

CURRICULUM VITAE

NAME: EDDY FAN

DATE PREPARED: July 1, 2023

BUSINESS ADDRESS: Toronto General Hospital
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CITIZENSHIP: Canadian

SIGNED:



Education

DEGREES

Doctor of Philosophy, Graduate Training Program in Clinical Investigation Johns Hopkins School of Medicine/Bloomberg School of Public Health Johns Hopkins University, Baltimore, Maryland (Supervisor: Dr. Peter Pronovost)	2007-2013
Doctor of Medicine Schulich School of Medicine and Dentistry University of Western Ontario, London, Ontario	1997-2001
Bachelor of Science (High Distinction), Molecular Genetics and Biology Faculty of Arts and Science, St. George Campus University of Toronto, Toronto, Ontario	1994-1997

POSTGRADUATE MEDICAL TRAINING

Postgraduate Residency Training, Adult Critical Care Medicine University of Toronto, Toronto, Ontario	2005-2007
Chief Medical Resident, Mount Sinai Hospital/Toronto General Hospital University of Toronto, Toronto, Ontario	2004-2005
Postgraduate Residency Training, Core Internal Medicine University of Toronto, Toronto, Ontario	2001-2004

Certification and Licensure

Licentiate of the Medical Council of Canada, # 95647	2003
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Royal College of Physicians and Surgeons of Canada Specialist Certificate in Internal Medicine	2005
Subspecialist Certificate in Critical Care Medicine	2007
College of Physicians & Surgeons of Ontario, Medical License # 76116	2001-present
Diplomate, American Board of Internal Medicine, # 287365	2006-2016
Maryland Board of Physicians, Medical License # D0065922	2007-2010

Appointments

FACULTY APPOINTMENTS

Professor, Interdepartmental Division of Critical Care Medicine Department of Medicine, Faculty of Medicine University of Toronto, Toronto, Ontario	July 2023-present
Professor, Institute of Health Policy, Management and Evaluation Faculty of Medicine University of Toronto, Toronto, Ontario	July 2023-present
Full Member, Institute of Medical Science School of Graduate Studies University of Toronto, Toronto, Ontario	Nov 2020-present
Associate Professor, Interdepartmental Division of Critical Care Medicine Department of Medicine, Faculty of Medicine University of Toronto, Toronto, Ontario	July 2017-June 2023
Associate Professor, Institute of Health Policy, Management and Evaluation Faculty of Medicine University of Toronto, Toronto, Ontario	July 2017-June 2023
Assistant Professor, Institute of Health Policy, Management and Evaluation Faculty of Medicine University of Toronto, Toronto, Ontario	Nov 2013-June 2017
Associate Member, Institute of Medical Sciences School of Graduate Studies University of Toronto, Toronto, Ontario	May 2013-Oct 2020
Assistant Professor, Interdepartmental Division of Critical Care Medicine Department of Medicine, Faculty of Medicine University of Toronto, Toronto, Ontario	July 2011-June 2017
Instructor, Division of Pulmonary and Critical Care Medicine Department of Medicine, Johns Hopkins Medical Institutions Johns Hopkins University, Baltimore, Maryland	July 2007-Dec 2010

HOSPITAL APPOINTMENTS

Scientist, Toronto General Hospital Research Institute University Health Network, Toronto, Ontario	Oct 2018-present
Site Lead, Critical Care Research Toronto General Hospital, Toronto, Ontario	Jan 2018-Jan 2019
Director, Critical Care Research University Health Network and Mount Sinai Hospital, Toronto, Ontario	Aug 2015-Jan 2018
Medical Director, Extracorporeal Life Support (ECLS) Program Toronto General Hospital, Toronto, Ontario	June 2012-present
Staff Physician, Critical Care Medicine and Respiriology University Health Network and Mount Sinai Hospital, Toronto, Ontario	2011-present
Associate Staff Physician, Critical Care Medicine and Respiriology University Health Network and Mount Sinai Hospital, Toronto, Ontario	2007-2011
Attending Intensivist Johns Hopkins Hospital, Baltimore, Maryland	2007-2010
Intensivist (Courtesy Staff) Johns Hopkins Bayview Medical Center, Baltimore, Maryland	2007-2010
Internal Medicine and Critical Care Locum Thunder Bay Regional Health Sciences Centre, Thunder Bay, Ontario	2006-2007
Internal Medicine Locum University Health Network, Toronto, Ontario	2005-2007
Internal Medicine Locum Mount Sinai Hospital, Toronto, Ontario	2005-2006
Internal Medicine Locum St. Michael's Hospital, Toronto, Ontario	2005-2006

Honours and Awards

EXTERNAL AWARDS

Merit Award Department of Medicine, University of Toronto	2020-2023
Presidential Citation Society of Critical Care Medicine	2020
Henning Potoppidan Visiting Professorship Massachusetts General Hospital, Boston, MA	2019
New Investigator Award	2015-2020

Canadian Institutes of Health Research	
Fellowship Award Canadian Institutes of Health Research	2007-2012
Detweiler Travelling Fellowship Royal College of Physicians and Surgeons of Canada	2007-2008

POSTGRADUATE AWARDS

Clinical Teaching Award – Toronto General Hospital Interdepartmental Division of Critical Care Medicine University of Toronto, Toronto, Ontario	2013, 2014, 2020
Michael F. X. Glynn Teaching Award University Health Network, Toronto, Ontario	2005
Clinical Teaching Award (Housestaff) University Health Network, Toronto, Ontario	2005
Wightman-Berris Academy Teaching Award University of Toronto, Toronto, Ontario	2005
Outstanding Housestaff Award Mount Sinai Hospital, University of Toronto	2004-2005

GRADUATE AWARDS

Phi Beta Kappa Honor Society Johns Hopkins University, Baltimore, Maryland	2013
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UNDERGRADUATE AWARDS

Samuel Lunenfeld Summer Student Research Award Mount Sinai Hospital, Toronto, Ontario	1998
Trinity College Ashbaugh Scholarship University of Toronto, Toronto, Ontario	1994-1997
University of Toronto Dean's Honour List University of Toronto, Toronto, Ontario	1994-1997
Canada Scholar University of Toronto, Toronto, Ontario	1994-1997
University of Toronto Scholar Award University of Toronto, Toronto, Ontario	1994
Trinity College Entrance Scholarship University of Toronto, Toronto, Ontario	1994
Marie Pick Memorial Scholarship in English York Region Board of Education, Richmond Hill, Ontario	1994

MISCELLANEOUS

Clarivate (Web of Science) Highly Cited Researcher	2022
University of Toronto Department of Medicine Merit Award	2020-2023
John Marshall Interprofessional Award (Toronto General Hospital MSICU)	2013
Dr. Allen DeVilbiss Literary Award (American Association for Respiratory Care)	2011
Marquis Who's Who in America	2011

Professional Affiliations & Activities

PROFESSIONAL ORGANIZATION MEMBERSHIPS

Ontario Medical Association	1997-present
Canadian Medical Association	1997-2019
Royal College of Physicians and Surgeons of Canada, Fellow	2005-present
American Thoracic Society	2007-present
Society of Critical Care Medicine	2012-present
Canadian Critical Care Society	2012-present
European Society of Intensive Care Medicine	2012-present
Canadian Critical Care Trials Group	2012-2016, 2019-2021

SCHOLARLY AND PROFESSIONAL ACTIVITIES – INTERNATIONAL

Reviewer for Scientific Journals

American Journal of Medicine	2010-2013
American Journal of Respiratory and Critical Care Medicine	2008-2009, 2011-present
Annals of the American Thoracic Society	2013-present
Annals of Internal Medicine	2010
Archives of Physical Medicine and Rehabilitation	2009
British Medical Journal	2008-2010, 2012-2014, 2019-present
BMC Pulmonary Medicine	2013
British Medical Journal Case Reports	2011
British Medical Journal Quality & Safety	2011-2014
Canadian Medical Association Journal	2013, 2019-present
Chest	2010-present
Cochrane Collaboration - Anesthesia Review Group	2006, 2013
Critical Care	2008-present
Critical Care Medicine	2008-present
Intensive Care Medicine	2013-present
Intensive Care Medicine Experimental	2014-present
Intensive and Critical Care Nursing	2012
JAMA	2020-present
Journal of Applied Physiology	2012
Journal of Critical Care	2008-2009, 2012-present
Journal of Trauma and Treatment	2012
Lancet Respiratory Medicine	2014-present
Medical Care	2012-2014

New England Journal of Medicine	2012-2018
Physical Therapy Journal	2012-2015
PLoS ONE	2010-2011, 2014-2018
Respiratory Care Journal	2008-2010, 2012-present
Respirology	2011
Thorax	2012

Editorial Board Membership

CHEST Critical Care (Deputy Editor)	Nov 2022-present
American Journal of Respiratory and Critical Care Medicine	Oct 2022-present
Respiratory Care	2013-present
Intensive Care Medicine (Board of Reviewers)	2013-present
Annals of the American Thoracic Society	2014-2016

Reviewer for Funding Agencies

University of Leuven (KU Leuven) Research Council and IOF Council C2 Grants	Feb 2017
MSI Foundation Alberta Research Grants	May 2018
United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP) Acute Lung Injury Peer Review Panel	2018, 2019
COVID-19 Therapeutics Peer Review Panel	July 2020
COVID-19 Surveillance, Triage, and Monitoring Peer Review Panel	July 2020
Ministry of Health Singapore National Medical Research Council Grants	August 2018, March 2021
AIRC Foundation for Cancer Research (Milan, Italy) Research Grant Review Panel	June 2019-present
National Institutes of Health (NIH) Early Independence Award Review Panel	December 2019
NHLBI ARDS, Pneumonia, Sepsis Phenotyping Consortium Review Panel	November 2022
German Research Foundation (Deutsche Forschungsgemeinschaft [DFG]) Clinical Trials Programme	2021-present

Other International Activities

ACCP/ATS Liberation from Mechanical Ventilation Clinical Practice Guideline Panel Member	2014-2016
International ECMO Network (ECMONet) Executive Committee	2013-present
Chair, Data Committee	2013-present
Chair, North American ECMONet	Feb 2017-present

Cardiac Safety Research Consortium (CSRC) Co-Lead, Standardization of Clinical Outcomes for Shock Research	2021-2022
European Society of Intensive Care Medicine (ESICM) Acute Respiratory Failure Section Large observational study to understand the global impact of severe acute respiratory failure: LUNG-SAFE Study – Executive Committee	2012-2018
A strategy of ultraprotective lung ventilation with extracorporeal CO ₂ removal for new-onset moderate to severe ARDS: The SUPERNOVA Trial – Executive Committee	2014-2018
Extracorporeal Life Support Organization (ELSO) Content Editor, Adult Respiratory Failure Guideline Section	2013-2015
Co-Chair, Adult ECMO Working Group	2016-2018
Chair, Device Development Group Subcommittee	2019-2021
Chair, Research	Jan 2021-Feb 2023
ELSO Conference Planning Committee	2017-present
ELSO-SCCM Task Force	2017-2020
Steering Committee	Jan 2021-Feb 2023
United Kingdom Intensive Care Society Management of Acute Hypoxaemic Respiratory Failure Guideline Development Panel International Consultant/Panel Member	2013-2017
Johns Hopkins University Outcomes After Critical Illness and Surgery (OACIS) Research Group Investigator	2008-2013
International Meeting of Physical Medicine and Rehabilitation in the Critically Ill Organizing Committee	2007-2010
American Thoracic Society Consensus Conference on Acquired Weakness in Critical Illness Planning Committee	2009-2010
Critical Care Assembly Program Committee	2010-2015, 2020-2021
Chair-Elect	2018-2019
Chair	2019-2020
Critical Care Assembly Planning Committee	2012-2015
Critical Care Assembly Nominating Committee	2014-2015
Documents Development and Implementation Committee	2016-2017
Mechanical Ventilation in Adults with ARDS Clinical Practice Guidelines Committee	
Chair	2014-2017
Chair, Update	Jan 2021-present
International Conference Committee	2018-2020

Society of Critical Care Medicine (SCCM) Scientific Review Committee	Jan 2014-Jan 2017
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SCHOLARLY AND PROFESSIONAL ACTIVITIES – PROVINCIAL/NATIONAL

Royal Society of Canada COVID-19 Task Force Critical Care Workgroup	Aug 2021-June 2022
Canada Critical Care Forum Co-Chair, Scientific Program	2020-present
Toronto Central Local Health Integration Network (TC-LHIN) Critical Care Quality Committee Member Co-Lead, Ventilation Quality Initiative	2013-2015 2019-2020
Technology Evaluation in the Elderly Network (TechValue Net) Scientific Review Committee Member Research Management Committee Member	2012-2015 2012-2013
Health Quality Ontario (HQO) Expert Panel Member "Episode of Care" Expert Advisory Panel to Inform Quality-based Funding for COPD	2012, 2014
Expert Consultant Health Technology Assessment: ECMO for Cardiac Indications	July 2018-July 2019
Critical Care Services Ontario (CCSO) ECMO Reference Group Co-Chair, Provincial ECMO Network	2018-2019 Dec 2022-present
Ontario Critical Care Review Course Organizer and Co-Chair	2007
Canadian Chief Medical Resident Conference Lead Organizer	2005

SCHOLARLY AND PROFESSIONAL ACTIVITIES – UNIVERSITY OF TORONTO

Interdepartmental Division of Critical Care Medicine, University of Toronto

Critical Care Medicine Residency Selection Committee	2011-2015
Critical Care Medicine Residency Training Committee	2005-2007
Critical Care Medicine Education Committee	2005-2007

Department of Medicine, University of Toronto

Continuing Faculty Appointment Review (CFAR) Committee	2021-present
Internal Medicine Royal College Lecture Series Lead Organizer	2005
Internal Medicine Postgraduate Residency Training Committee	2002-2005

Department of Medicine, University Health Network

UHN Health Information System (HIS) Physician Champion	Jan 2021-present
UHN Advanced Clinical Documentation RFP Project	
Clinical Program Content and Functionality Panel Member	2012-2013
Critical Care Due Diligence Lead	2013-2014

Department of Medicine, Mount Sinai Hospital

Research Ethics Board	2011-2013
Pharmacy and Therapeutics Committee	2011-2013
Education Committee	2003-2004
Summer Student Research Program Liason Samuel Lunenfeld Research Institute	1998

Faculty of Medicine and Dentistry, University of Western Ontario

Best Curriculum on Earth Committee	1997-1999
Medical School Admissions Committee	1997-1998

Peer-Reviewed Grants & Awards

<u>Evaluating Subphenotypes in Immunocompromised Patients with Acute Respiratory Failure</u>	April 2023-Mar 2026
Role: Co-Principal Investigator	
Granting Agency: Canadian Institutes of Health Research (CIHR) Project Grant	
Funds Granted: \$455,176	
<u>Volatile Anesthetic Pharmacokinetics during Extracorporeal Membrane Oxygenation</u>	July 2023-June 2025
Role: Principal Investigator	
Granting Agency: PSI Foundation Clinical Research Grant	
Funds Granted: \$113,000	
<u>Driving Pressure-Limited Ventilation in Hypoxemic Respiratory Failure: The DRIVE RCT</u>	Sept 2022-Aug 2025
Role: Co-Principal Investigator	
Granting Agency: Canadian Institutes of Health Research (CIHR) Clinical Trial Projects	
Funds Granted: \$7,078,341	
<u>The Corticosteroid Early and Extended (CORT-E2) Randomized Controlled Trial</u>	Sept 2022-Aug 2025
Role: Co-Principal Investigator	
Granting Agency: Canadian Institutes of Health Research (CIHR) Clinical Trial Projects	
Funds Granted: \$3,412,833	
<u>Non-invasive Ventilation and Dexmedetomidine in Critically Ill Adults: A Pragmatic Randomized Controlled Trial (inDEX)</u>	Sept 2022-Aug 2025
Role: Co-Investigator	
Granting Agency: Canadian Institutes of Health Research (CIHR) Clinical Trial Projects	

Funds Granted: \$3,658,614

<u>CATCH: Creating Access to Transplant for Candidates who are High Risk</u> Role: Co-Investigator Granting Agency: NIH/NHLBI Lung Transplant Consortium (1U011HL163298-01) Funds Granted: \$1,999,500 (USD)	Aug 2022-July 2027
<u>Long Term Outcomes of Survivors of Invasive Mechanical Ventilation (LOTUS-IMV)</u> Role: Principal Investigator Granting Agency: Canadian Institutes of Health Research (CIHR) Project Grant Funds Granted: \$382,501	Oct 2022-Sep 2026
<u>Lung and Diaphragm Protection in Acute Hypoxemic Respiratory Failure: The LANDMARK II Pilot and Feasibility Randomized Clinical Trial</u> Role: Co-Principal Investigator Granting Agency: Canadian Institutes of Health Research (CIHR) Project Grant Funds Granted: \$339,660	Oct 2022-Sep 2024
<u>Large Reductions in Arterial Carbon Dioxide and Development of Acute Brain Injury in Invasively Mechanically Ventilated Patients with Acute Respiratory Failure (CARBI)</u> Role: Co-Principal Investigator Granting Agency: Canadian Institutes of Health Research (CIHR) Project Grant Funds Granted: \$130,051	Oct 2022-Sep 2024
<u>Driving Pressure-Limited Ventilation in Hypoxemic Respiratory Failure: The DRIVE RCT</u> Role: Co-Principal Investigator Granting Agency: Canadian Institutes of Health Research (CIHR) Project Grant Funds Granted: \$100,000	Oct 2022-Sep 2023
<u>Preventing Reduced Outcomes in Acute Respiratory Failure by Transitioning from Invasive Ventilation with ECMO (PROACTIVE Trial)</u> Role: Principal Investigator Granting Agency: Canadian Institutes of Health Research (CIHR) Project Grant Funds Granted: \$512,551	Apr 2022-Mar 2025
<u>Lung and Diaphragm Protection in Acute Hypoxemic Respiratory Failure: The LANDMARK II Pilot and Feasibility Randomized Clinical Trial</u> Role: Co-Principal Investigator Granting Agency: CIHR Project Grant (PA: Patient-Oriented Research) Funds Granted: \$100,000	Apr 2022-Mar 2023
<u>A Randomised Controlled Trial of ECMO to Desedate, Extubate Early and Mobilise in Severe Acute Respiratory Infection (REDEEM Trial)</u> Role: Co-Investigator Granting Agency: Medical Research Future Fund (MRFF) Funds Granted: \$2,500,000 (AUD)	Jan 2022-Dec 2027
<u>ECMO-Free Trial: A Multi-Center Pilot Feasibility Study</u> Role: Co-Investigator Granting Agency: SCCM Discovery Research Grant Funds Granted: \$25,000 (USD)	Jan 2022-Dec 2022
<u>A Centre for Research Excellence to Transform Outcomes of Critically Ill Patients In the ICU (CRE-ICU)</u>	Nov 2021-Oct 2026

Role: Co-Investigator
Granting Agency: NHMRC Centres of Research Excellence
Funds Granted: \$2,500,000 (AUD)

Lung and Diaphragm Protection in Acute Hypoxemic Respiratory Failure:
The LANDMARK II Pilot and Feasibility Randomized Clinical Trial Oct 2021-Sept 2022

Role: Co-Principal Investigator
Granting Agency: CIHR Project Grant (PA: Patient-Oriented Research)
Funds Granted: \$100,000

Awake Prone Position in Hypoxemic Patients with Coronavirus Disease 19 July 2020-Dec 2020

Role: Co-Investigator
Granting Agency: CIHR COVID-19 Rapid Research Funding Opportunity
Funds Granted: \$2,178,410

Awake Prone Position in Hypoxemic Patients with Coronavirus Disease 19 July 2020-June 2021

Role: Co-Investigator
Granting Agency: McMaster Internal Funding – COVID-19
Funds Granted: \$250,000

Cardiovascular disease and outcomes among patients with SARS-CoV-2 Infection
during admission and post-discharge: The COVID study May 2020-Apr 2021

Role: Co-Investigator
Granting Agency: PMCC Innovation Fund
Funds Granted: \$249,300

A Novel Tie2 Agonist IV Medication for the Treatment of ALI/ARDS in Military Casualties
and Civilians April 2020-Mar 2023

Role: Consultant
Granting Agency: DoD CDMRP Technology/Therapeutic Development Award
Funds Granted: \$2,821,652 (USD)

A phase II randomized, open-label, multicentre trial to evaluate the effect of peginterferon
Lambda for the treatment of COVID-19 April 2020-Mar 2021

Role: Co-Investigator
Granting Agency: University of Toronto COVID-19 Action Fund
Funds Granted: \$500,000

Ultra-Low Tidal Volume Mechanical Ventilation in ARDS Through ECCO₂R (ULTIMATE)
Pilot Randomized Controlled Trial April 2020-Feb 2023

Role: Co-Principal Investigator
Granting Agency: CIHR Project Grant
Funds Granted: \$520,000

New Strategies to Improve Anticoagulation and Blood Resource Management during
ECMO in Adult Patients Mar 2020-Feb 2023

Role: Principal Investigator
Granting Agency: PSI Research Grant
Funds Granted: \$196,000

The EXCEL Project: A collaborative approach to improve outcomes of Australian
patients with acute heart failure and cardiac arrest requiring extracorporeal life support Oct 2018-Sept 2021

Role: Co-Investigator
Granting Agency: NHMRC Partnership Projects

Funds Granted: \$692,656.80 (AUD)

A multi-centered stepped wedge cluster randomized controlled trial (RCT) of the de-adoption of oral chlorhexidine prophylaxis and implementation of an oral care bundle for ventilated critically ill patients (The CHORAL study) Sept 2018-Aug 2019

Role: Co-Investigator

Granting Agency: Network for Canadian Oral Health Research New Frontier Seed Grant Program

Funds Granted: \$20,000

Is the Change in PaCO₂ after ECLS Initiation Associated with Outcomes? Jan-Dec 2018

Role: Principal Investigator

Granting Agency: Extracorporeal Life Support Organization (ELSO) Research Grant

Funds Granted: \$5000 (USD)

Opioids Use After Critical Illness July 2016-June 2018

Role: Co-Investigator

Granting Agency: Canadian Institutes of Health Research Project Grant

Funds Granted: \$240,000

Physical Training for Patients Receiving ECMO to Improve Recovery: International Pilot RCT Jan 2017-Dec 2017

Role: Co-Investigator

Granting Agency: Monash University Strategic Grant Scheme

Funds Granted: \$45,000 (AUD)

Strategies for Optimal Lung Ventilation in ECMO for ARDS: The SOLVE ARDS Study July 2015-June 2020

Role: Principal Investigator

Granting Agency: CIHR New Investigator Award

Funds Granted: \$300,000

Gas exchange extracorporeal techniques: The XXL Study Apr 2015-Mar 2017

Role: Principal Investigator

Granting Agency: UHN/MSH AFP Innovation Fund

Funds Granted: \$130,950

The Impact of Oxygen and Carbon Dioxide Thresholds on Mortality during ECLS Jan-Dec 2015

Role: Principal Investigator

Granting Agency: Extracorporeal Life Support Organization (ELSO) Research Grant

Funds Granted: \$5000 (USD)

Frequency of Screening and SBT Technique Trial: The FAST Trial Oct 2014-Sept 2016

Role: Co-Investigator

Granting Agency: Canadian Institutes of Health Research (CIHR)

Funds Granted: \$158,000

Liberation from Mechanical Ventilation and Screening Frequency Trial: The RELEASE Trial Aug 2014-July 2015

Role: Co-Investigator

Granting Agency: Ontario Thoracic Society (OTS) Grant-in-Aid

Funds Requested: \$50,000

Screening Elderly Patients for Inclusion in a Weaning Trial: The SENIOR Trial July 2014-June 2016

Role: Co-Investigator

Granting Agency: TechValueNet (TVN) Catalyst Grant

Funds Requested: \$100,000

- The Importance of Spontaneous Breathing Efforts in Mechanically Ventilated Patients with Acute Respiratory Distress Syndrome May 2014-Apr 2016
 Role: Principal Investigator
 Granting Agency: Physician Services Incorporated (PSI) Foundation
 Funds Granted: \$170,000
- Strategies for Optimal Lung Ventilation in ECMO for ARDS: The SOLVE ARDS Study Apr 2014-Mar 2016
 Role: Principal Investigator
 Granting Agency: Physician Services Incorporated (PSI) Foundation
 Funds Granted: \$57,500
- Intensive Care Rehabilitation Study (ICURuS): Barriers to Early Physical Rehabilitation in the ICU – A Delphi Study Apr 2014-Oct 2015
 Principal Investigator: Cuthbertson B
 Role: Co-Investigator
 Granting Agency: Canadian Institutes of Health Research (CIHR) – Operating Grant
 Funds Granted: \$88,438
- Mechanical Ventilation in Adults with the Acute Respiratory Distress Syndrome (ARDS): A Clinical Practice Guideline Jan 2013-Dec 2014
 Role: Principal Investigator
 Granting Agency: American Thoracic Society (ATS)
 Funds Granted: \$70,000
- Understanding Barriers to Early Rehabilitation in the Intensive Care Unit Using the Toronto ICU Registry (TICUR) Project Jan 2012-Dec 2013
 Role: Principal Investigator
 Granting Agency: University of Toronto – Department of Medicine Strategic Planning Innovation Fund
 Funds Granted: \$75,000
- One-Day Point Prevalence Study of Barriers to Acute Rehabilitation in Ontario Intensive Care Units Mar 2012-Feb 2013
 Principal Investigator: Koo KKY
 Role: Co-Investigator
 Granting Agency: Academic Health Sciences Centre AFP Innovation Fund – Academic Medical Organization of Southwestern Ontario (AMOSO)
 Funds Granted: \$102,183.90
- One-Day Point Prevalence Study of Barriers to Acute Rehabilitation in Ontario Intensive Care Units Mar 2012-July 2013
 Principal Investigator: Koo KKY
 Role: Co-Investigator
 Granting Agency: Physician Services Incorporated (PSI) Foundation
 Funds Granted: \$58,234.90
- Understanding Long-Term Mechanical Ventilation in Canada: A Programmatic Approach Apr 2011-Mar 2014
 Principal Investigator: Rose L
 Role: Co-Investigator
 Granting Agency: Canadian Institutes of Health Research (CIHR) Partnerships for Health Systems Improvement (PHSI)
 Funds Granted: \$349,863

<u>A Prospective Evaluation of the Association Between Psychoactive Medications and Delirium In Critically Ill Adults</u>	May 2011-Apr 2012
Principal Investigator: Burry L	
Role: Co-Investigator	
Granting Agency: University of Toronto – Leslie Dan Faculty of Pharmacy	
Funds Granted: \$25,000	
<u>Improving Long-Term Physical and Mental Health Outcomes After Acute Lung Injury</u>	Sept 2008-June 2012
Principal Investigators: Pronovost PJ and Needham DM	
Role: Co-Investigator	
Granting Agency: National Heart, Lung and Blood Institute (NHLBI) Grant #R01 HL088045-01	
Funds Granted: \$1,911,194 (USD)	
<u>Corticosteroids and Long-Term Weakness After Acute Lung Injury</u>	July 2007-June 2012
Role: Principal Investigator	
Supervisor: Pronovost PJ, Johns Hopkins University	
Granting Agency: Canadian Institutes of Health Research (CIHR) Fellowship Award #MFE-81972	
Funds Granted: \$300,000	
<u>Corticosteroids and Long-Term Weakness After Acute Lung Injury</u>	July 2007-June 2008
Role: Principal Investigator	
Supervisors: Pronovost PJ and Needham DM, Johns Hopkins University	
Granting Agency: Royal College of Physicians and Surgeons of Canada – Detweiler Travelling Fellowship	
Funds Granted: \$21,000	
<u>Long-Term Outcomes of Specific Ventilator Strategies</u>	July 2003-June 2008
Principal Investigator: Pronovost PJ	
Role: Co-Investigator	
Granting Agency: National Institutes of Health (NIH) – Specialized Clinical Centers of Research (SCCOR) Grant #P50 HL073944 (Johns Hopkins University)	
Funds Granted: \$13,776,641 (USD)	

Peer-Reviewed Grants & Awards Submitted

Non-Peer-Reviewed Grants & Awards

<u>Pressure Response from Intracardiac Monitoring During ECMO</u>	Dec 2021-Nov 2023
Role: Co-Principal Investigator	
Granting Agency: Abbott Medical Canada	
Funds Granted: \$257,831	
<u>Preventing Reduced Outcomes in Acute Respiratory Failure by Transitioning to Invasive Ventilation with ECMO (PROACTIVE Trial)</u>	Dec 2021-Nov 2024
Role: Principal Investigator	
Granting Agency: LivaNova	
Funds Granted: \$319,200 (USD)	
<u>International Database of Extracorporeal Support (INDEX)</u>	Nov 2021-Oct 2023
Role: Principal Investigator	
Granting Agency: Baxter Healthcare Corporation	

Funds Granted: \$131,355 (USD)

<u>International Database of Extracorporeal Support (INDEX)</u> Role: Principal Investigator Granting Agency: Fresenius Medical Care Funds Granted: \$565,000	June 2019-May 2021
<u>Nitric Oxide in Right Ventricular Dysfunction: Improvements in Congestion and Hemodynamics on VA ECMO (NOVICE) Study</u> Role: Co-Principal Investigator Granting Agency: Mallinckrodt Pharmaceuticals Funds Granted: \$46,000	June 2016-May 2017
<u>Prospective Evaluation of the Vision Alpha in Adults with Acute Lung Injury</u> Role: Principal Investigator Granting Agency: Nihon Kohden Corporation Funds Granted: \$297,000	Oct 2013-Sept 2016
<u>Implementing Real-Time Monitoring of Mechanical Ventilation in the Intensive Care Unit Using Electrical Impedance Tomography</u> Role: Principal Investigator Granting Agency: Mount Sinai Hospital Department of Medicine Physician Campaign Funds Granted: \$41,000	May 2013-Apr 2014
<u>Toronto Western Hospital Delirium Quality Improvement Project</u> Role: Principal Investigator Co-Principal Investigator: Singh JM Granting Agency: Hospira Healthcare Corporation Funds Granted: \$25,000	May 2011-Apr 2012

Research Study Participation

<u>Extracorporeal CO₂ Removal to Facilitate Ultra-Lung Protective Ventilation in Moderate ARDS</u> Principal Investigators: Combes A, Ranieri M Role: Co-Investigator Granting Agency: ALung Technologies Incorporated	Aug 2014-Dec 2014
<u>ECMO to Rescue Lung Injury in Severe ARDS (EOLIA)</u> Principal Investigator: Combes A Role: Site Principal Investigator Granting Agency: Assistance Publique – Hopitaux de Paris (AP-HP) Funds Granted: Equipment in-kind (Maquet)	Dec 2013-Apr 2017
<u>EPVent2 – A Phase II study of Mechanical Ventilation Directed by Transpulmonary Pressures</u> Principal Investigator: Talmor D Role: Site Principal Investigator Granting Agency: National Heart, Lung and Blood Institute (NHLBI)	Jul 2013-May 2017

Publications

PEER-REVIEWED PUBLICATIONS

1. Grasselli G, Calfee CS, Camporota L, Poole D, Amato MBP, Antonelli M, Arabi YM, Baroncelli F, Beitler JR, Bellani G, Bellingan G, Blackwood B, Bos LDJ, Brochard L, Brodie D, Burns KEA, Combes A, D'Arrigo S, De Backer D, Demoule A, Einav S, **Fan E**, Ferguson ND, Frat JP, Gattinoni L, Guerin C, Herridge MS, Hodgson C, Hough CL, Jaber S, Juffermans NP, Karagiannidis C, Kesecioglu J, Kwizera A, Laffey JG, Mancebo J, Matthay MA, McAuley DF, Mercat A, Meyer NJ, Moss M, Munshi L, Myatra SN, Gong MN, Papazian L, Patel BK, Pellegrini M, Perner A, Pesenti A, Piquilloud L, Qiu H, Ranieri VM, Riviello E, Slutsky AS, Stapleton RD, Summers C, Thompson BT, Barbas CSV, Villar J, Ware LB, Weiss B, Zampieri FG, Azoulay E, Cecconi M on behalf of the European Society of Intensive Care Medicine Taskforce on ARDS. ESICM Guidelines on acute respiratory distress syndrome: definition, phenotyping and respiratory support strategies. Intensive Care Medicine 2023, in press.
2. Teijeiro-Paradis R, Grenier J, Urner M, Doufle G, Steel A, Cypel M, Keshavjee S, Herridge M, Goligher E, Granton J, Ferguson N, **Fan E**, Del Sorbo L. Outcomes of patients with respiratory failure declined for extracorporeal membrane oxygenation: a prospective observational study. Canadian Journal of Anesthesia 2023;6:1-8.
3. Wentlandt K, Wolofsky KT, Weiss A, Hurlbert L, **Fan E**, Zimmerman C, Isenberg SR. Differences in palliative care provision by primary and specialist providers supporting patients with COVID-19: a qualitative study. Journal of Palliative Medicine 2023, in press.
4. Parekh M, Abrams D, Agerstrand C, Badulak J, Dzierba A, Alexander PMA, Price S, **Fan E**, Mullin D, Diaz R, Hodgson C, Brodie D. The use of extracorporeal membrane oxygenation for COVID-19: lessons learned. Clinics in Chest Medicine 2023;44:335-346.
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ORIGINAL INVESTIGATIONS FOR PEER-REVIEW PUBLICATION

1. Aoyoma H, Uchida K, Aoyoma K, Yang A, Pechlivanoglou P, Englesakis M, Yamada T, **Fan E**. Effect of therapeutic interventions on long term mortality of patients with ARDS: a systematic review and network meta-analysis. 2023, under review.

NON-PEER REVIEWED PUBLICATIONS/BOOK CHAPTERS

1. Madahar P, Grasselli G, Brodie D, **Fan E**. Initiating ECLS for adult respiratory failure. In ECMO, Extracorporeal Support in Critical Care, 6th Edition MacLaren G, Peek G, Lorusso R, Brodie D, Thiagarajan R, Vercaemst L [eds]. University of Michigan Press, Ann Arbor, 2022.
2. Doufle G, Su E, Thiagarajan R, Donker DW, **Fan E**. Bedside ultrasound for ECMO. In ECMO, Extracorporeal Support in Critical Care, 6th Edition MacLaren G, Peek G, Lorusso R, Brodie D, Thiagarajan R, Vercaemst L [eds]. University of Michigan Press, Ann Arbor, 2022.
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11. Dhar P, **Fan E**. Gastrointestinal complications in critically ill patients. In Non-Pulmonary Complications of Critical Care: A Clinical Guide Richards JB and Stapleton RD [eds]. Springer, New York, NY, 2014. Electronic identifier: <http://dx.doi.org/10.1007/978-1-4939-0873-8>
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PODCASTS/WEBINARS

1. VV-ECMO Roundtable. PulmPEEPs January 3, 2023. Available at <https://www.pulmpeeps.com/2023/01/03/32-vv-ecmo-roundtable>
2. A Review of Acute Respiratory Distress Syndrome and COVID-19 – Part 2. Society of Critical Care Medicine/American Association of Respiratory Care COVID-19 Webcast Series June 30, 2021. Available at <https://sccm-video.s3.amazonaws.com/Webcast/COVID19/COVID19-Review-ARDS-Part2.mp4>
3. A Review of Acute Respiratory Distress Syndrome and COVID-19 – Part 1. Society of Critical Care Medicine/American Association of Respiratory Care COVID-19 Webcast Series May 26, 2021. Available at <https://sccm-video.s3.amazonaws.com/Webcast/COVID19/COVID19-Review-ARDS.mp4>
4. Extracorporeal CO₂ Removal. ISICEM Chats May 20, 2021. Available at https://www.isicem.org/e-chat/Video_PresChat.asp?Num=21
5. Critical Perspective: ARDS in COVID-19: Insights One Year into the Pandemic. American Thoracic Society: Breathe Easy Podcast February 1, 2021. Available at <https://www.thoracic.org/about/ats-podcasts/critical-perspective-ards-in-covid-19-insights-one-year-into-the-pandemic.php>
6. Critical Perspective: Management of ARDS in the Era of COVID-19. American Thoracic Society: Breathe Easy Podcast April 13, 2020. Available at <https://www.thoracic.org/about/ats-podcasts/critical-perspective-management-of-ards-in-the-era-of-covid-19.php>
7. Assessment of therapeutic interventions and lung protective mechanical ventilation in patients with moderate to severe acute respiratory distress syndrome: a systematic review and network meta-analysis. JAMA Network Open Live August 6, 2019.

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12. How to use an article on quality improvement. JAMAevidence. July 2017. Available at <http://books.mcgraw-hill.com/podcast/jamaevidence>.
13. Extracorporeal life support for acute respiratory failure. Annals of the American Thoracic Society. July 2014. Available at <http://static.thoracic.org/podcast/AnnalsATS-interviews/AnnalsATS-201401-012OC.mp3>.

ABSTRACTS

1. Jain T, Sale R, Eisenberg N, **Fan E**, Billia F, Roche-Nagle G. Vascular complications with extracorporeal membrane oxygenation. Journal of Vascular Surgery 2020;72:E352.
2. Pettenuzzo T, Doufle G, Luk A, Pichette M, **Fan E**. Speckle-tracking echocardiography in patients undergoing extracorporeal life support. ASAIO Journal 2017;63(5S_Suppl):40.
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6. Kobayashi T, Munshi L, Cypel M, Keshavjee S, Ferguson ND, **Fan E**. The evolution of supportive care during extracorporeal life support for acute respiratory distress syndrome: the Toronto experience. American Journal of Respiratory and Critical Care Medicine 2014;189:A3092.
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8. Goligher EC, Murray A, Herridge MS, **Fan E**, Ferguson ND. Inspiratory diaphragm activity attenuates the rapid onset of diaphragm atrophy during the early course of mechanical ventilation. American Journal of Respiratory and Critical Care Medicine 2014;189:A5374.
9. Mathur S, Torres T, Mendes P, Dance D, Cameron JI, Cote N, **Fan E**, Flannery J, Gage W, Herridge MS, Lo V. Feasibility of electrical muscle stimulation in long-term mechanically ventilated patients in medical-surgical

intensive care unit: experience from a Canadian centre. American Journal of Respiratory and Critical Care Medicine 2014;189:A4516.

10. **Towards RECOVER Investigators.** Caregiver well-being is dependent on caregiver mastery, social support and participating in valued activities: Towards RECOVER Study. American Journal of Respiratory and Critical Care Medicine 2014;189:A1144.
11. **Towards RECOVER Investigators.** Long-term patient outcomes after prolonged mechanical ventilation: Towards RECOVER Study. American Journal of Respiratory and Critical Care Medicine 2014;189:A3879.
12. Telesnicki T, Munshi L, **Fan E.** Extracorporeal membrane oxygenation for adult patients with acute respiratory failure: a systematic review and meta-analysis. American Journal of Respiratory and Critical Care Medicine 2013;187:A3957.
13. **Fan E,** Reda L, Chu LM, Matte AL, Chan L, Tomlinson G, Ferguson ND, Chaparro C, Singer LG, Cypel M, Keshavjee S, Cameron JI, Herridge MS. Long-term physical outcomes after extracorporeal membrane oxygenation (ECMO): The Towards RECOVER Study. American Journal of Respiratory and Critical Care Medicine 2013;187:A4480.
14. **Towards RECOVER Investigators.** Long-term patient outcomes after prolonged mechanical ventilation: Towards RECOVER Study. American Journal of Respiratory and Critical Care Medicine 2013;187:A3623.
15. Penuelas O, Frutos Vivar F, **Fan E,** Ferguson ND, Thille AW, Rios F, Maggiore SM, Villagomez A, Gonzalez M, Nin N, Anzueto A, Esteban A. Incidence and outcome of patients diagnosed with ICU-acquired weakness. American Journal of Respiratory and Critical Care Medicine 2013;187:A3628.
16. Cypel M, Paraghamian A, Azad S, Yasufuku K, de Perrot M, Pierre A, Arce C, Serick C, Ferguson ND, Waddell TK, **Fan E,** Keshavjee S. Ten years experience with extracorporeal life support for adult respiratory failure: evolution of indications, techniques and outcomes. Journal of Thoracic and Cardiovascular Surgery 2013, in press.
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18. Mew E, Farias P, Wheeler K, **Fan E,** Singh JM. A quality improvement initiative to screen for ICU delirium, improve sedation practices, and ensure timely liberation from mechanical ventilation. American Journal of Respiratory and Critical Care Medicine 2012;185:A1614.
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24. Vatwani A, Dinglas V, Benson K, Parry J, Scardillo J, Boucher K, Sepulveda K, Mendez-Tellez P, Dennison C, **Fan E**, Needham D, Ciesla N. Hospital discharge placement and 3-month follow-up of muscle strength and quality of life of 100 survivors of acute respiratory distress syndrome/acute lung injury. Cardiopulmonary Physical Therapy Journal 2007;18:23.
25. Shahid S, **Fan E**, Kondreddi P, Bienvenu J, Mendez-Tellez P, Pronovost P, Needham D. Informed consent in the critically ill: a 2-step approach. Journal of General Internal Medicine 2007; 22(Supp 1):1341.
26. **Fan E**, Mullaly A, Ko M, Lyle J, Pirano T, Harris C, Traill J, Rosenberg J, Granton JT, Stewart TE, Ferguson ND. Airway pressure release ventilation (APRV) in acute lung injury/acute respiratory distress syndrome patients. Critical Care 2007;11:P180.
27. **Fan E**, MacDonald RD, Adhikari N, Scales DC, Wax RS, Stewart TE, Ferguson ND. Outcomes of interfacility critical care adult patient transport: a systematic review. Canadian Journal of Anesthesia 2006;53:A417.
28. **Fan E**, MacDonald RD, Adhikari N, Scales DC, Wax RS, Stewart TE, Ferguson ND. Outcomes of interfacility ICU patient transport. Proceedings of the American Thoracic Society 2005;2:A429.

Invited Presentations

INVITED LECTURES

1. Intensive Rehabilitation Therapy in the ICU. Critical Care Grand Rounds, St. Michael's Hospital, University of Toronto, Toronto, ON. August 3, 2007.
2. Adjuncts to Improve ICU Weakness: The ICU MOVER Aid. First International Meeting of Physical Rehabilitation in the Critically Ill, Toronto, ON. May 17, 2008.
3. Thrombolysis for Massive Pulmonary Embolism. Pulmonary and Critical Care Medicine Grand Rounds, Johns Hopkins Hospital, Baltimore, MD. October 30, 2008.
4. ICU-Acquired Weakness: Prevention, Evaluation, and Treatment. American Physical Therapy Association (APTA) Vision 2020 (Acute Care), National Harbor, MD. October 31, 2008.
5. Beyond ICU Discharge: Addressing Functional Outcomes for Survivors of Critical Illness. American Physical Therapy Association (APTA) Vision 2020 (Acute Care), National Harbor, MD. October 31, 2008.
6. Delirium, Sedation, and Analgesia in the ICU. Critical Care Medicine for the Hospitalist, Society of Hospital Medicine, Baltimore, MD. November 5, 2008.
7. Delirium, Sedation, and Analgesia in the ICU. Critical Care Medicine for the Hospitalist, Society of Hospital Medicine, Atlanta, GA. February 3, 2009.
8. Ventilatory Management of ARDS. Department of Medicine Grand Rounds, Aurora St. Luke's Medical Center, Milwaukee, WI. March 26, 2009.
9. Diagnostic Testing for ICU-Acquired Weakness: A Systematic Review. American Thoracic Society

- Consensus Conference on Acquired Weakness in Critical Illness: Assessments and Definitions, San Diego, CA. May 16, 2009.
10. Inter-Rater Reliability of Manual Muscle Testing. Second International Meeting of Physical Medicine and Rehabilitation in the Critically Ill, San Diego, CA. May 16, 2009.
 11. Extracorporeal Membrane Oxygenation (ECMO) for Severe Acute Respiratory Distress Syndrome (ARDS). Pulmonary and Critical Care Medicine Grand Rounds, Johns Hopkins Hospital, Baltimore, MD. September 10, 2009.
 12. Wake Up, Get Up, and Get Out Early: Physical Medicine and Rehabilitation in the ICU. Department of Medicine Grand Rounds, University Health Network and Mount Sinai Hospital, Toronto, ON. March 3, 2010.
 13. Muscle Strength and Physical Function in ICU Survivors. American Thoracic Society Consensus Conference on Acquired Weakness in Critical Illness: Assessments and Definitions, New Orleans, LA. May 14, 2010.
 14. What is Stopping Us from Early Mobility in the ICU? Canada Critical Care Forum, Toronto, ON. November 8, 2010.
 15. What to Do When Conventional Mechanical Ventilation Fails? Refractory Hypoxemia in Severe ARDS. American Thoracic Society International Meeting, Denver, CO. May 14, 2011.
 16. Introduction to Extracorporeal Gas Exchange for ALI/ARDS. American Thoracic Society International Meeting, Denver, CO. May 16, 2011.
 17. Ventilatory Management of ARDS. University of British Columbia - Okanagan CME Meeting, Kelowna, BC. May 27, 2011.
 18. ABCDE Approach to Early Liberation from Mechanical Ventilation. University of British Columbia - Okanagan CME Meeting, Kelowna, BC. May 27, 2011.
 19. The Role for HFOV in Severe ARDS. 33rd Annual Meeting of the Japan Society of Respiratory Care Medicine, Yokohama, Japan. June 10, 2011.
 20. Lung Protective Ventilation in ALI/ARDS – HFOV in ARDS – Update. 33rd Annual Meeting of the Japan Society of Respiratory Care Medicine, Yokohama, Japan. June 10, 2011.
 21. Wake Up, Get Up, and Get Out Early: Physical Medicine and Rehabilitation in the ICU. Ontario Respiratory Care Society Annual General Meeting, Toronto, ON. June 16, 2011.
 22. Wake Up, Get Up, and Get Out Early: Physical Medicine and Rehabilitation in the ICU. William Osler Health Centre, Toronto, ON. August 23, 2011.
 23. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. 49th Respiratory Care Journal Conference on the Chronic Critically Ill Patient, Tampa, FL. September 9, 2011.
 24. Beyond Mechanical Ventilation: Extracorporeal Gas Exchange for ARDS. Judah Skolnick and Douglas David Pulmonary Symposium. University of Louisville, Louisville, KY. October 7, 2011.
 25. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. 8th Annual Krembil Neurosciences Symposium. Toronto, ON. October 26, 2011.
 26. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. Respiratory Therapy Seminar Day. Michener Institute. Toronto, ON. November 1, 2011.

27. ECLS for Respiratory Failure: Everything Old is New Again. Canada Critical Care Forum, Toronto, ON. November 14, 2011.
28. Networks for Clinicians: A Clinical Laboratory. Canada Critical Care Forum, Toronto, ON. November 15, 2011.
29. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. Canada Critical Care Forum, Toronto, ON. November 16, 2011.
30. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. Mississauga Halton LHIN – Critical Care. Piper’s Heath. Oakville, ON. January 12, 2012.
31. Mechanical Ventilation. Ontario Respiratory Resident’s Symposium – Better Breathing Conference. Ontario Thoracic Society. Toronto, ON. January 29, 2012.
32. Refractory Hypoxemia in ARDS. 32nd International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 20, 2012.
33. ICU-Acquired Weakness in 2012. 32nd International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 22, 2012.
34. Delirium – Quality of Care Can Prevent It. 32nd International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 22, 2012.
35. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. St. Joseph’s Health Centre. Toronto, ON. April 3, 2012.
36. High Frequency Oscillatory Ventilation in Adults with Refractory Hypoxemia. Clinical Focus – Sepsis-Related Respiratory Failure. Society for Critical Care Medicine. Boston, MA. April 26, 2012.
37. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. Clinical Focus – Sepsis-Related Respiratory Failure. Society for Critical Care Medicine. Boston, MA. April 27, 2012.
38. Long Term Outcomes in Survivors of Sepsis. Clinical Focus – Sepsis-Related Respiratory Failure. Society for Critical Care Medicine. Boston, MA. April 27, 2012.
39. Physical Complications in Survivors of Acute Lung Injury: 2 Year Follow Up. 5th International Meeting of Physical Medicine and Rehabilitation in the Critically Ill, San Francisco, CA. May 19, 2012.
40. Extracorporeal Gas Exchange as a Bridge to Lung Transplant. American Thoracic Society International Meeting, San Francisco, CA. May 21, 2012.
41. Pro-Con: HFO or VV ECMO for Severe ARDS. International Course of ECMO and Short Term Circulatory/Respiratory Support, Paris, France. June 28, 2012.
42. Get ‘Em Moving – Early Mobility for Ventilator-Dependent Patients. American Association for Respiratory Care Professor’s Rounds, Dallas, TX. July 25, 2012.
43. Building the Future – One Breath at a Time... Department of Medicine Grand Rounds, University Health Network and Mount Sinai Hospital, Toronto, ON. August 15, 2012.
44. Improving Outcomes After Critical Illness – The Awake, Calm, Cooperative, and Mobile ICU Patient. Cardiorespiratory Physical Therapy and Early Mobility Skills in Acute Care, Toronto, ON. October 20, 2012.

45. ICU-Acquired Weakness in Survivors of Critical Illness. Canada Critical Care Forum, Toronto, ON. October 29, 2012.
46. Mechanical Ventilation for Patients on ECMO – How, Why, Future Studies. Canada Critical Care Forum, Toronto, ON. October 30, 2012.
47. Delirium: Quality of Care Can Prevent It – A Tale of Two Institutions. Canada Critical Care Forum, Toronto, ON. October 31, 2012.
48. To Breathe or Not to Breathe – Spontaneous Breathing in ARDS. Mount Sinai Hospital RT Education Day, Toronto, ON. December 3, 2012.
49. Pain, Agitation, and Delirium: The Awake, Calm, Cooperative and Mobile ICU Patient. Oakville-Trafalgar ICU Rounds, Oakville, ON. March 5, 2013.
50. Improving Outcomes After Critical Illness – The Awake, Calm, Cooperative, and Mobile ICU Patient. Cardiorespiratory Physical Therapy and Early Mobility Skills in Acute Care, Toronto, ON. April 13, 2013.
51. Year in Review – Mechanical Ventilation. American Thoracic Society International Meeting, Philadelphia, PA. May 21, 2013.
52. Physical Complications in Survivors of Acute Lung Injury: A 2-Year Prospective Longitudinal Study. Hospital for Sick Children, Department of Critical Care Research Rounds, Toronto, ON. June 13, 2013.
53. Mechanical Ventilation: Maximizing Lung Protection and ECMO. Perfusion Department, Toronto General Hospital, Toronto, ON. June 28, 2013.
54. ECLS as a Bridge to Lung Transplant – When to Start? When to Stop? 17th Annual Research Days, Toronto Lung Transplant Program, Cambridge, ON. July 5, 2013.
55. Refractory Hypoxemia in Severe ARDS. University of Toronto Critical Care Summer Physiology Lecture Series, Toronto, ON. August 20, 2013.
56. Paralysis and Proning in Severe ARDS: Why Do We Need ECMO? 26th Annual ELSO Conference, Philadelphia, PA. September 22, 2013.
57. Improving Outcomes After Critical Illness – The Awake, Calm, Cooperative, and Mobile ICU Patient. Interior BC Network ICU Rounds, Kelowna, BC. September 25, 2013.
58. Extracorporeal Life Support for Acute Respiratory Failure. 26th Annual Meeting and Critical Care Update, Society of Critical Care Anesthesiologists, San Francisco, CA. October 11, 2013.
59. High Frequency Oscillatory Ventilation: Which Patients? American College of Chest Physicians Annual Meeting, Chicago, IL. October 28, 2013.
60. Ventilating the Native Lung During ECLS. Canada Critical Care Forum, Toronto, ON. November 9, 2013.
61. ECLS for ARDS – A Bridge to Recovery. Canada Critical Care Forum, Toronto, ON. November 9, 2013.
62. Severe ARDS: Prone, Paralysis, ECMO? Canada Critical Care Forum, Toronto, ON. November 11, 2013.
63. Outcomes Following ECMO. Canada Critical Care Forum, Toronto, ON. November 11, 2013.

64. Year in Review – Invasive Mechanical Ventilation. 59th Annual American Association for Respiratory Care (AARC) Congress, Anaheim, CA. November 16, 2013.
65. Hypocapnia and Hypercapnia. 59th Annual American Association for Respiratory Care (AARC) Congress, Anaheim, CA. November 16, 2013.
66. Extracorporeal Life Support for Acute Respiratory Failure. Hamilton Regional Critical Care Rounds, Hamilton, ON. February 3, 2014.
67. Extracorporeal Life Support for Acute Respiratory Failure. St. Joseph's Health Centre. Toronto, ON. February 25, 2014.
68. Extracorporeal Life Support for Acute Respiratory Failure. UHN Perfusion ECLS Symposium, Toronto, ON. April 4, 2014.
69. Focusing on Quality Improvement to Improve Outcomes in ARDS. American Thoracic Society International Meeting, San Diego, CA. May 18, 2014.
70. The Emerging Role of ECCO₂R to Prevent VILI in ARDS. EuroELSO 2014 Meeting, Paris, France. May 23, 2014.
71. Prediction of VV ECMO Success. EuroELSO 2014 Meeting, Paris, France. May 24, 2014.
72. Refractory Hypoxemia and Severe ARDS. Università degli Studi di Padova, Department of Medicine, Padova, Italy. June 6, 2014.
73. Novel Approaches to Minimize Ventilator-Induced Lung Injury. 5th Shanghai Respiratory International Forum, Shanghai, China. June 22, 2014.
74. Setting Mean Airway Pressure in HFOV. Japanese HFO Experts Meeting, Tokyo, Japan. July 9, 2014.
75. HFOV in ARDS: Is it Finished in Adults? 8th Alfred Advanced Mechanical Ventilation Conference, Melbourne, Australia. July 17, 2014.
76. Extracorporeal CO₂ Removal: Preventing Intubation and Minimizing VILI. 8th Alfred Advanced Mechanical Ventilation Conference, Melbourne, Australia. July 17, 2014.
77. ICU-Acquired Weakness: Do We Diagnose it Early Enough? Alfred ICU Physiotherapy Seminar, Melbourne, Australia. July 18, 2014.
78. Refractory Hypoxemia in Severe ARDS. University of Toronto Critical Care Summer Physiology Lecture Series, Toronto, ON. August 12, 2014.
79. ECMO for Cardiogenic Shock. UHN/MSH Cardiology Fellows Educational Series, Toronto, ON. October 10, 2014.
80. Prediction of VV ECMO Success. Severe Acute Respiratory Failure – A Masterclass. Canada Critical Care Forum, Toronto, ON. October 29, 2014.
81. Monitoring and Managing – EIT. Canada Critical Care Forum, Toronto, ON. October 30, 2014.
82. Prediction of VV ECMO Success. Canada Critical Care Forum, Toronto, ON. November 1, 2014.
83. Mechanical Ventilation: A Primer. Principles of Surgery Lecture Series, Department of Surgery, University of

Toronto, Toronto, ON. November 18, 2014.

84. PEEP in ARDS Must be Optimized Using Transpulmonary Pressure – Not So Fast... 60th Annual American Association for Respiratory Care (AARC) Congress, Las Vegas, NV. December 9, 2014.
85. Approaches to Refractory Hypoxemia – APRV and HFOV. 60th Annual American Association for Respiratory Care (AARC) Congress, Las Vegas, NV. December 10, 2014.
86. ECMO for ARDS. Critical Care Reviews. Belfast, Northern Ireland. January 23, 2015.
87. Wake Up, Get Up, and Get Out Early: ICU-Acquired Weakness and Early Mobility in the ICU. Critical Care Reviews. Belfast, Northern Ireland. January 23, 2015.
88. From Good to Great? Customizing Mechanical Ventilation in ARDS. Critical Care Grand Rounds, Columbia-New York Presbyterian Hospital, New York, NY. January 29, 2015.
89. ECCO2R for Respiratory Failure. Better Breathing Conference. Ontario Thoracic Society. Toronto, ON. January 31, 2015.
90. ICUAW - Outcomes. 35th International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 17, 2015.
91. Refractory Hypoxemia in ARDS. 35th International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 17, 2015.
92. Predicting VV ECMO Success. 35th International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 19, 2015.
93. How to Maximize Lung Protection with Extracorporeal Support. 35th International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 19, 2015.
94. Managing ARDS – An Important “Turn” of Events. Evolutions in Critical Care 2015, CACCN Toronto Chapter. Toronto, ON. May 4, 2015.
95. Weaning VV ECMO – Is There a Best Way? EuroELSO 2015 Meeting, Regensburg, Germany, May 8, 2015.
96. Superprotective Ventilation with ECCO2R: Goals, Complications, Future Directions. EuroELSO 2015 Meeting, Regensburg, Germany, May 9, 2015.
97. Mechanical Ventilation during VV ECMO. American Thoracic Society International Meeting, Denver, CO. May 15, 2015.
98. ICU Recovery – International Practice. ANZIC-RC Collaborative Clinical Trials in Intensive Care Medicine Conference, Prato, Italy. June 15, 2015.
99. Integrating Morbidity and Mortality Outcomes in Clinical Trials. International Congress on ECMO and Short Term Circulatory/Respiratory Support, Paris, France. June 25, 2015.
100. Mechanical Ventilation During VV ECMO. 28th Annual ELSO Conference, Atlanta, GA. September 19, 2015.
101. The REVIVE Study – Editorial Comment. Canada Critical Care Forum, Toronto, ON. October 26, 2015.
102. Predicting ECMO Outcomes. Canada Critical Care Forum, Toronto, ON. October 27, 2014.

103. Spontaneous Breathing in ARDS. 61st Annual American Association for Respiratory Care (AARC) Congress, Tampa, FL. November 7, 2015.
104. ECLS to Facilitate Lung Protection in ARDS. 61st Annual American Association for Respiratory Care (AARC) Congress, Tampa, FL. November 8, 2015.
105. ECMO for Severe Hypoxia – A North American Perspective. UK Intensive Care Society State of the Art Meeting, London, UK. December 7, 2015.
106. Early Mobility – Making it Happen. UK Intensive Care Society State of the Art Meeting, London, UK. December 8, 2015.
107. ARDS Definitions Are Killing Research in the Field (Pro-Con Debate). UK Intensive Care Society State of the Art Meeting, London, UK. December 8, 2015.
108. ECMO: You Are Doing It All Wrong! (Pro-Con Debate). UK Intensive Care Society State of the Art Meeting, London, UK. December 8, 2015.
109. Rehab Can Make a Difference (Pro-Con Debate). UK Intensive Care Society State of the Art Meeting, London, UK. December 8, 2015.
110. Refractory Hypoxemia in ARDS. Cook County Trauma Rounds, Chicago, IL. December 16, 2015.
111. Ventilatory Management of ARDS. Universita degli Studi di Padova, Department of Medicine, Padova, Italy. April 27, 2016.
112. Long-term Outcomes after Extracorporeal Gas Exchange as the Primary Endpoint for Future Trials. Temporary Circulatory Support-ECMO Meeting, Paris, France. June 1, 2016.
113. Mechanical Ventilation in VV ECMO: How I Do It. 29th Annual ELSO Conference, San Diego, CA. September 17, 2016.
114. Ventilatory Management of ARDS: What Have We Learned in 50 Years? Department of Critical Care Grand Rounds, University of Alberta, Edmonton, AB. September 20, 2016.
115. Extracorporeal Support for Respiratory Failure. Mazankowski Alberta Heart Institute Grand Rounds, University of Alberta, Edmonton, AB. September 21, 2016.
116. Spontaneous Breathing in ARDS. NY Downstate Association of Respiratory Therapists Symposium, Long Island, NY. October 28, 2016.
117. Mechanical Ventilation in VV ECMO. Canada Critical Care Forum, Toronto, ON. November 1, 2016.
118. Registries for Quality and Research. Canada Critical Care Forum, Toronto, ON. November 2, 2016.
119. Extracorporeal Support for Respiratory Failure. Department of Critical Care Medicine Grand Rounds, Queen's University, Kingston, ON. November 3, 2016.
120. Critical Care Quality: The Toronto iCORE Project. Ontario Surgical Quality Conference, Health Quality Ontario, Toronto, ON. November 4, 2016.
121. Extracorporeal Support for ARDS. 5th Henan ECMO Summit, Zhengzhou, China. November 18, 2016.

122. Ventilatory Management of ARDS: What Have We Learned in 50 Years? Department of Critical Care Education Rounds, Interior Health, Kelowna, BC. February 28, 2017.
123. Extracorporeal Support for Respiratory Failure – A to Z. Department of Critical Care Education Rounds, Interior Health, Kelowna, BC. February 28, 2017.
124. Extracorporeal Support for Respiratory Failure. Mechanical Ventilation: From Physiology to Clinical Practice, Toronto, ON. April 28, 2017.
125. Mechanical Ventilation: Has Anything Changed in 50 Years? American Thoracic Society International Conference, Washington DC. May 24, 2017.
126. ATS/ESICM/SCCM Clinical Practice Guideline: Mechanical Ventilation for ARDS. American Thoracic Society International Conference, Washington DC. May 24, 2017.
127. Extracorporeal Support for Respiratory Failure. Ventilator Management for the Intensivist Workshop, Toronto, ON. May 31, 2017.
128. Extracorporeal Support for Respiratory Failure. Lung Transplantation and Artificial Lung Support, Division of Thoracic Surgery, University of Toronto, Toronto, ON. June 1, 2017.
129. Albumin: Good, Bad, or Ugly? University of Toronto Transfusion Bootcamp, Toronto, ON. June 2, 2017.
130. Extracorporeal Support Registries. ANZIC-RC Collaborative Clinical Trials in Intensive Care Medicine Conference, Prato, Italy. June 6, 2017.
131. Extracorporeal Support for Respiratory Failure: Toronto and Beyond. Art Slutsky Research Day, Interdepartmental Division of Critical Care Medicine, Toronto, ON. June 20, 2017.
132. Extracorporeal Support Registries. Temporary Circulatory Support-ECMO Meeting, Paris, France. June 29, 2017.
133. Latest in Mechanical Ventilation during ECMO. Temporary Circulatory Support-ECMO Meeting, Paris, France. June 30, 2017.
134. Is There an Age Limit for ECMO? Temporary Circulatory Support-ECMO Meeting, Paris, France. June 30, 2017.
135. Outcomes in Caregivers of Critically Ill Patients. 27th Congresso Argentino de Terapia Intensiva, Cordoba, Argentina. August 31, 2017.
136. Liberation from Mechanical Ventilation: Clinical Practice Guidelines. 27th Congresso Argentino de Terapia Intensiva, Cordoba, Argentina. August 31, 2017.
137. The RECOVER Study. 27th Congresso Argentino de Terapia Intensiva, Cordoba, Argentina. August 31, 2017.
138. No Lungs? No Problem! We Can Support You. 28th Annual ELSO Conference, Baltimore, MD. September 26, 2017.
139. Why Remove CO₂? Canada Critical Care Forum, Toronto, ON. October 3, 2017.
140. A Role for ECPR? Canada Critical Care Forum, Toronto, ON. October 4, 2017.
141. Oxygenation Comes With a Cost. Asia-Pacific ELSO Meeting, Gold Coast, Australia. October 13, 2017.

142. What Are the Right Outcomes? Lessons Learned from the Pediatric World. Asia-Pacific ELSO Meeting, Gold Coast, Australia. October 13, 2017.
143. When I'm 65... Asia-Pacific ELSO Meeting, Gold Coast, Australia. October 14, 2017.
144. Mechanical Ventilation During Extracorporeal Support. SickKids Department of Critical Care Medicine Research Rounds, Toronto, ON. October 26, 2017.
145. Year in Review: Acute Respiratory Failure and Mechanical Ventilation. American College of Chest Physicians Annual Meeting, Toronto, ON. October 28, 2017.
146. Refractory Respiratory Failure: Rescue Therapies and VA ECMO. American College of Chest Physicians Annual Meeting, Toronto, ON. October 30, 2017.
147. What's New in 2017 for Mechanical Ventilation Guidelines for Patients with ARDS? The World Day of the Critical Lung, Global Webinar (Spain), November 17, 2017.
148. ECMO in 2017: A Role in the ED? UHN Emergency Department Grand Rounds, Toronto, ON. November 23, 2017.
149. Extracorporeal Support for ARDS. Cardiovascular Surgery/ICU Grand Rounds, National Taiwan University Hospital, Taipei, Taiwan. January 2, 2018.
150. Challenging Cases. SCCM-ELSO Workshop, Society of Critical Care Medicine 47th Critical Care Congress, San Antonio, TX. February 24, 2018.
151. VV ECMO; Earlier Cannulation for Better Outcomes. Society of Critical Care Medicine 47th Critical Care Congress, San Antonio, TX. February 25, 2018.
152. Mechanical Ventilation in Adult Patients with ARDS: An ATS/ESICM/SCCM Clinical Practice Guideline. Society of Critical Care Medicine 47th Critical Care Congress, San Antonio, TX. February 26, 2018.
153. Creating a Culture of Mobility in the ICU: An Interdisciplinary Team Approach. Canadian Respiratory Conference, Vancouver, BC. April 12, 2018.
154. Mechanical Ventilation in Adult Patients with ARDS. 37th Korean Society of Critical Care Medicine Annual Congress and Asian Critical Care Conference, Seoul, South Korea. April 27, 2018.
155. ECCO₂R for ARDS. 37th Korean Society of Critical Care Medicine Annual Congress and Asian Critical Care Conference, Seoul, South Korea. April 28, 2018.
156. Roadmap to ECMO: Conventional Management of ARDS and Patient Selection. American Thoracic Society International Conference, San Diego, CA. May 19, 2018.
157. ECMO for ARDS. Michener Institute, Toronto, ON. May 24, 2018.
158. ECMO for ARDS. 35th International Congress of the International Society of Blood Transfusion (ISBT) Academy Day, Toronto, ON. June 3, 2018.
159. Extracorporeal Support for Respiratory Failure. 2nd Update on Lung Transplantation and Artificial Lung Support, Division of Thoracic Surgery, University of Toronto, Toronto, ON. June 7, 2018.

160. Mechanical Ventilation in VV ECMO. 2nd Chinese Society of Extracorporeal Life Support Annual Meeting, Beijing, China. June 9, 2018.
161. Extracorporeal Support Registries for Quality and Research. 2nd Chinese Society of Extracorporeal Life Support Annual Meeting, Beijing, China. June 9, 2018.
162. High PEEP: The Good, The Bad, The Future. Temporary Circulatory Support-ECMO Meeting, Paris, France. June 28, 2018.
163. Long-Term Outcomes in ARDS. Temporary Circulatory Support-ECMO Meeting, Paris, France. June 28, 2018.
164. Infrastructure for ECMO Research. 29th Annual ELSO Conference, Scottsdale, AZ. September 14, 2018.
165. Mechanical Ventilation During VV ECMO. 29th Annual ELSO Conference, Scottsdale, AZ. September 14, 2018.
166. Extracorporeal Support for ARDS: What Now? Where Next? Critical Care Medicine Department Grand Rounds, NIH Clinical Center, Bethesda, MD. September 27, 2018.
167. Outcomes from VV ECMO. Combined ICU Rounds, Toronto General Hospital, Toronto, ON. October 17, 2018.
168. Extracorporeal Support for ARDS: What Now? Where Next? CANCARE 3rd Annual ECMO Symposium, Toronto, ON. October 19, 2018.
169. Lung Recruitment in ARDS – Should We Stop Talking About It? ESICM Lives 2018, Paris, France. October 22, 2018.
170. Mechanical Ventilation during VV ECMO. ESICM Lives 2018, Paris, France. October 22, 2018.
171. Where Next? Future Trials for ECLS. Canada Critical Care Forum, Toronto, ON. November 6, 2018.
172. ECCO₂R for Ultra-Protective Mechanical Ventilation. Canada Critical Care Forum, Toronto, ON. November 8, 2018.
173. Monitoring during Mechanical Ventilation. 64th Annual American Association for Respiratory Care (AARC) Congress, Las Vegas, NV. December 5, 2018.
174. Evidence-Based Practice. 64th Annual American Association for Respiratory Care (AARC) Congress, Las Vegas, NV. December 6, 2018.
175. Extracorporeal Support for ARDS: What Now? Where Next? Medicine Grand Rounds, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY. February 28, 2019.
176. Extracorporeal Support for ARDS: What Now? Where Next? Critical Care Medicine Grand Rounds, Kingston General Hospital/Queens' University, Kingston, ON. March 21, 2019.
177. Causal Inference in Observational Studies. SG ANZICS Asia Pacific Intensive Care Forum, Singapore. April 20, 2019.
178. Extracorporeal Support for ARDS: What Now? Where Next? [Plenary Lecture] SG ANZICS Asia Pacific Intensive Care Forum, Singapore. April 21, 2019.

179. Nuts and Bolts of VV ECMO. SG ANZICS Asia Pacific Intensive Care Forum, Singapore. April 21, 2019.
180. Medical Progress – ARDS: Pontoppidan, Mechanical Ventilation, and Beyond. Henning Pontoppidan Lecture, Anesthesia, Pain, and Critical Care Medicine Grand Rounds, Massachusetts General Hospital, Boston, MA. April 25, 2019.
181. How to Design the Next ECMO Trial? American Thoracic Society International Conference, Dallas, TX. May 21, 2019.
182. Who Not to Put on VV ECMO? 3rd Update on Lung Transplantation and Artificial Lung Support, Division of Thoracic Surgery, University of Toronto, Toronto, ON. June 6, 2019.
183. EOLIA and Beyond. 3rd Chinese Society of Extracorporeal Life Support Annual Meeting, Chengdu, China. June 22, 2019.
184. ARDS: Ventilatory Management and Beyond. 41st Annual Meeting, Japanese Society of Respiratory Care Medicine, Osaka, Japan. August 3, 2019.
185. The Future of Research in ECLS. 30th Annual ELSO Conference, Austin, TX. September 13, 2019.
186. ECCO₂R to Facilitate Ultraprotective Mechanical Ventilation in ARDS. 30th Annual ELSO Conference, Austin, TX. September 14, 2019.
187. Process Metrics. 30th Annual ELSO Conference, Austin, TX. September 14, 2019.
188. ARDS: Evidence-Based Management. Chinese Critical Care Congress, Wuhan, China. September 20, 2019.
189. Extracorporeal Support for ARDS: What Now? Where Next? Chinese Critical Care Congress, Wuhan, China. September 20, 2019.
190. What's All the Fuss with Driving Pressure and Mechanical Power? Chinese Critical Care Congress, Wuhan, China. September 21, 2019.
191. VA ECMO: A Better Solution for Cardiogenic Shock? Hamilton Health Sciences ECMO Training Workshop, Hamilton, ON. September 28, 2019.
192. VA ECMO: Emergencies and Complications. Hamilton Health Sciences ECMO Training Workshop, Hamilton, ON. September 28, 2019.
193. Extracorporeal Support for ARDS: Research in Progress. University of Toronto Division of Respiratory, Research Rounds, Toronto, ON. November 1, 2019.
194. VIDD: What's the Evidence? 65th Annual American Association for Respiratory Care (AARC) Congress, New Orleans, LA. November 10, 2019.
195. Placing Artificial Airways: Endotracheal Tubes and Supraglottic Airways. 65th Annual American Association for Respiratory Care (AARC) Congress, New Orleans, LA. November 10, 2019.
196. Mechanical Ventilation During VV ECMO. Canada Critical Care Forum, Toronto, ON. November 12, 2019.
197. Driving Pressure and Mechanical Power in ARDS: Why All the Fuss? Canada Critical Care Forum, Toronto, ON. November 13, 2019.

198. Who Not to Put on VV ECMO? Sheba Medical Center Lung Transplant Workshop, Tel Aviv, Israel. December 2, 2019.
199. Acute Post-Operative Care in Lung Transplantation. Sheba Medical Center Lung Transplant Workshop, Tel Aviv, Israel. December 2, 2019.
200. Diagnosis and Management of Post-Operative Lung Transplant Complications in the ICU. Sheba Medical Center Lung Transplant Workshop, Tel Aviv, Israel. December 2, 2019.
201. Extracorporeal Support for Respiratory Failure in 2019. Ornge TMP CME Day, Toronto, ON. December 12, 2019.
202. Novel Approaches to the Management of Acute Respiratory Failure: Extracorporeal Support. Better Breathing 2020, The Lung Association, Toronto, ON. January 23, 2020.
203. International ECMO Network: Building Research Infrastructure. Cardiac Safety Research Consortium Think Tank: Shock III, Gaylord National Convention Center, National Harbor, MD. February 22, 2020.
204. ECMO in COVID-19: The North American Perspective. EuroELSO 2020 (London) Virtual Day. June 25, 2020.
205. ECMO for ARDS. Unidad de Terapia Intensiva de Adultos Grand Rounds, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina (Virtual). August 13, 2020.
206. Mechanical Ventilation during Extracorporeal Support: What are the Right Targets? 14th Chinese Society of Critical Care Medicine (CSCCM) Congress, Chongqing, China (Virtual). August 14, 2020.
207. What's Next for ECCO₂R in ARDS? 31st Annual ELSO Conference, Kailua, HI (Virtual). September 25, 2020.
208. International ECMO Databases. 31st Annual ELSO Conference, Kailua, HI (Virtual). September 25, 2020.
209. Extracorporeal Support 101. Canada Critical Care Forum, Toronto, ON (Virtual). October 7, 2020.
210. What's Next for ECLS in ARDS? Canada Critical Care Forum, Toronto, ON (Virtual). October 7, 2020.
211. Management of ARDS in the Era of COVID-19. 30th Congreso Argentino de Terapia Intensiva, Argentina (Virtual). November 4, 2020.
212. VV ECMO: Respiratory Function Monitoring and Lung Protection. Annual Critical Care Quality Control Congress of China, Nanjing (Virtual). November 13-14, 2020.
213. Driving Pressure and Mechanical Power in ARDS: Why All the Fuss? 66th Annual American Association for Respiratory Care (AARC) Congress (Virtual). November 18, 2020.
214. Does Oxygenation Play a Role in PEEP Selection? 66th Annual American Association for Respiratory Care (AARC) Congress (Virtual). December 5, 2020.
215. ECMO for COVID-19 ARDS. ATS COVID-19 Critical Care Training Forum (Virtual). December 8, 2020.
216. Respiratory Management of COVID-19. Ontario Critical Care Clinical Practice Rounds (OC3PR): COVID-19 (Virtual). December 10, 2020.
217. The ARREST Trial – A Role for ECPR? Critical Care Reviews Meeting 2021, Belfast, Northern Ireland (Virtual). January 20, 2021.

218. The REST Trial – ECCO₂R for Ultrprotective MV. Critical Care Reviews Meeting 2021, Belfast, Northern Ireland (Virtual). January 21, 2021.
219. Rescue Approaches to ARDS: Do's and Don'ts. 50th Society of Critical Care Medicine Meeting (Virtual). January 31, 2021.
220. B before H: The Alphabet Never Lies About ECMO Anticoagulation. 50th Society of Critical Care Medicine Meeting (Virtual). February 4, 2021.
221. ECMO for ARDS in the Era of COVID-19. SUNY Stony Brook Pulmonary/Critical Care Grand Rounds (Virtual). February 10, 2021.
222. Are ECCO₂R Indications Moving From Specific Diseases to VILI Prevention? ARDS E-Day, ISICEM, Brussels, Belgium (Virtual). March 2, 2021.
223. Observational Registries: Successes, Pitfalls, What Can Be Fixed Now, and Future Collaborations (ELSO). Cardiac Safety Research Consortium Shock V Think Tank, CRT 2021 (Virtual). March 19, 2021.
224. Are ECCO₂R Indications Moving From Specific Diseases to VILI Prevention? ECMO E-Day, ISICEM, Brussels, Belgium (Virtual). April 13, 2021.
225. Inhaled Vasodilators for ARDS. Pulmonary and Critical Care Medicine Grand Rounds, Specturm Health, New Jersey, United States (Virtual). April 21, 2021.
226. An Alternative to Breathing: The Story of Extracorporeal Support for Acute Respiratory Failure. Anesthesiology and Critical Care Medicine Grand Rounds, Johns Hopkins University, Baltimore, MD (Virtual). May 6, 2021.
227. COVID-19: Is it "Typical" ARDS? – Clinician Center Panel Discsuion. American Thoracic Society International Conference (Virtual). May 17, 2021.
228. Extracorporeal Organ Support for Respiratory Failure. American Thoracic Society International Conference (Virtual). May 19, 2021.
229. An Alternative to Breathing: The Future Management of Acute Respiratory Failure. Medicine Grand Rounds, University of Massachussetts Medical School, Boston, MA (Virtual). June 3, 2021.
230. ECMO for COVID-19: The Ontario Experience. Ontario Critical Care Clinical Practice Rounds (OC3PR): COVID-19 (Virtual). June 3, 2021.
231. Mechanical Ventilation During VV ECMO. American Thoracic Society 2021 Fellow Track Symposium (Virtual). June 15, 2021.
232. ECMO for ARDS – When and in Whom? Temoporary Circulatory Support-ECMO Meeting, Paris, France (Virtual). June 29, 2021.
233. Controversial Topics in Respiratory ECMO. 5th Chinese Society of Extracorporeal Life Support Annual Meeting, Nanjing, China (Virtual). July 21, 2021.
234. ECMO for COVID-19. XXIV International Forum of Critical Care. Mexico City, Mexico (Virtual). July 24, 2021.

235. Extracorporeal Support: Current and Future Role in Acute Respiratory Failure. Pulmonary Research Conference, Division of Pulmonary and Critical Care Medicine, University of Michigan, Ann Arbor, MI (Virtual). September 8, 2021.
236. Driving Pressure and Mechanical Power: Current and Future Role in the Management of ARDS. International Symposium of Mechanical Ventilation and Hemodynamic Monitoring, Lima, Peru (Virtual). September 9, 2021.
237. Noninvasive Respiratory Support for COVID-19. Canadian Society of Respiratory Therapy Webinar. October 7, 2021.
238. An Alternative to Breathing: Current and Evolving Management of Acute Respiratory Failure. Sidone Goldstein Lecture, Medical Grand Rounds, Department of Medicine, University Health Network/Sinai Health System, Toronto, ON. October 27, 2021.
239. VV ECMO: Updated 2021 Adult Guidelines. Asia-Pacific ELSO (APELSO) Conference, Taipei, Taiwan (Virtual). October 29, 2021.
240. ECCO₂R – State of the Art. XXVI Congresso Brasileiro de Medicina Intensiva, Brazil (Virtual). November 8, 2021.
241. Extracorporeal Support: Current and Future Role in Acute Respiratory Failure. Toronto General Hospital Research Institute Research Day, Toronto, ON. November 9, 2021.
242. ECMO for Acute Respiratory Failure: Current and Evolving Management. Pulmonary Grand Rounds, Beth Israel Deaconess Medical Center, Boston, MA (Virtual). November 11, 2021.
243. ECMO for ARDS: Past, COVID-19, Future. University of British Columbia and BC Society of Critical Care, Critical Care Medicine Rounds, Vancouver, BC. November 18, 2021.
244. Respiratory Drive in COVID-19. American Association of Respiratory Therapy Annual Congress (Virtual). December 1, 2021.
245. ECMO for ARDS – When and in Whom? Canada Critical Care Forum, Toronto, ON (Virtual). December 8, 2021.
246. Titrating Oxygen Therapy in the Critically Ill. Cardiology Grand Rounds, Boston University Medical Center, Boston, MA (Virtual). January 19, 2022.
247. INDEX and International Trials. EXCEL Symposium, Monash University, Melbourne, Australia (Virtual). March 31, 2022.
248. ARDS. Canadian Critical Care Review Course, Toronto, ON. April 8, 2022.
249. The Future of Respiratory Support in ARDS: MV and ECLS Research in Progress. Pulmonary Research Conference, Brown University, Providence, RI (Virtual). April 11, 2022.
250. VV-ECMO for COVID-19: A Comparative Effectiveness Study. 10th EuroELSO Congress, London, UK. May 5, 2022.
251. Myths or Truths: ARDS Phenotyping. American Thoracic Society International Conference, San Francisco, CA. May 15, 2022.

252. The Promise of ECLS: Should Patients Breathe? American Thoracic Society International Conference, San Francisco, CA. May 16, 2022.
253. ECMO Bridge to Lung Transplantation: Non-COVID and COVID. McGill ECMO Academic Session, Montreal, QC (Virtual). May 24, 2022.
254. Mechanical Power: Current and Future Role in the Management of ARDS. ECOS-TCS International Congress, Paris, France. June 9, 2022.
255. What's Next: International Research Database for Extracorporeal Support (INDEX). ECOS-TCS International Congress, Paris, France. June 9, 2022.
256. Weaning Strategies in VV-ECMO. ECOS-TCS International Congress, Paris, France. June 10, 2022.
257. How to Manage Spontaneous Breathing during VV ECMO. 6th Chinese Society of Extracorporeal Life Support Annual Meeting, Nanjing, China (Virtual). June 18, 2022
258. ECMO for COVID-19: The International Experience. 5th MiECT Symposium/Canadian Society of Cardiovascular Perfusion Regional Meeting, Niagara-on-the Lake, Ontario. June 19, 2022.
259. Prolonged ECMO for ARDS – Clinical Strategies for Success. 33rd Annual ELSO Conference, Boston, MA. September 15, 2022.
260. ECCO₂R for ARDS. Chest Annual Meeting, Nashville, TN. October 19, 2022.
261. The Future of Respiratory Support in ARDS. Pulmonary Diseases, Critical Care and Environmental Medicine, Tulane University School of Medicine, New Orleans, LA. November 9, 2022.
262. ECMO for Protective Mechanical Ventilation. American Association of Respiratory Therapy Annual Congress, New Orleans, LA. November 10, 2022.
263. ECCO₂R for ARDS. 3rd Israeli ECMO Symposium, Tel Aviv, Israel (Virtual). November 10, 2022.
264. ECMO for ARDS – When and in Whom? 32nd Congreso Argentino de Terapia Intensiva, Plata Del Mar, Argentina (Virtual). November 10, 2022.
265. Extracorporeal Support for ARDS – When and in Whom? Healthcare Associates ECMO Working Group (Virtual). November 10, 2022.
266. Pro/Con Setting PEEP using the PEEP/FiO₂ Table. American Association of Respiratory Therapy Annual Congress, New Orleans, LA. November 11, 2022.
267. VV ECMO for COVID-19 – What Have We Learned? Canada Critical Care Forum, Toronto, ON. November 25, 2022.
268. ECMO for COVID-19 – The Canadian and International Experience. Health Canada Scientific Advisory Committee on Medical Devices Used in the Cardiovascular System. Toronto, ON (Virtual). November 25, 2022.
269. Survivorship: The Defining Challenge for Critical Care in the 21st Century. Rutgers University, New Jersey Medical School, Department of Medicine Grand Rounds, Camden, NJ (Virtual). December 20, 2022.
270. Mechanical Treatments That Should be Pursued in Patients with RV Failure. Society of Critical Care Medicine Annual Congress, San Francisco, CA. January 22, 2023.

271. Year in Review: VV ECLS. 10th Kuwait Critical Care Conference and 1st Kuwait ECLS Congress. Kuwait City, Kuwait. February 5, 2023.
272. MV during ECMO. 10th Kuwait Critical Care Conference and 1st Kuwait ECLS Congress. Kuwait City, Kuwait. February 5, 2023.
273. ICU Registries – Why, When, and How? 10th Kuwait Critical Care Conference and 1st Kuwait ECLS Congress. Kuwait City, Kuwait. February 6, 2023.
274. Ultraprotective MV using ECCO₂R. 10th Kuwait Critical Care Conference and 1st Kuwait ECLS Congress. Kuwait City, Kuwait. February 5, 2023.
275. Breathing Easier? Acute Hypoxemic Respiratory Failure after the COVID-19 Pandemic. UHN/SHS Medical Grand Rounds. Toronto, ON. February 22, 2023.
276. Lung Protection in the ICU. 7th Asian Society for Neuroanesthesia and Critical Care Congress. Manila, Philippines (Virtual). February 23, 2023.
277. Beyond LTVV – The Future of Respiratory Support for ARDS. Robert Wood Johnson University Hospital Critical Care Grand Rounds. New Brunswick, NJ (Virtual). February 23, 2023.
278. VV ECMO for ARDS – Updates from COVID-19. New York State Thoracic Society (ATS Chapter) Annual Conference. Westchester, NY. March 24, 2023.
279. Extracorporeal Support for Cardiopulmonary Failure. Queen’s University Critical Care Medicine Academic Half-Day. Kingston, ON. March 29, 2023.
280. INDEX and PRACTICAL. The EXCEL Registry Symposium, Monash University. Melbourne, Australia. April 21, 2023.
281. Extracorporeal CO₂ Removal (ECCO₂R) – Current Practice. The EXCEL Registry Symposium, Monash University. Melbourne, Australia. April 21, 2023.
282. ECCO₂R – A Solution in Search for a Problem? 11th EuroELSO Congress. Lisbon, Portugal. April 27, 2023.
283. Adaptive Platform Trial Initiative – VV ECMO. 11th EuroELSO Congress. Lisbon, Portugal. April 28, 2023.
284. The Rationale for Oxygen and Carbon Dioxide Targets in ECMO. 11th EuroELSO Congress. Lisbon, Portugal. April 28, 2023.
285. ARDS. Canadian Critical Care Review Course, Toronto, ON. June 8, 2023.
286. Beyond LTVV – The Future of Respiratory Support for ARDS. Hales Memorial Lecture, Pulmonary and Critical Care Medicine Grand Rounds, Massachusetts General Hospital. Boston, MA. June 14, 2023.
287. Extracorporeal Support for ARDS – Lessons Learned from COVID-19. Pulmonary/Critical Care Grand Rounds, Department of the Institute for Critical Care, Mount Sinai Health System. New York, NY. June 15, 2023.

INVITED PRESENTATIONS – DECLINED

1. Keynote Address on ARDS. Suncoast Pulmonary Symposium, Bonita Springs, FL. September 7, 2017.

2. Recruitment Maneuvers in ARDS and EIT During Controlled Mechanical Ventilation. 63rd Annual American Association for Respiratory Care (AARC) Congress, Indianapolis, IN. October 4-7, 2017.
3. Novel Approaches to ECMO. Society of Critical Care Medicine 47th Critical Care Congress, San Antonio, TX. February 28, 2018.
4. ECPR: How Far is Too Far? American Association for Thoracic Surgery (AATS) Mechanical Circulatory Support Symposium, Houston, TX. March 9, 2018.
5. ECMO as a Bridge to Lung Transplantation. American Thoracic Society International Conference, San Diego, CA. May 23, 2018.
6. Annual E. Paul Didier Memorial Lecture. Mayo School of Health Sciences/University of Minnesota Rochester, Mayo Clinic, Rochester, MN. October 25, 2018.
7. ACCP Update on Critical Care. American College of Chest Physicians Annual Meeting, San Antonio, TX. October 30, 2018.
8. ECMO. 3rd International Critical Care Conference, Riyadh, Saudi Arabia. January 15-17, 2019.
9. Anesthesia Critical Care Medicine Grand Rounds. Stanford Medical Center, Palo Alto, CA. May 6, 2019.
10. Building an International Database as a Platform for Clinical Trials. ANZIC-RC Collaborative Clinical Trials in Intensive Care Medicine Conference, Prato, Italy. May 29, 2019.
11. Monitoring Respiratory Function in Adult Acute Care. 58th Respiratory Care Journal Conference, St. Petersburg, FL. June 10-11, 2019.
12. Mechanical Ventilation and ECMO in ARDS. 18th International Conference on Emergency Medicine, Korean Society of Emergency Medicine (KSEM), Seoul, Korea. June 12-15, 2019.
13. Mechanical Ventilation and ECMO for ARDS. ATS/ALAT South American Critical Care Conference, Santiago, Chile. September 6, 2019.
14. Critical Illness Myopathy. University of Washington Medical Center Physical Therapy Course, Seattle, WA. October 12, 2019.
15. ECMO for ARDS: Now and Next? Taiwan Society of Pulmonary and Critical Care Medicine Annual Meeting, Kaoshiung, Taiwan. December 7-8, 2019.
16. ECLS for Lung Failure. AATS Mechanical Support for the Heart and Lung Symposium, Houston, TX. September 20, 2019.
17. Where Does ECMO Fit In? Society of Critical Care Medicine 48th Critical Care Congress, Orlando, FL. February 18, 2020.
18. ECLS for Lung Failure. AATS Mechanical Support for the Heart and Lung Symposium, Houston, TX. February 14, 2020.
19. ECMO: Current Practice and Future Directions. 2nd Saudi ECMO Conference, Riyadh, Saudi Arabia. March 8-9, 2020.
20. Spontaneous Breathing in ARDS. Respiratory Congress, Respiratory Care Society of Washington, Spokane, WA. April 19-21, 2020.

21. The Future of ECLS for ARDS. 40th International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium (Virtual). September 17, 2020.

ORAL PRESENTATIONS AT SCIENTIFIC MEETINGS – PEER REVIEWED

1. Cavayas A, Munshi L, **Fan E**. The change in PaCO₂ in the first 24 hours after ECLS initiation is associated with neurological complications. [oral] 29th Annual ELSO Conference, Phoenix, AZ. September 14, 2018.
2. Munshi L, Kiss A, **Fan E**. Oxygenation thresholds and mortality during extracorporeal support. [oral] 27th Annual ELSO Conference, San Diego, CA. September 17, 2016.
3. Goddard S, Manoharan V, Laffey J, **Fan E**, Rubinfeld G. Randomized educational ARDS diagnosis study: A LUNG-SAFE sub-study. [oral] American Thoracic Society International Meeting, San Francisco, CA. May 16, 2016.
4. Telesnicki T, Munshi L, **Fan E**. Extracorporeal membrane oxygenation for adult patients with acute respiratory failure: a systematic review and meta-analysis. [oral] American Thoracic Society International Meeting, Philadelphia, PA. May 21, 2013.
5. **Fan E**, MacDonald RD, Adhikari N, Scales DC, Wax RS, Stewart TE, Ferguson ND. Outcome of Interfacility ICU Patient Transport. [oral] Toronto Critical Care Medicine Symposium, Toronto. October 26, 2005.

OTHER ACTIVITIES

1. New Ventilator Modes. Session Moderator. Canada Critical Care Forum, Toronto, ON. November 8, 2010.
2. Mechanical Ventilation: State of the Art. Postgraduate Course Organizer and Chair. American Thoracic Society International Meeting, Denver, CO. May 14, 2011.
3. Extracorporeal Gas Exchange: Beyond Mechanical Ventilation for ALI. Scientific Symposium Organizer and Chair. American Thoracic Society International Meeting, Denver, CO. May 16, 2011.
4. Process of Care, Quality of Life, and Long-Term Follow Up. Poster Discussion Chair/Facilitator. American Thoracic Society International Meeting, Denver, CO. May 16, 2011.
5. Epidemiology of ALI. Mini-Symposium Chair. American Thoracic Society International Meeting, Denver, CO. May 18, 2011.
6. HFOV in Adults – Roundtable and Forum. Facilitator and Commentator. 33rd Annual Meeting of the Japan Society of Respiratory Care Medicine, Yokohama, Japan. June 10, 2011.
7. The Chronic Critically Ill Patient. Roundtable Participant. 49th Respiratory Care Journal Conference, Tampa, FL. September 9-10, 2011.
8. ESICM Task Force on ARDS Definitions. Roundtable Participant. European Society of Intensive Care Medicine (ESICM), Berlin, Germany. September 30-October 2, 2011.
9. Extracorporeal Life Support (ECLS) II – Cases and Discussion. Session Moderator and Panel Discussant. Canada Critical Care Forum, Toronto, ON. November 14, 2011.
10. Poster Session Adjudicator. 32nd International Symposium on Intensive Care and Emergency Medicine. Brussels, Belgium. March 20, 2012.

11. Ventilator-Associated Pneumonia. Session Moderator. 32nd International Symposium on Intensive Care and Emergency Medicine. Brussels, Belgium. March 22, 2012.
12. Intensive Care Unit Physiotherapy and Weaning: Mind Over Muscle? Thematic Poster Session Adjudicator. American Thoracic Society International Meeting, San Francisco, CA. May 21, 2012.
13. Extracorporeal Gas Exchange: Respiratory Failure and Beyond. Scientific Symposium Organizer and Chair. American Thoracic Society International Meeting, San Francisco, CA. May 21, 2012.
14. Ventilation I – Monitoring and Spontaneous Breathing. Session Moderator. Canada Critical Care Forum, Toronto, ON. October 30, 2012.
15. Systematic Reviews. Scientific Poster Session Adjudicator. Canada Critical Care Forum, Toronto, ON. October 30, 2012.
16. Assessing and Preventing Delirium. Session Moderator. Canada Critical Care Forum, Toronto, ON. October 30, 2012.
17. Neurocognitive and Neuromuscular Issues in the ICU. Thematic Poster Session Adjudicator. American Thoracic Society International Meeting, Philadelphia, PA. May 20, 2013.
18. ECLS Symposium. Symposium Organizer and Chair. Canada Critical Care Forum, Toronto, ON. November 9, 2013.
19. ECLS Hands-On Session. Simulation Session Faculty. American Association of Thoracic Surgery, Toronto, ON. April 26, 2014.
20. ARDS 2024: Looking to the Next Decade. Scientific Symposium Organizer and Chair. American Thoracic Society International Meeting, San Diego, CA. May 18, 2014.
21. Extracorporeal Lung Support. Session Moderator. EuroELSO 2014 Meeting, Paris, France. May 24, 2014.
22. Airflow Obstruction: Lower Airway. Session Instructor. Alfred ICU Ventilator Waveforms Workshop, Melbourne, Australia. July 16, 2014.
23. Severe Acute Respiratory Failure – A Masterclass. Symposium Organizer. Canada Critical Care Forum, Toronto, ON. October 29, 2014.
24. Ventilators and Ventilation. Poster Discussion Chair/Facilitator. 60th Annual American Association for Respiratory Care (AARC) Congress, Las Vegas, NV. December 10, 2014.
25. Weaning. Session Moderator. 35th International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium. March 17, 2015.
26. ECMONet Session: The Future of Clinical Research in Extracorporeal Support. Session Chair. International Congress on ECMO and Short Term Circulatory/Respiratory Support, Paris, France. June 25, 2015.
27. ECLS Frontiers. Session Moderator. Canada Critical Care Forum, Toronto, ON. October 27, 2015.
28. Clinical Poster Session Adjudicator. UK Intensive Care Society State of the Art Meeting, London, UK. December 7, 2015.
29. 50 Years of ARDS: Looking Back and Forward. Scientific Symposium Organizer and Chair. American Thoracic Society International Meeting, Washington, DC. May 24, 2017.

30. Hamilton Health Sciences ECMO Training Course. Co-Organizer. Hamilton General Hospital, Hamilton, ON. September 28-29, 2019.

Educational Activities

TEACHING

Undergraduate Teaching, University of Toronto

Internal Medicine Clinical Clerkship Tutor Wightman-Berris Academy	2004-2005
Art and Science of Clinical Medicine (ASCM) Course Clinical Tutor Wightman-Berris Academy	2004-2005
LINK Course Instructor Wightman-Berris Academy	2003-2005

Postgraduate Teaching, University of Toronto

University of Toronto Critical Care Fellows Journal Club Facilitator University of Toronto	2011-2018
Core Internal Medicine Noon Rounds Seimars University Health Network and Mount Sinai Hospital	2010-2016
Internal Medicine Morning Report Mount Sinai Hospital and University Health Network	2004-2005
Internal Medicine Royal College Scenario Rounds Mount Sinai Hospital and University Health Network	2004-2005
Internal Medicine Clinicopathological Correlation Conference Mount Sinai Hospital	2004

Graduate Teaching, Institute of Health Policy, Management and Evaluation (IHPME), University of Toronto

Clinical Epidemiology Institute Course Concept Sheet Session Tutor	November 2013
Observational Studies in Clinical Epidemiology: Theory, Design, and Methods (HAD5309H) Course Co-Instructor	2014-present

Faculty of Nursing, University of Toronto

Acute Care Nurse Practitioner Lecture Series	2006
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Postgraduate Teaching, Johns Hopkins University

Medical Intensive Care Unit Resident Seminar Series	2007-2010
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Johns Hopkins Hospital

Intensive Care Unit, University Health Network

Extracorporeal Life Support Education and Simulation Program
Toronto General Hospital 2012-2020

GRADUATE STUDENT ACTIVITIES

Institute of Medical Sciences, University of Toronto
Lu Chen, MD July 2018
Graduate Student (MSc Candidate)
Role: Internal PhD Transfer Examiner
Mechanics-oriented mechanical ventilation in patients with ARDS

Elizabeth Wilcox, MD, MPH August 2019
Graduate Student (PhD Candidate)
Role: Internal IMS Defense
Sleep and cognition after ICU admission

RESEARCH SUPERVISION

Faculty Mentorship, University of Toronto
Michael Detsky, MD, MSc Jan 2020-present
Assistant Professor, University of Toronto
Role: Faculty Mentor

Laveena Munshi, MD, MSc July 2016-present
Assistant Professor, University of Toronto
Role: Faculty Mentor

Student, Resident, and Fellow Project Supervisor, University of Toronto
Cal Robinson, MD Jan 2023-present
Graduate Student (MSc Candidate)
Institute of Health Policy, Management and Evaluation, University of Toronto
Role: Program Advisory Committee Member
Optimizing treatment strategies in childhood nephrotic syndrome

Stephan von Doring, MD Jan 2021-present
Graduate Student (MSc Candidate)
Institute of Health Policy, Management and Evaluation, University of Toronto
Role: Program Advisory Committee Supervisor
Epidemiology and Outcomes of Mechanical Power in Acute Hypoxemic
Respiratory Failure
* Valeria Rossi di Montelera Foundation Bourse Eugenio Litta Grant (2022-2023)

Lu Chen, MD Oct 2020-present
Graduate Student (PhD Candidate)
Institute of Medical Sciences, University of Toronto
Role: Program Advisory Committee Member
Mechanics-oriented mechanical ventilation in patients with ARDS

Diana Morales Castro, MD July 2020-present
Critical Care Fellow, University of Toronto

Graduate Student (MSc Candidate)
 Department of Pharmacy, University of Toronto
 Role: Program Advisory Committee Supervisor
 Pharmacokinetics and Pharmacodynamics of Antibiotics in VV ECMO
 * IDCCM Scholar Award (2022-2023)

Leanne Delaney, MD Jan 2020-June 2022
 Internal Medicine Resident, University of Toronto
 Role: Research Supervisor
 Palliative Care in ECLS Patients

Kevin Gorsky, MD Nov 2019-Nov 2020
 Anesthesiology Resident, University of Toronto
 Role: Research Supervisor
 ICU Redeployment of Internal Medicine and Anesthesiology Residents during a Pandemic

Menachem Benzaquen, MD Nov 2019-present
 Anesthesiology Resident, University of Toronto
 Role: Research Supervisor
 The Effect of Tranexemic Acid Use on Complications and Outcomes in ECLS Patients

Manuel Tisminetzky, MD Oct 2019-present
 Critical Care Fellow, University of Toronto
 Role: Research Supervisor
 Predicting Response to Prone Positioning in ARDS

Wentao Wang, MD Oct 2019-May 2020
 Critical Care Resident, Zhengzhou Hospital, Zhengzhou, China
 Role: Research Supervisor – Clinical Research Fellow, University of Toronto
 Neuroprotection during VA-ECMO following ECPR

Ricardo Teijeiro-Paradis, MD July 2019-present
 Critical Care Fellow, University of Toronto
 Graduate Student (MSc Candidate)
 Institute of Medical Sciences, University of Toronto
 Role: Program Advisory Committee Supervisor
 Weaning from VV ECMO – Evaluating a Protocol for Sweep Off Trials

Laith Ishaq, MD Nov 2018-June 2022
 Internal Medicine Resident, University of Toronto
 Role: Research Project Supervisor
 Complications from mechanical ventilation for acute respiratory failure

Damian Ratano, MD Oct 2018-present
 Research Fellow, University of Toronto
 Role: Research Supervisor
 The role of viscoelastic testing to guide anticoagulation in ECMO patients

Aneesh Thakore Apr 2018-June 2020
 Medical Student, University of Toronto
 Role: Research Project Supervisor
 Mechanical ventilation during extracorporeal life support

Rafaela Vanin Pinto Ribeiro, MD Feb 2018-Dec 2018

Graduate Student (MSc Candidate)
 Institute of Medical Sciences, University of Toronto
 Role: Program Advisory Committee Member
 Photodynamic therapy to treat bacteremia during extracorporeal life support

Yasin Khan, MD Oct 2017-present
 Research Fellow, University of Toronto
 Graduate Student (PhD Candidate)
 Institute of Health Policy, Management and Evaluation, University of Toronto
 Role: Program Advisory Committee Supervisor
 Adherence to Low Tidal Volume Ventilation in ARDS

Alex Cavayas, MD Sept 2017-Dec 2020
 Research Fellow, University of Toronto
 Role: Research Supervisor
 Changes in gas exchange and outcomes during ECLS

Anna Geagea, MD Mar 2017-May 2023
 Graduate Student (MSc Candidate)
 Institute of Health Policy, Management and Evaluation, University of Toronto
 Role: Program Advisory Committee Supervisor
 The role of S/F ratio in the diagnosis and outcomes of acute hypoxemic respiratory failure

Martin Uner, MD Jan 2017-July 2022
 Graduate Student (PhD Candidate)
 Institute of Health Policy, Management and Evaluation, University of Toronto
 Role: Program Advisory Committee Supervisor
 Novel analytical techniques for observational data in critical care: driving pressure
 * CIHR Vanier Canada Graduate Scholarship

Hiroko Aoyama, MD July 2016-Jan 2022
 Research Fellow, University of Toronto
 Graduate Student (PhD Candidate)
 University of Tokyo, Japan
 Role: Research Supervisor and Thesis Committee Member
 Driving pressure in ARDS

Aadil Ali, BSc Oct 2016-Mar 2021
 Graduate Student (PhD Candidate)
 Institute of Medical Sciences, University of Toronto
 Role: Program Advisory Committee Member
 Long-term maintenance of normothermic ex-vivo lung perfusion using synthetic oxygen carriers

Tommaso Pettenuzzo, MD Oct 2016-Sept 2017
 Anesthesiology Resident, Università degli Studi di Padova, Padova, Italy.
 Role: Research Supervisor – Clinical Research Fellow, University of Toronto
 Evaluation of right ventricular function during VV ECMO

Alice Vendramin, MD July 2015-June 2016
 Anesthesiology Resident, Università degli Studi di Padova, Padova, Italy.
 Role: Research Supervisor – Clinical Research Fellow, University of Toronto
 Evaluation of driving pressure-guided mechanical ventilation in ARDS

<p>Petra Wildgoose, MD Emergency Medicine Resident, University of Toronto Role: Research Project Supervisor Patient preferences and outcomes in critical care – a systematic review</p>	<p>June 2015–June 2016</p>
<p>Marcello Schmidt, MD Graduate Student (PhD Candidate) Institute of Health Policy, Management and Evaluation, University of Toronto Role: Program Advisory Committee Member Spontaneous breathing in ARDS</p>	<p>June 2015–present</p>
<p>Alex White, MD Anesthesiology Resident, University of Toronto Role: Research Supervisor Patient information and decision aids for ECMO</p>	<p>May 2015–July 2019</p>
<p>Aiden Burrell, MD Critical Care Research Fellow, Monash University Role: Research Project Co-Supervisor Core outcomes in ECMO</p>	<p>May 2015–June 2019</p>
<p>Marlena Habal, MD Cardiology Fellow, University Health Network Role: Research Project Co-Supervisor Nitric Oxide in Right Ventricular Dysfunction: Improvements in Congestion on VA ECMO (NOVICE) Study</p>	<p>Feb 2015–June 2018</p>
<p>Kali Barrett, MD, MPH Clinical Associate, University Health Network Role: Research Mentor Economic analysis of VV ECMO for acute respiratory distress syndrome</p>	<p>Jan 2015–Jan 2020</p>
<p>Georgiana Ignat, RRT Respiratory Therapist, University Health Network Role: Collaborative Academic Practice (CAP) Research Fellowship Mentor Standardizing the practice of ventilation during mobilization of patients in the MSICU</p>	<p>Dec 2014–Dec 2019</p>
<p>Siriwardena Maithri, MD Echocardiography Fellow, University Health Network Role: Research Project Co-Supervisor Pulsatility and Cardiac Ultrasound in VA ECMO (PULSE) Study</p>	<p>Oct 2014–Mar 2020</p>
<p>Michael Sklar, MD Anesthesiology Resident, University of Toronto Role: Research Project Supervisor 1. XXL study 2. Anticoagulation in ECMO systematic review</p>	<p>Jan 2015–Dec 2016</p>
<p>Francesca Facchin, MD Anesthesiology Resident, Università degli Studi di Padova, Padova, Italy. Role: Research Supervisor – Clinical Research Fellow, University of Toronto Evaluation of patient-guided choice of optimal mean airway pressure in HFOV (EPOCH)</p>	<p>July 2014–June 2015</p>
<p>Jonathan Marhong, MD</p>	<p>Dec 2013–June 2016</p>

Internal Medicine and Critical Care Resident, University of Toronto
 Role: Research Project Supervisor
 Mechanical ventilation in adult ECMO patients

Jane Kobylanski, BSc June 2014-Apr 2016
 Medical Student, Queens' University
 Role: Research Student Supervisor
 Electrical Impedance Tomography (EIT) systematic review and clinical case study

Maude St-Onge, MD, MSc Sept 2013-Dec 2014
 Clinical Associate, Critical Care Medicine, Sunnybrook Health Science Centre
 Role: Research Project Co-Supervisor
 Cost analysis for the use of extracorporeal life support (ECLS) in poisoned patients

Christina Katsios, MD July 2013-Dec 2014
 Critical Care Resident, University of Toronto
 Role: Research Project Supervisor
 Anticoagulation and transfusion practices during extracorporeal life support (ECLS)

Catalina Casas-Lopez, MD July 2013-June 2014
 Critical Care Fellow, University of Toronto
 Role: Research Project Supervisor
 The role of echocardiography in patients supported with extracorporeal life support (ECLS)

Florence Morriello June 2013-Feb 2016
 Graduate Student (MSc Candidate)
 Institute of Medical Sciences, University of Toronto
 Role: Program Advisory Committee Member
 Human neutrophil peptide in patients with sepsis

Jon Silversides, MD April 2013-Dec 2017
 Critical Care Fellow, University of Toronto
 Consultant, Critical Care and Anesthesia, Belfast Health and Social Care Trust
 Role: Research Project Co-Supervisor
 Resuscitation and deresuscitation in critical care – a systematic review

Tadahiro Kobayashi, MD July 2012-June 2014
 Staff Physician, Department of Anesthesiology and Critical Care Medicine
 Yamagata University Faculty of Medicine, Japan
 Role: Research Sabbatical Supervisor – Clinical Research Fellow, University of Toronto
 Comparative efficacy of conventional mechanical ventilation, high frequency oscillatory ventilation,
 and extracorporeal membrane oxygenation (ECMO) for severe respiratory failure

Laveena Munshi, MD 2012-Aug 2016
 Critical Care Resident, University of Toronto
 Clinical Associate, Critical Care Medicine, University Health Network
 Role: Thesis Committee Member - MSc in Health Policy, Management, and Evaluation
 Extravascular Lung Water in Lung Transplant Patients
 * CIHR Fellowship Award

Shannon Goddard, MD 2011-2017
 Critical Care Resident, University of Toronto
 Clinical Associate, Critical Care Medicine, Sunnybrook Health Sciences Centre
 Role: Thesis Committee Member - MSc in Health Policy, Management, and Evaluation

Barriers to Early Physical Rehabilitation in the ICU – A Delphi Study

Teagan Telesnicki May-Aug 2012
Undergraduate Student, McMaster University May-Aug 2013

Role: Summer Research Student Supervisor
Extracorporeal Life Support for Acute Respiratory Failure: A Systematic Review and Meta-Analysis

Luke Reda Oct 2012-May 2013

Undergraduate Student, University of Western Ontario
Role: Research Student Supervisor
Long-Term Outcomes in Critically Ill Patients Supported with ECLS – Towards RECOVER

Elizabeth Wilcox, MD 2012-2013

Clinical Associate, Critical Care Medicine, University Health Network
Role: Research Project Supervisor
Do intensivists staffing patterns influence hospital mortality following ICU admission?
A systematic review and meta-analysis

Emma Mew May-Aug 2011

Undergraduate Student, Dalhousie University May-Aug 2012
Role: Summer Research Student Supervisor
Using the CAM-ICU to Evaluate Delirium in the TWH ICU – A Quality Improvement Study

Tim Patterson, MBBS 2011-2012

Critical Care Fellow, University of Toronto
Role: Research Project Supervisor
Recruitment maneuvers in patients with acute lung injury

Student, Resident, and Fellow Project Supervisor, Johns Hopkins University

Matthew Pipeling, MD 2009-2010

Pulmonary/Critical Care Fellow, Johns Hopkins University
Role: Research Project Supervisor
Therapies for refractory hypoxemia in acute respiratory distress syndrome

Elliott Dasenbrook, MD, MHS 2007-2009

Pulmonary/Critical Care Fellow, Johns Hopkins University
Role: Research Project Supervisor
Higher positive end-expiratory pressure in patients with acute lung injury:
a systematic review and meta-analysis

M. Bradley Drummond, MD, MHS 2007-2009

Pulmonary/Critical Care Fellow, Johns Hopkins University
Role: Research Project Supervisor
1. Inhaled corticosteroids in patients with stable chronic obstructive pulmonary disease:
a systematic review and meta-analysis
2. Evaluation of respiratory acidosis