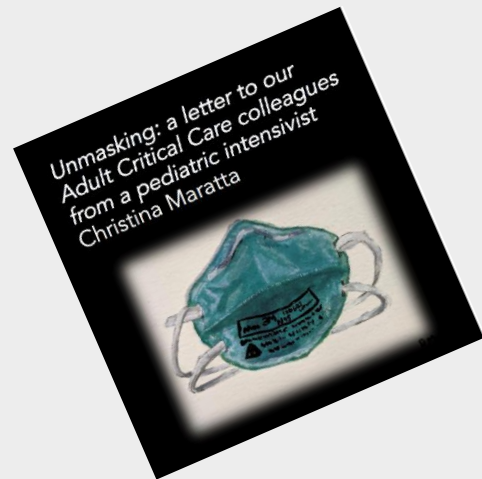
As disease enveloped your world
We watched, eager and hesitant to support you
Months flew by, our guilt and unease grew
Until you asked for our help.

In truth, we did not fully appreciate
The hardship, the sorrow, the strain,
The disparities and tragedies you were witnessing,
Until we lived it ourselves.

As we unmask,
And we inch towards a semblance of normality
Few truly understand your burden
How painful this pandemic

We thank you for running this marathon
For shouldering this load on everyone’s behalf.
It was a privilege to work together
In ways we never have before

As our masks come off
We reveal our faces: gaunt, wary, relieved.
But as collective amnesia begins to blanket the world
We will not forget.



Adult Critical Care from a Pediatric Intensivist Lens

After the decision of accepting adult patient into SickKids PICU, we prepared for a week followed by two months of managing critically ill adults. We discovered first-hand the flexibility within our healthcare system and the internal world of SickKids, the resourcefulness in utilizing existing infrastructure to provide care to an unfamiliar patient population with an unfamiliar disease, and the adaptability of health practitioners’ teams inside and outside the ICU. The two months were difficult as we watched patients close to our age struggle to breathe or lose their muscle mass while being dependent on the ventilator; but it was gratifying to contribute to the community during this unique period, and use the opportunity to advance the care of our pediatric patients.



Here are some clinical examples of the differences and commonalities between our two worlds.

First, patient size. Pediatric ICU, from vital signs to fluids and medications, revolves around patient size, particularly weight. Adult medicine has a similar weight dependency, particularly tidal volumes and some medication dosing. However, the weight options are several, with a multitude of formulas to calculate them. With the change in practice in our unit, we recognized that some of our adolescent overweight and obese patients might be better served if we adapt some of these adult size concepts into our pediatric practice.

Second, the science of ventilation and weaning. In pediatric ICU, the majority of our patients are ventilated in pressure control modes, with intermittent use of volume control in ARDS patients. We re-familiarized ourselves with the literature of adult ARDS management and implemented strategies to ensure small tidal volumes, close monitoring of plateau pressure and driving pressure, measuring RI, frequent prone positioning for long durations of time, and not utilizing the oscillator. We reviewed adult ventilator weaning strategies, utilizing p0.1, and patient-ventilator asynchronies encountered in adults and their management. We will continue to use some of these strategies and knowledge in our pediatric patients.

Third, sedation and wakefulness. We stepped away from the usual pediatric armamentarium of continuous infusions for sedation and the slow wean of analgesics and sedatives. Our unit has acquired more experience with the use of continuous propofol infusions and its usefulness in the management of our adolescent patients.

Fourth, VV ECMO. We had a significant number of patients on VV ECMO concurrently, which is a rare occurrence in pediatrics. This provided our trainees exceptional exposure to the acute management and separation of VV versus VA ECMO while dealing with the unique circumstances of managing adults.

Fifth, nutritional interventions. We developed evidence-based nutrition guidelines for adults that focus on early enteral nutrition and protein supplementation, a proactive approach to intolerance management, and avoidance of feeding interruption unless necessary, a practice we hope to continue for our pediatric patients to reduce their NPO times.

Sixth, Physiology and Clinical Examination. This entire experience re-emphasized the need to always go back to the basics. Do one thing and do it well (I guess two things in this case). Whether it was a child or an adult, examine the patients closely and think of the physiology of the disease process. Two key things that span both ICU worlds. Last, Toronto IDCCM. We felt closer to the broader Toronto ICU group. Thank you for taking the time to answer our questions, help us through some of the difficulties we encountered, and for facing this pandemic so graciously for the last year and a half. It was a privilege to serve alongside you.

Haifa Mtaweh, B.Sc., MD

Assistant Professor, Department of Paediatrics, University of Toronto
Staff Physician, Department of Critical Care Medicine, The Hospital for Sick Children



The adult COVID experience at The Hospital for Sick Children

Now that we have come through to the other side of our Adult ICU experience at SickKids, I wanted to share some reflections, on behalf of our team:

- We were proud to be able to contribute. We were watching from the sidelines for most of the pandemic as you, our adult colleagues, worked to the point of exhaustion, and on occasion, burnout. We wanted to help and were grateful for the opportunity.
- Adults *are* just big kids. A little hairier maybe...
- We could not have done this without the tremendous help from our colleagues and new friends at Mount Sinai, TGH, St Mikes, Toronto Western, Sunnybrook, and William Osler, who we relied on for advice at all times of the day. Thank you.
- We also could not have done this without our medical, surgical, anesthesia, DI, lab, and mostly our interprofessional colleagues across SickKids. They may not have signed up to do this when they started working at a children's hospital, but many, many people enthusiastically pitched in and actively provided care, gave support and a lot of advice along the way.
- We are now not afraid to prone "large" patients. Jelly roll anyone? (Note that previously to us "Large = anyone who either had to shave more than once a week or wore a training bra")
- Turns out that we have been sharing an extremely valuable human resource among our units all along – the RESPIRATORY THERAPISTS! Many of whom work at both SickKids and an adult ICU. They brought their expertise, experience and invaluable suggestions with them when coming on shift to our PICU. Amazing. And we didn't even have to use our handy go-to oscillator. Not even once. You must understand - it is like a security blanket to us in PICU. We knew it was always there, waiting for us, in case we needed it. We just went to the ECMO circuit instead.
- Even though many of our PICU nurses have never cared for a critically ill adult before, they 100% rose to the challenge. They provided exemplary care to 36 patients over 10 weeks, and as a result, our outcomes were excellent, if I do say so myself.



This experience showed us that we are really just 1 big ICU community who can bend the rules, change norms and take on challenges when called upon to do so. The question is, if the next pandemic affects 5-year-olds as much as this one affected 50-year-olds, can we count on you? Of course, we can. Let us hope that never happens.

Dr. Elaine Gilfoyle

On behalf of the entire Critical Care Unit at SickKids Hospital



*"Hello,
Our big news is that my wife Dana and I welcomed our first child Jamie Douglas Yarnell! He was born February 5 2021 and is now five months old. Here is a recent photo."*

Cheers - Chris Yarnell

Experience from the Ontario COVID-19 Science Advisory Table

By: Drs. Laveena Munshi, Kali Barrett, and Arthur Slutsky

One of the greatest challenges during the COVID-19 pandemic was the synthesis, evaluation and implementation of research surrounding SARS-CoV2 and COVID-19 acute respiratory failure. Unlike pre-pandemic times, the pace of research far exceeded what we have seen in previous years. Furthermore, unique platforms for dissemination amplified the distribution of evidence (irrespective of its quality).

The **Ontario COVID-19 Science Advisory Table (SAT)** was created in July 2020 in response to the volume of evidence and absence of a central body in Ontario to synthesize the evidence and place it into context for the population of Ontario. This Table is made up of health system clinicians, scientists and leaders whose mandate is to synthesize and summarize emerging evidence related to COVID-19. The Table was set up to provide independent scientific advice on a range of questions related to (1) epidemiology and public health, (2) health equity and social determinants of health, (3) infections disease and clinical care and (4) public policy. The members were free to voice their personal opinions publicly, whether or not they agreed with the conclusions of the Table or the actions of the government.

As part of the SAT, in addition to providing insight from the critical care units for each of the science briefs published, Laveena Munshi was lead author on several SAT Briefs, including Hospital Visitation Policies, and Obstetrical Care of Patients with COVID-19 Respiratory Failure. She also participated in the COVID-19 Drugs and Biologics sub-committee, which has contributed guidance and recommendations for clinicians surrounding therapies related to COVID-19. Arthur Slutsky has led the working group on Dexamethasone early in the pandemic and provided oversight on Science Briefs related to clinical care and epidemiology. Kali Barrett joined the Secretariat of the SAT in April 2021. All briefs are available at <https://covid19-sciencetable.ca/science-briefs/>

Kali Barrett and Yasin Khan are core members of the COVID-19 Modelling Collaborative, a group that contributed to the SAT's Modelling Consensus Table. The group developed a model that generates projections for the number of patients with COVID-19 expected to need critical care based on potential pandemic scenarios. Their ICU projections have been presented in the Science Table's bi-weekly modelling press conference and were directly used to inform planning and policy development. Their work is available at www.covid-19-mc.ca

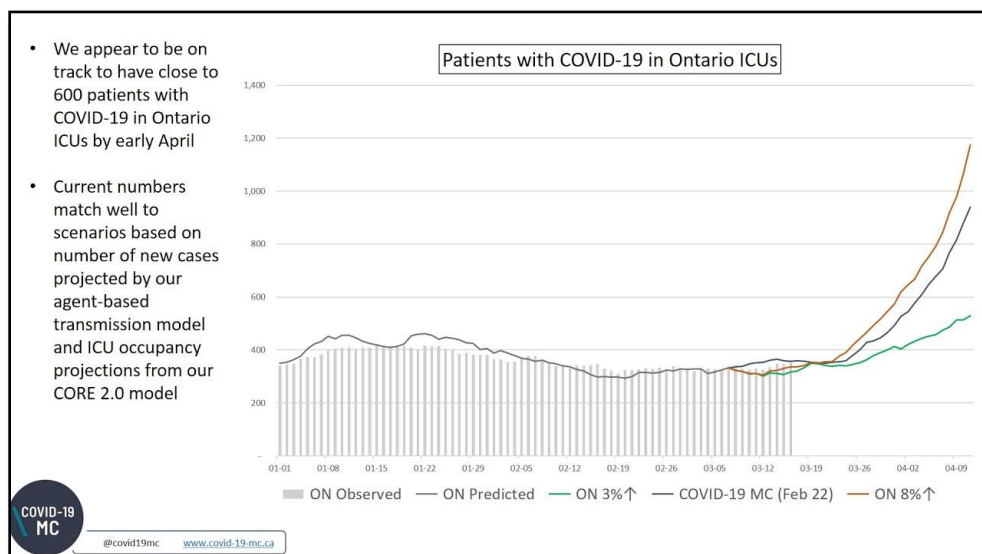


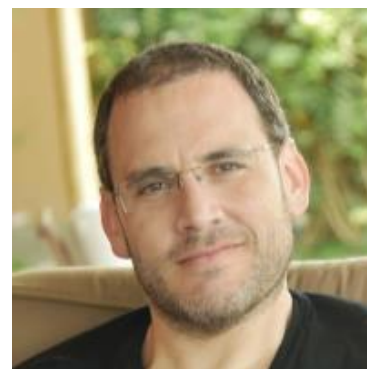
Figure: MARCH 16, 2021: Updated Projections of COVID-19 in ICU and variants of concern (VOC) by the level of care in ON.

As a result of our roles affiliated with the Science Advisory Table and modelling groups, we participated in multiple interviews with media outlets to help raise awareness to the importance of public health measures and contribute to public education activities.

Our collective experience with the SAT has highlighted the remarkable ability of scientific communities nationally and internationally to collaborate to address relevant questions related to the pandemic. Locally, it has also highlighted a need for funding and development of a provincial critical care clinical database that can be accessed in a timely manner by clinicians and researchers to support clinical research, quality improvement and policy development work. While we as critical care clinicians have excellence in clinical bedside care, teaching, leadership and research, it has also highlighted the importance of our public communication skills and emphasized the role we can play in assisting with public education and generating evidence to inform policy. The experience has been unique and invaluable and we hope that insights acquired can help inform future responses to epidemics and pandemics.

Longitudinal Biomarkers to study COVID-19 and beyond

SMH's COLOBILI (**CO**ronavirus **LO**ngitudinal **BI**omarkers in Lung Injury) study started with our 1st COVID-19 ICU patient, and we mark almost a year and a half of continuous recruitment. Collecting clinical data and multi-omic biomarkers longitudinally, the results of a preliminary cohort of 42 patients have already produced two publications: one showing that autoantibodies are not exclusive to COVID-19 patients but rather a feature of critical illness (Intensive Care Med. 2021 Apr 30;1–4.), and one showing that anti-phospholipid antibodies and clinical thrombotic events are not elevated in COVID-19 when compared to similarly ill ICU patients (Annals of the Rheumatic Diseases. 2021 Apr 25). With more than 200 recruited so far, we're getting ready for the next publications from our core group at SMH as well as in collaboration with other research and analytical partners. Conducting the study, analyzing the data, and the insights from the results are informing our next longitudinal multi-omic projects which will study acute lung injury and aneurysmal subarachnoid hemorrhage.



Uriel Trahtemberg, for the COLOBILI study group at SMH (alphabetically): Andrew Baker, Laurent Brochard, John Marshall, Claudia dos Santos and Arthur Slutsky.

Dr. Uriel Trahtemberg, MD-PhD

Former IDCCM Fellow

Critical Care Physician

Affiliate Scientist, Keenan Research Centre of Biomedical Science

St. Michael's Hospital, Toronto, Canada

“Remember, hope is a good thing, maybe the best of things, and no good thing ever dies.” —Stephen King

TORONTO ADDIS ABABA ACADEMIC COLLABORATION (TAAAC) UPDATE

The Toronto Addis Ababa Academic Collaboration (TAAAC) is an educational partnership established in 2003 that co-builds, supports, and strengthens capacity and sustainability for postgraduate education at Addis Ababa University (AAU) in Ethiopia. Starting in 2018, the IDCCM under the leadership of Neill Adhikari and Alberto Goffi has co-established a Critical Care Medicine fellowship program at AAU (TAAAC-CCM) delivered on site in the ICUs at Tikur Anbessa Specialized Hospital (TASH). Three times annually, Toronto faculty and trainees have travelled to TASH to participate in clinical rounds, provide clinical assistance to local ICU teams, and deliver teaching to trainees. The goal of TAAAC-CCM is to train local physicians to become CCM specialists and assume responsibility for the care of critically ill patients across Ethiopia.

Due to the pandemic, travel restrictions curtailed the on-site collaborative educational relationship. With interest from AAU, we designed an online intensive care webinar series to share knowledge and to create an educational opportunity for faculty and trainees at AAU. We hoped the sessions would attract bright and enthusiastic physicians to future CCM training.

A planning session identified local champions from UofT and AAU, and topics were developed collaboratively. We organized four 2-hour long sessions with four speakers per session – a mix of physicians and allied health professionals from AAU and UofT. 190 people registered to attend the events. Interaction was facilitated through multiple choice questions and feedback forms. The sessions are available at <https://vimeo.com/showcase/8309186>.

Each sessions had ~15-25 participants, primarily post-graduate residents from anesthesia, internal medicine, emergency medicine, and the pulmonary division, plus nurses from critical care and emergency medicine. Trainees identified barriers to choosing CCM as a career in Ethiopia, including limited formal programs, lack of funding for training, and uncertain financial security for graduates.

This cross-cultural TAAAC webinar series was original in numerous ways. AAU experts contributed to content selection and delivery based on current practices, resources and needs. Foci included not only knowledge, but also organization, quality improvement and the future of CCM in Africa. Above all, the webinars were a collaborative effort that drew expert speakers from all around the world (Ethiopia, Canada, USA, UK), who emphasized the delivery of high-quality care in in low-resource settings.

A NEW initiative from the Toronto Addis Ababa Academic Collaboration (TAAAC) - Critical Care Medicine

Intensive Care Review: Webinar Series 2021



OUR GOAL

- ©To share high-quality critical care knowledge in collaborative manner.
- ©To jointly create new educational opportunities in critical care medicine for faculty and trainees at Tikur Anbessa Specialized Hospital, Addis Ababa University (AAU) and faculty at University of Toronto (U of T).
- ©To attract bright and enthusiastic physicians to the field of critical care medicine.

TOPICS and DATES

Four 2-hour sessions, 3PM–5PM East Africa Time.
Featuring speakers from both AAU and U of T with interactive media.

| | |
|-----------|---|
| April 29: | ABC'S OF CRITICAL CARE |
| May 6: | COVID-19 & CRITICAL CARE |
| May 13: | QUALITY & SAFETY IN CRITICAL CARE |
| May 20: | CRITICAL CARE IN ETHIOPIA: PROJECTS & INITIATIVES |

FREE EVENT! REGISTER TODAY AT:

<http://tiny.cc/TAAACweb>



 **TAAAC** THE TORONTO ADDIS ABABA ACADEMIC COLLABORATION
Interdepartmental Division of Critical Care Medicine

Future directions:

- 1) *Webinars:* we plan to create and disseminate a needs assessment for trainees and faculty and optimize publicity and methods to promote interaction. We will also create a virtual CPD event for physicians attending in Ethiopian ICUs.
- 2) *Training:* Our AAU colleagues anticipate that a new group of fellows will be ready to start training by January 2022. We will work with experts across IDCCM to create a weekly web-based series of rounds and case discussions to complement on-site teaching trips, which we hope can start in 2022.

Sissi Cao

Critical Care Physician

Toronto

Dominique Piquette

Sunnybrook HSC

Alberto Goffi

Unity Health Toronto-St Michael's Hospital

Neill Adhikari

Sunnybrook HSC

Resources: <https://taaac.com/toronto-addis-ababa-academic-collaboration>

Announcement

In memory of Göran Hedenstierna

Dear colleagues,

On behalf of the community of researchers of the Hedenstierna Laboratory of Uppsala University, we sadly announce the death of Professor Göran Hedenstierna.

He has been Master of Medical Science and Mentor of a generation of brilliant young scientists.

Our thoughts go to his wife Lena and his family. May his generous soul rest in peace.

With profound sadness,
Miklós Lipcsey and Gaetano Perchiuzzi



*“Göran gave a wonderful lecture for the **Kavanagh Physiology Rounds** just a few weeks ago. He was a giant in respiratory physiology and a fantastic human being. He has been working and thinking of physiology until his last day. We will miss him greatly.”*

Laurent Brochard

THE ABSENT PRESENCE

For Brian Kavanagh

By: Christopher Parshuram, Andrew Helmers, Bhushan Katira, Haifa Mtaweh, Luciana Rodriguez-Guerineau, and Briseida Mema

“Lives interweave with other lives, and out of the tapestry arise hints at answers to questions that raze to the bone of life: What are the building blocks of character, of contentment, of lasting achievements?”

Maria Popova, *Figuring*

We are six intensivists whose otherwise diverse journeys borne of family, career, ideals, opinions, gender and race are inseparably interwoven by our fleeting time with Dr. Brian Kavanagh as his colleagues, mentees, students and friends.

In the past two years since his death, after the publications acknowledging and applauding his noteworthy contributions to science, education and practice, we have come to understand that the reality of his absence is different from the acute loss we felt when he died. Powerful memories of a vibrant individual fully engaged in life fill that void left by his physical absence.

As highly motivated academics, we each gravitated to Brian’s office seeking guidance. In the path of discovering ourselves – our passions, our callings – we were fortunate to meet him. He helped shape who we are today. He elevated rather than catered to our state at the time and helped us use our talents and passion to advance ourselves professionally and personally.

This essay is for our friend, for us, and for others. To remember and explain what he did and how he did it. We hope that ultimately we may replicate, in some small measure, the effective ways he helped us, so that we may help others. We seek to pay it forward.

Brian had a **genuine interest** in people and took great satisfaction from their successes. His curiosity had no bounds and his will to understand complex problems was unparalleled. As we sat in his umbra, he *listened*, applying his abundant intellect to understand the circumstances as a prelude to his ever honest and sage advice. Brian’s full concentration empowered us to take our work or dilemma to heart; he had the ability to change our own inner focus. We left his office inspired and motivated to improve ourselves and our work, indeed, to move beyond ourselves just as Brian so often seemed to forget himself, like he was part of something larger. And of course, we invariably left his office laughing, too: humor was a constant cornerstone in the perspective that Brian imparted to us.

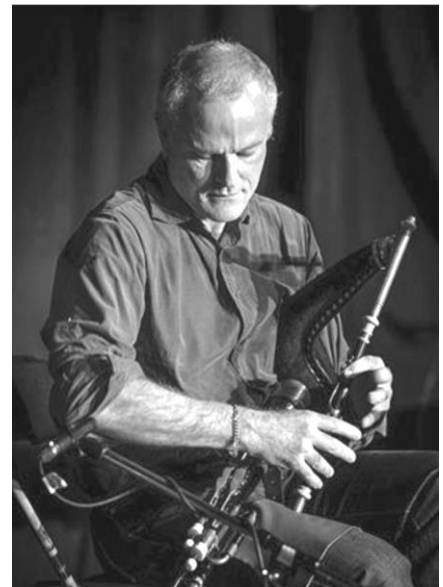


Photo: Dr. Brian Kavanagh

Brian taught us to be curious about ourselves and the world around us, and his curiosity was contagious. He was no stranger to modern devices but was inseparable from his “archaic” notebook: “where you can write down questions, ideas, things to learn about, and your own thoughts”. He knew when to gently berate us for a lack of curiosity, and also when to use his own curiosity to draw others out, to encourage them to articulate their passion.

His genuine interest in people around him was fueled by his abundant **generosity**. He **took** time he could have otherwise used to pursue his own career to help us meet research deadlines and cope with administrative duties. He readily added items to his ever-expanding “to-do list”. For him, career was meaningful because of, not in

spite of, those opportunities to help: “It is totally ok to spend hours writing a thoughtful letter of reference for someone. It is much more important than writing a manuscript. Don’t complain about it taking time from your evening or weekend. It is time spent that will make you feel fulfilled because you were able to help someone else.” Those who knew him best knew that Brian was never properly in a rush, certainly not when it mattered. Whether seeking guidance about your career, troubleshooting a complex clinical question, or simply unburdening yourself about something – it felt as though he had all the time in the world.

Brian **recognized and valued** all people around him. He integrated everyone on the team, from the most junior trainee to his most senior colleagues. This was evident both philosophically and physically as he would corral his large ICU rounding team and arrange us in a circle, shoulder to shoulder, where everyone was included and heard. He discretely offered and provided help (no matter who was asking) and never credited himself for a job well done. Despite giving lectures to audiences of hundreds at international conferences, it was the trainee lecture evaluations he would proudly show to his colleagues. He also recognized and spoke fondly of those from whom he had learned the most; he would praise the substance and style of Martin Tobin, the way in which JB West presented his research, the simplicity with which Charlie Bryan explained complex concepts and the tremendous impact of Barrie Fairley. Though some of us never had the privilege of meeting these great people, we learned from them through Brian. In a similar way these past two years, it has been Brian’s legacy and lessons that we find ourselves attempting to channel in our own professional life.

While Brian applauded excellence, he encouraged and practiced **humility**. He taught that “research is not about being smart, it’s realizing you are ignorant”. When acknowledging our achievements, which he often played a part in, he reminded us to “wear our success less and congratulate others on their achievement or, more importantly, their efforts”. Year in, year out, we all witnessed the energy with which Brian taught us about ventilation, in the classroom and at the bedside. Though his knowledge and understanding far surpassed most, he patiently imparted so much knowledge to all levels of learners with the utmost respect and humility. Brian always had an ear for the most junior person in the room, and truly listened before teaching with enthusiasm and grace. In clinically contentious cases he was the first to acknowledge the unknown. He was always immensely supportive of us all, without losing his uncanny ability to remind us not to take ourselves too seriously.

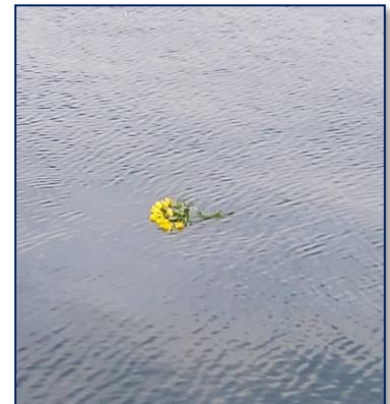


Photo: Flowers at the place where his ashes were scattered

Brian was always **helpful**. He had an uncanny ability to assess how much help was needed and when. On many occasions when he had something figured out, he would know when to hold back, when to allow learners to figure it out for themselves. When he offered help it was with clear intent and a greater goal in mind. He used to approach our desks, start a casual talk, and before you knew it the direction of the conversation would switch and sway into some project or problem that you hardly knew you were struggling with; he had an uncanny ability in those moments to seed a thought in your mind, making a suggestion or describing the benefits of doing this or that – and then the casual talk would resume and you were left in the possession of a new solution or idea. Sometimes his help was more concrete. He would help us make PowerPoint slides, so they were clear and concise to the audience. He would privately practice with quieter trainees to use louder voices in intimidating rooms or helped us learn how to teach others. His help was graded, thoughtful and calculated. Brian knew how to help propel you forward or reel you back. He would push us out of our comfort zone while always having our backs with his expertise and guidance.

Through all the support he provided, he made sure his **expectations** were clear. He expected us to give impeccable care to our patients and see our profession as a calling. While he himself helped us or he connected us with other remarkable people he made sure we kept our side of the deal, saying once “And when you do an excellent job, because you’ll work hard not to disappoint, you’ll have learned a tremendous amount”. His own

professional integrity, in clinical and academic work, was an unwavering hallmark of all he did. Quite late into his illness he felt a sense of duty to fulfill his responsibilities for grants he had won. Before presenting to hospital for the last time, quite unwell, he completed and submitted an academic review. The following morning, having received some treatment with a clearer mind, he retracted his submission. It was not at the standard or level that he expected of himself and for Brian that was unacceptable. He taught us to be uncompromising in the standard to which we hold ourselves, to set high expectations and strive always to be excellent.

Brian also remained a dedicated, tender and compassionate **friend**. He **offered** advice on just about everything, from investments to our love lives, from secondhand furniture to breadmaking. There was always an immense desire to share any experience and insights he had gleaned professionally or personally. He taught us about preparing for retirement, for that somewhat daunting switch, while proudly telling us his own plan that included playing music and fixing instruments. He explained the value of writing handwritten cards to people and taking great care of the writing within. These personal insights and pearls from Brian were woven into his mentorship and into the importance and meaning with which he imbued all of his close relationships.

Moreover, Brian showed us how to stay true to our **principles**. He stood tall in his personal convictions in science, clinical care, and friendship. He taught us that the solution to uncertainty does not lie in consensus, and that an uncompromising commitment to the best patient care is the shortest path to clarity in decision-making. We learned from him how to advocate, with a healthy impatience, for what is difficult but necessary, and how to collaborate effectively; he encouraged us to “welcome and encourage a different or opposing opinion/viewpoint to your own because everyone benefits”. While fluent in clinical protocols and guidelines, he impressed upon us the importance of putting the patient front and centre, with truly compassionate care. His sensitivity in end-of-life cases was remarkable, and his clarity of thinking was helpful to many families.

We all are aware of our own finitude, but we distract ourselves with the busyness of living. When the end is clearly imminent we ask: what is the meaning of it all? Brian allowed us to be close to him through those final moments. He remained a teacher and taught, between radiation and clinic appointments, hiding his shortness of breath in online sessions. He remained a mentor and wrote nomination and promotion letters. He remained a friend and consoled us for his impending departure while grieving his own death. He remained an example of a colleague with honesty and integrity, and he died as he had lived – even at the end, he adhered to his own practice of “aggressive but not futile care”.

The years following his death has been characterized by so many moments in which we ask “what would Brian have thought, said, advised or done”. Every effort to answer those questions is on the one hand a stinging barb, a reminder of the sorrow we all feel now that he is gone. Yet at the same time, with every affirmation that *This* is how Brian would approach it, we bring some part of Brian back among us. As we continue to weave our own collective tapestry – of learning, of professional life, of family life, of healthy debates in unhealthy pubs, of music, of books, of calm evenings by the water and harried evenings at a patient’s bedside – there is now in all of this an indelible mark left by our friend, teacher and colleague, whose generous legacy compels us to pay it forward: to patiently teach and learn, to stand up for what we believe in and to be continuously curious about the world around us.

Thank you, Brian

So we end with Brian’s favourite poet, WB Yeats:

*“A brief parting from those dear
Is the worst man has to fear.
Though grave-digger’s toil is long,
Sharp their spades, their muscles strong,
They but thrust their buried men
Back in the human mind again.”*

Virtual Art Slutsky Research Day on ZOOM!!

June 22, 2021

Once again this year, COVID-19 couldn't stop our Annual Art Slutsky Day!!. There is enormous resilience within the group and congratulations to everyone for your courage and dogged determination to continue with your academic contributions during a very challenging and historic time for our specialty. Virtual Art Slutsky Day was another great success and a wonderful opportunity for connection and celebration of our IDCCM community at the University of Toronto!

We were again honoured to pay tribute to the legacy of Art Slutsky and to highlight the academic diversity of contributions from our pediatric, adult and interprofessional critical care membership across the University of Toronto.

We had another very strong attendance at AS Day this year, including up to **110** faculty, trainees, and other colleagues who joined us through the ZOOM meeting. Our faculty judges vetted **43** abstracts encompassing basic and clinical science, quality, physiology and education contributed by our adult and pediatric trainees. Consistent with previous years, the quality and depth of the submitted work was impressive, and we have so much to laud within our university group.

Distinguished Speakers:

Dr. Greet Van Den Berghe: We were privileged to have Dr. Van Den Berghe serve as our distinguished featured speaker this year and to give an innovative translational talk on “**Epigenetic changes: a Biological Basis of the Long-term Legacy of Critical Illness**”. This served to highlight the importance of linking translational work to granular clinical outcomes and she presented fascinating early data linking parenteral nutrition in neonates to long-term cognitive dysfunction.

Drs. Cory Anderson and Catherine Proulx (Pediatrics) and Vatsal Trivedi, Cameron Landry, Stephan Von During (Adult) shared some wonderfully poignant and also humorous videos reflecting the bravery and perseverance that our fellows have shown consistently throughout the COVID-19 crisis.

- **We also continued our Tradition of the Annual Interprofessional Award.** The competition remained fierce and we continued to grant two awards- one in each of pediatrics and adult critical care. **Dr. Craig Dale** (Sunnybrook Health Sciences Centre) was recognized for his exceptional research leadership and specific contributions in oral health in critical illness and pain evaluation and management. **Ms. Angela Trope** (SickKids) was recognized for her extraordinary multi-decade leadership in pioneering early Pediatric critical care pharmacy and its crucial and foundational role in our interprofessional team.



Photo: Art Slutsky Day 2019

Oral and Abstract Presentation Awards

The lead authors of the top 12 abstracts were:

- | | |
|--------------------|-----------------------|
| 1. Sissi Cao | 7. Manuel Tisminetsky |
| 2. Jady Liang | 8. Jose Dianti |
| 3. Sabri Soussi | 9. Kate Kazlovich |
| 4. Sergio Pereira | 10. Laura Dragoi |
| 5. Daniel Ehrmann | 11. Jasmin Khateeb |
| 6. Annia Schreiber | 12. Bruno Ferreyro |

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

CONGRATULATIONS to:

1st Place Overall Best Abstract – Dr. Jady Liang

2nd Place Overall Best Abstract – Dr. Sabri Soussi

There were so many exceptional abstracts this year and we invite you to explore the abstract booklet via this link: <https://www.criticalcare.utoronto.ca/news/virtual-art-slutsky-research-day-2021>

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

| | | |
|-------------------|-------------------|------------------|
| Claudia DosSantos | John Marshall | Haibo Zhang |
| Alejandro Floh | Laurent Brochard | Matteo Parotto |
| Chris Yarnell | Irene Telias | Annemijn Jonkman |
| Mike Sklar | Lorenzo Del Sorbo | Nava Maham |
| Margaret Herridge | Hannah Wunsch | Gail Annich |
| Preeti Dhar | Neill Adhikari | Briseida Mema |
| Azad Mashari | | |

IDCCM Divisional Awards

The residents and clinical fellows awarded the ***John Granton Award***, 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 ***Simon Abrahamson Award***, for outstanding academic performance in Critical Care Medicine to **Drs. Onion Gerald Vergara Ubaldo (Adult) and Prasant Dev Aravind (Peds)** who were recognized for exceptional research productivity, wonderful collegiality and leadership.

The ***John Laffey Award*** 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 was: **Dr. Shaurya Taran**

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

| | |
|---|---|
| Sunnybrook Hospital: Dr. Federico Angriman | St. Michaels: Dr. Bijan Teja |
| Toronto General Hospital: Dr. Ghislaine Doufle | Toronto Western Hospital: Dr. Nava Maham |
| Mount Sinai: Dr. Laveena Munshi | SickKids Hospital: Dr. Mjaye Mazwi |

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!!

We look forward to seeing you all at the Mill St. Brew Pub night and the AS Day in June 2022!! (Fingers Crossed!)



Photo: Art Slutsky Day 2018

Alliance Day April 8, 2021

Building Follow-up and a Care Continuum in Critical Illness; Building a Translational Biology Program as part of Follow-up Care.

The tradition of Alliance Day is to foster research relationships across the adult and pediatric teaching hospitals across the IDCCM. For this second Alliance Day this 20/21 academic year, we chose to highlight follow-up programs and translational research work across the city.

Even in the context of very busy clinical schedules, 65 faculty and trainees were able to attend these wonderful presentations!

The afternoon began with an exceptional Plenary talk by **Dr. Michael Matthay –‘Expanding Research in Pediatric and Adult ICUs –Opportunities for Vertical and Horizontal Studies’** and this really set the stage beautifully for the subsequent presentations on post ICU follow-up.

1. **Margaret Herridge** gave an overview on the IDCCM follow-up study inventory including: **COIN/COHO networks in critical care oncology; PCOPS- predicting outcomes in critically ill oncology patients; UHN ECLS Program; SickKids ECLS Program; TEGMO; RECOVER; CANCOV.**
2. **Barbara Haas/Bourke Tillmann** spoke about follow-up after trauma
3. **Elizabeth Wilcox/Carmela Tartaglia** gave an overview on their work in Sleep and Cognitive follow-up after Critical Illness
4. **Christina Maratta** discussed Follow-up after Pediatric Critical Illness
5. **Craig Dale** presented a summary of Interprofessional research in the Care Continuum-Lessons from the Choral Study

Jamie Hutchison followed with the second Plenary session of the day ‘Building a Translational Biology Program as part of a Clinical Research Program’ This was extremely insightful and well received and was a great introduction to the afternoon sessions on basic and translational work.

1. **Lorenzo Del Sorbo** gave a timely overview on Lessons from ECMO/Lung injury and COVID
2. **Claudia Dos Santos/Jane Batt** presented some of their ongoing work on lessons from COLOBILI and MEND-ICU.

Thanks so much to each of you for supporting these events and for helping to celebrate all the exceptional achievements of our University of Toronto IDCCM community!! Wishing you and your families’ safety, good health and strength as we all rest and regroup now after this third wave.



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

IDCCM Visiting Professor Program

During the spring of 2021 we welcome two superb Visiting Professors (Virtually) to Toronto.

On March 23rd, **Dr. Charlotte Summers** joined us from Cambridge University in the United Kingdom where she is a University Lecturer in Intensive Care Medicine and the Dean, Fellow, and Director of Studies in Clinical Medicine at Selwyn College. She spoke on “The Neutrophil in ARDS.”

Then, on June 1st, **Professor J Randall (Randy) Curtis** joined us from the University of Washington where he is Professor and the A. Bruce Montgomery – American Lung Association Endowed Chair in Pulmonary and Critical Care Medicine as well as the Director of the Cambria Palliative Care Centre of Excellence. He spoke on “Measuring and improving palliative care in the ICU: A career in review.” We were honored to be joined by Randy’s family as well as many colleagues and friends from around the world, with over 200 participants.

We are very grateful to both international speakers for their time and expertise!



Hannah Wunsch
Associate Director of Research- IDCCM
University of Toronto

High-Impact IDCCM PUBLICATIONS (Jan-June 2021)

[Interleukin-6 Receptor Antagonists in Critically Ill Patients with Covid-19.](#)

REMAP-CAP Investigators, Gordon AC, Mouncey PR, Al-Beidh F, Rowan KM, Nichol AD, Arabi YM, Annane D, Beane A, van Bentum-Puijk W, Berry LR, Bhimani Z, Bonten MJM, Bradbury CA, Brunkhorst FM, Buzgau A, Cheng AC, Detry MA, Duffy EJ, Estcourt LJ, Fitzgerald M, Goossens H, Haniffa R, Higgins AM, Hills TE, Horvat CM, Lamontagne F, Lawler PR, Leavis HL, Linstrum KM, Litton E, Lorenzi E, Marshall JC, Mayr FB, McAuley DF, McGlothlin A, McGuinness SP, McVerry BJ, Montgomery SK, Morpeth SC, Murthy S, Orr K, Parke RL, Parker JC, Patanwala AE, Pettilä V, Rademaker E, Santos MS, Saunders CT, Seymour CW, Shankar-Hari M, Sligl WI, Turgeon AF, Turner AM, van de Veerdonk FL, Zarychanski R, Green C, Lewis RJ, Angus DC, McArthur CJ, Berry S, Webb SA, Derde LPG. *N Engl J Med.* 2021 Apr 22;384(16):1491-1502.

[Resumption of Cardiac Activity after Withdrawal of Life-Sustaining Measures.](#)

Dhanani S, Hornby L, van Beinum A, Scales NB, Hogue M, Baker A, Beed S, Boyd JG, Chandler JA, Chassé M, D'Aragon F, Dezfulian C, Doig CJ, Duska F, Friedrich JO, Gardiner D, Gofton T, Harvey D, Herry C, Isac G, Kramer AH, Kutsogiannis DJ, Maslove DM, Meade M, Mehta S, Munshi L, Norton L, Pagliarello G, Ramsay T, Rusinova K, Scales D, Schmidt M, Seely A, Shahin J, Slessarev M, So D, Talbot H, van Mook WNKA, Waldauf P, Weiss M, Wind JT, Shemie SD; Canadian Critical Care Trials Group; Canadian Donation and Transplantation Research Program. *N Engl J Med.* 2021 Jan 28;384(4):345-352.

[Interleukin-6 receptor blockade in patients with COVID-19: placing clinical trials into context.](#)

Angriman F, Ferreyro BL, Burry L, Fan E, Ferguson ND, Husain S, Keshavjee SH, Lupia E, Munshi L, Renzi S, Ubaldo OGV, Rochweg B, Del Sorbo L. *Lancet Respir Med.* 2021 Jun;9(6):655-664.

[Outcomes in patients treated with chimeric antigen receptor T-cell therapy who were admitted to intensive care \(CARTTAS\): an international, multicentre, observational cohort study.](#)

Azoulay É, Castro P, Mamar A, Metaxa V, de Moraes AG, Voigt L, Wallet F, Klouche K, Picard M, Moreau AS, Van De Louw A, Seguin A, Mokart D, Chawla S, Leroy J, Böll B, Issa N, Levy B, Hemelaar P, Fernandez S, Munshi L, Bauer P, Schellongowski P, Joannidis M, Moreno-Gonzalez G, Galstian G, Darmon M, Valade S; Nine-I investigators. *Lancet Haematol.* 2021 May;8(5):e355-e364.

[Sarilumab in patients admitted to hospital with severe or critical COVID-19: a randomised, double-blind, placebo-controlled, phase 3 trial.](#)

Lescure FX, Honda H, Fowler RA, Lazar JS, Shi G, Wung P, Patel N, Hagino O; Sarilumab COVID-19 Global Study Group. *Lancet Respir Med.* 2021 May;9(5):522-532.

[Trends in COVID-19-related in-hospital mortality: lessons learned from nationwide samples.](#)

Madahar P, Wunsch H, Jha P, Slutsky AS, Brodie D. *Lancet Respir Med.* 2021 Apr;9(4):322-324.

[A simple nomogram for predicting failure of non-invasive respiratory strategies in adults with COVID-19: a retrospective multicentre study.](#)

Liu L, Xie J, Wu W, Chen H, Li S, He H, Yu Y, Hu M, Li J, Zheng R, Li X, Qiu H, Tong Z, Du B, Fan E, Yang Y, Slutsky AS. *Lancet Digit Health.* 2021 Mar;3(3):e166-e174.

[COVID-19: a heavy toll on health-care workers.](#)

Mehta S, Machado F, Kwizera A, Papazian L, Moss M, Azoulay É, Herridge M. *Lancet Respir Med.* 2021 Mar;9(3):226-228.

[Clinical trials in critical care: can a Bayesian approach enhance clinical and scientific decision making?](#)

Yarnell CJ, Abrams D, Baldwin MR, Brodie D, Fan E, Ferguson ND, Hua M, Madahar P, McAuley DF, Munshi L, Perkins GD, Rubinfeld G, Slutsky AS, Wunsch H, Fowler RA, Tomlinson G, Beitler JR, Goligher EC. *Lancet Respir Med.* 2021 Feb;9(2):207-216.

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[Association of the 2016 US Centers for Disease Control and Prevention Opioid Prescribing Guideline With Changes in Opioid Dispensing After Surgery.](#)

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[All-Cause and Cancer-Specific Death of Older Adults Following Surgery for Cancer.](#)

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[Redefining Health Care Utilization as a Quality Measure for Goal Concordance at the End of Life.](#)

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[Simulation-Based Estimation of SARS-CoV-2 Infections Associated With School Closures and Community-Based Nonpharmaceutical Interventions in Ontario, Canada.](#)

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[Respiratory Support During the COVID-19 Pandemic: Is It Time to Consider Using a Helmet?](#)

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[Media Portrayals of Outcomes After Extracorporeal Membrane Oxygenation.](#)

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Haas B, Jeon SH, Rotermann M, Stepler M, Fransoo R, Sanmartin C, Wunsch H, Scales DC, Iwashyna TJ, Garland A. *JAMA Surg*. 2021 Jan 1;156(1):51-59.
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Goligher EC, Peñuelas O. *Am J Respir Crit Care Med*. 2021 Apr 26. doi: 10.1164/rccm.202104-0844ED. Online ahead of print. PMID: 33901412
[Ventilatory Variables and Mechanical Power in Patients with Acute Respiratory Distress Syndrome.](#)

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Toronto 1858 (Sketches from the Thomas Fisher Rare Book Library). Some nice things from the past...and some bad too.



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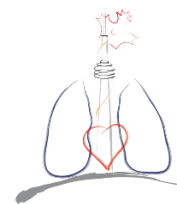
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Thank you everyone. Stay safe and take care!

