

# A. Date Curriculum Vitae Updated: Aug 15, 2021

# **B.** Biographical Information

Researchgate https://www.researchgate.net/profile/Michael Christian2

ca.linkedin.com/in/mdchristian Linkedin https://drmikechristian.com/ WebCV

#### 1. EDUCATION

### **Degrees**

2023 Apr [in prog]	Masters of Business Administration, Durham University, Durham, England.	
2011 Apr	Diploma, Tropical Medicine and Hygiene, Universidad Peruana Cayetano Heredia,	
	Canada Manada da Landida da Comanida da Donas dia da Madia da Dana	

Gorgas Memorial Institute of Tropical and Preventive Medicine, Lima, Peru

2009 Dec MSc, Public Health, London School of Hygiene and Tropical Medicine, London,

England, United Kingdom

Course work included: basic epidemiology, basic statistics, mathematical modelling, analytical models for decision making, research design & analysis, principles of social research, health policy, health economics, and organizational management. Thesis project: An analysis of policy options for the implementation of a tertiary triage protocol in a public health care system during a mass casualty event.

1999 May MD, McMaster University, Hamilton, Ontario, Canada

BA, Health Studies (Dean's honour list), Brock University, St. Catharines, Ontario, 1996 Jun

Canada

1989 May Certificate, Certificate in Ambulance & Emergency Care - Dean's Honour List,

Humber College of Applied Arts & Technology

#### Postgraduate, Research and Specialty Training

2004 Jul - 2007 Jun Fellowships, Critical Care Medicine & Infectious Diseases, McMaster University,

Hamilton, Ontario, Canada

Residency, Internal Medicine, University of Toronto, Toronto, Ontario, Canada 1999 Jul - 2003 Jun

### Qualifications, Certifications and Licenses

CANDIDATE (2021)	Canadian Certified Physician Executive, Canadian Society of Physician Leaders	
2020 - Present	General Medical Council UK (Full registration with a licence to practice)	
2020 Oct	Physician Leadership Institute Certificate, Canadian Medical Association	
2019 Nov	The Edward Jenner Program (Healthcare Leadership Foundations), NHS Leadership Academy	
2016 May – 2020 Dec	General Medical Council UK (Full registration in APS with a licence to practice)	
2014 Aug	Canadian Patient Safety Educator	

Canadian Patient Safety Educator 2014 Aug

2014 Jan Operational Flight Surgeon Qualification

2013 Dec Basic Aviation Medicine Provider Qualification, Canadian Armed Forces

2013 Sep Critical Care Aerovac Qualification, Canadian Armed Forces

2010 Nov	Basic Medical Officer Course, Canadian Armed Forces
2010 Oct	Health Services Basic Officer Training Course, Canadian Armed Forces
2007 - present	Fellow, Critical Care, Royal College of Physicians and Surgeons of Canada
2006 - present	Fellow, Infectious Diseases, Royal College of Physicians and Surgeons of Canada
2003 - present	Fellow, Internal Medicine, Royal College of Physicians and Surgeons of Canada

## 2. EMPLOYMENT

# **Current Appointments**

2021 Oct	Executive Medical Director (Geo 1) & Attending Physician Critical Care Medicine – Vancouver Island Health Authority, British Columbia, Canada
2018 Oct – 2021 Oct	Research & Clinical Effectiveness Lead – HEMS Doctor, London's Air Ambulance, Bart's Health NHS
2015 Nov - present	Attending Physician (Locum Tenens), Critical Care Medicine, Thunder Bay Regional Hospital, Ontario, Canada
2015 Jan - present	Specialist Medical Officer - Internal Medicine/Critical Care (reserves), Canadian Armed Forces (Royal Canadian Air Force), Canada
2015 Jul - present	Consultant Physician (Courtesy Staff), Critical Care & Infectious Diseases, Mount Sinai Hospital & University Health Network, Toronto, Ontario, Canada

# **Previous Appointments**

## CLINICAL

2018 Oct – 2021 Oct	Research & Clinical Effectiveness Lead – HEMS Doctor, London's Air Ambulance, Bart's Health NHS
2017 Nov – 2018 Oct	Clinical Lead (Safety, Education & Development), Essex & Herts Air Ambulance Trust
2016 May – 2017 Oct	Specialist Registrar - HEMS, Barts Health Trust (London's Air Ambulance/Essex & Herts Air Ambulance Trust), London, UK
2015 Jul - 2016 Jan	Associate Professor, McMaster University, Department of Medicine, Hamilton, ON, Canada
2015 Jan – 2017 Jul	Adjunct Professor, Department of Health Sciences, Brock University, St Catharines, ON, Canada
2015 Jan - 2016 Jan	Chief Safety Officer, Niagara Health System
2015 Jan - 2016 Jan	Medical Director, Critical Care Response Team, Niagara Health System
2015 Jan - 2016 Jan	Consultant Physician, Critical Care Medicine, Niagara Health System
2014 Jul - 2015 Jan	Medical Director, Critical Care Response Team (ACCESS), Mount Sinai Hospital
2014 Jun - 2015 Jun	PMH Acute Care Physician Lead, Princess Margaret Hospital
2011 Aug - 2015 Jan	Assistant Professor (Adj), Public Health Sciences, Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada
2010 Oct - 2015 Jun	Consultant Physician (Active Staff), Critical Care & Infectious Diseases, Mount Sinai Hospital & University Health Network, Toronto, Ontario, Canada

2010 Oct - 2015 Jun	Assistant Professor (Clinician Investigator), Infectious Diseases and Critical Care Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
2009 Jul – 2015 Jan	Specialist Medical Officer - Internal Medicine/Critical Care (regular forces), Canadian Armed Forces (Royal Canadian Air Force), Canada
2008 Nov – 2016 Apr	Transport Physician, Ornge Transport Medicine (formerly Ontario Air Ambulance), Ontario, Canada
2007 Jul - 2010 Sep	Attending Physician (Clinical Associate), Critical Care & Infectious Diseases, Mount Sinai Hospital & University Health Network, Toronto, Ontario, Canada
2003 Oct - 2004 Sep	Attending Physician (Locum), Internal Medicine, Grey Bruce Health Services - Owen Sound, Ontario, Canada
2003 Oct - 2009 Jun	Attending Physician (Courtesy Staff, Locum), Internal Medicine & HIV, Sault Area Hospital, Ontario, Canada
2003 Oct - 2008 Mar	Attending Physician (Locum Tenens), ICU & Internal Medicine, Thunder Bay Regional Hospital, Ontario, Canada
2003 Aug - 2004 Jun	Attending Physician (Clinical Assistant), Division of General Internal Medicine, University Health Network – Toronto General Hospital, Toronto, Ontario, Canada
2000 Jan - 2006 Dec	Instructor, Canadian Health Educators, Mississauga, Canada
1990 Jan - 1995 Dec	Paramedic-1, District of Halton & Mississauga Ambulance Service, Ontario, Canada Summer: 1995, 1994 & 1993; Full-time: 1990 - 1992
1989 Jan - 1994 Dec	Emergency Medical Attendant, Peel-York District Ambulance Service, Ontario, Canada
1989 Jan - 1990 Dec	Emergency Medical Attendant, Orillia & District Ambulance Service, Ontario, Canada

## UNIVERSITY/ACADEMIC

2019 Aug – 2021 Oct	Honorary Senior Lecturer, Centre for Medical Education, Institute of Health Sciences Education, Queen Mary University of London, England
2019 Mar – 2021 Oct	Intensive Care National Audit & Research Centre – Senior Clinical Scientist (Honorary)
2007 Jul - 2010 Sep	Lecturer, Infectious Diseases and Critical Care, Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
2003 Jul - 2005 Jun	Lecturer, General Internal Medicine, Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
2000 Jan 1 - 2001 Dec 31	Part-time Lecturer, Paramedic Programme, Michener Institute for Applied Health Sciences
1995 Jan 1 - 1996 Dec 31	Tutorial Assistant, Health Studies, Brock University, St Catharines, Ontario, Canada
1995 Jan 1 - 1996 Dec 31	Alcohol Education Facilitator Trainer, Health Services, Brock University, St Catharines, Ontario, Canada
1993 Jan 1 - 1995 Dec 31	Alcohol Education Facilitator, Health Services, Brock University, St Catharines, Ontario, Canada

#### 3. HONOURS AND CAREER AWARDS

#### **Distinctions and Research Awards**

INTERNATIONAL

Received

2017 Presidential Citation – Society of Critical Care Medicine

2017 Distinguished CHEST Educator - American College of CHEST Physicians

**NATIONAL** 

Received

2019 NHS Leadership Academy Award in Healthcare Leadership Foundations,

Edward Jenner Programme, NHS Leadership Academy.

2012 General Campaign Star – SOUTH-WEST ASIA (GCS-SWA)

2012 Queen Elizabeth II Diamond Jubilee Medal (QDJM)

2010 Operational Service Medal – HUMANITAS (OSM-HUM)

2006 Jan Oral Abstract Competition, 2nd place, Canadian Critical Care Society, Canada.

(Abstract Competition)

LOCAL

Received

2011 Apr The Karen McGibbon Award of Excellence, Mount Sinai Hospital. (Award)

Code Omega Team for Excellence in Customer Service Mount Sinai Hospital annual awarded as a member of the team developing our hospital's massive transfusion protocol. Award is given for excellence demonstrated in the areas of humanitarian behaviour, innovation, interprofessional team participation and mentorship. Total

Amount: 2,500

2006 Jun Outstanding Resident Award, Hamilton Health Sciences Medical Staff

Association, Hamilton, Ontario, Canada. (Resident Award)

Senior Resident/Fellow category.

#### **Teaching and Education Awards**

**LOCAL** 

Received

2013 Jul - 2014 Jun Award for Teaching Excellence, Dept of Medicine, Faculty of Medicine,

Interdepartmental Division of Critical Care Medicine

Awarded to Mt. Sinai Hospital Site for teaching Critical Care Medicine Residents.

#### Student/Trainee Awards

LOCAL

## Received

1996 Jun	<b>Vice-Chancellor's Silver Medal</b> . Brock University, St Catharines, Ontario, Canada <i>Medal awarded for highest academic achievement within faculty</i> .
1995 Sep - 1996 Jun	<b>Brock University 25th Anniversary Scholarship</b> . Brock University, St Catharines, Ontario, Canada
1995 Sep - 1996 Jun	In-Course Scholarship. Brock University, St Catharines, Ontario, Canada
1995 Sep - 1996 Jun	Spencer William Scholarship. Brock University, St Catharines, Ontario, Canada
1994 Sep - 1995 Jun	In-Course Scholarship. Brock University, St Catharines, Ontario, Canada
1994 Sep - 1995 Jun	Spencer William Scholarship. Brock University, St Catharines, Ontario, Canada
1994 Sep - 1995 Jun	Wood Gundy Scholarship. Brock University, St Catharines, Ontario, Canada

## 4. PROFESSIONAL AFFILIATIONS AND ACTIVITIES

#### **Professional Associations**

2019 – present	Member. Canadian Society of Physician Leaders
2014 - present	Honorary Fellow, American College of Critical Care Medicine (SCCM)
2011 - present	Honorary Fellow, American College of Chest Physicians
2007 - present	Fellow, Royal College of Physicians Canada

#### **Administrative Activities**

#### **INTERNATIONAL**

## Other Organizations

2013 - present	Chair, PREEDICCT Steering Committee
2011 - present	Member, InFACT (International Forum for Acute Care Trialists)

Member, International Severe Acute Respiratory Infection Consortium (ISARIC) 2011 - present

Working Group 4

# American College of Chest Physicians

2017 - 2019	Past-Chair, Disaster Response Network, Chicago, Illinois, United States.	
2017 – 2019	1 ast-Chair, Disaster Response Network, Chicago, filmois, Chica States.	
2015 - 2017	Chair, Disaster Response Network, Chicago, Illinois, United States.	
2013 - 2015	Vice-Chair, Disaster Response Network, Chicago, Illinois, United States.	
2011 - present	Member, Executive Steering Committee, Task Force for Mass Casualty Critical Care	
2010 Sep - present	Member, Disaster Response Network Steering Committee, Chicago, Illinois, United	
	States.	
2006 - 2011	Member, Task Force for Mass Casualty Critical Care Steering Committee	

## Centers for Disease Control US

2015 - 2017 Member, Botulism Clinical Guidelines, Treatment Workgroup

## Centers for Disease Control Task Force on Paediatric Mass Critical Care

2009 - 2011	Chair, Ethics Sub-committee
2009 - 2011	Member, Steering Committee

2009 - 2011 Chair, Triage/Resource Allocation Sub-committee

## Department of Health & Human Services Centers for Disease Control and Prevention

2013 - 2014 Member, Clinical Utilization Plan for Antrax Triage and Critical Care in a Mass

Casualty Event (CUPAC), Atlanta, Georgia, United States.

## European Society of Intensive Care Medicine

2008 Jan 1 - 2010 **Member**, Trifluicus Steering Committee

### Society of Critical Care Medicine

2019 – 2021	Immediate Past-Chair, Fundamentals of Disaster Medicine Committee, Chicago, Illinois, United States
2017 – 2019	<b>Chair</b> , Fundamentals of Disaster Medicine Committee, Chicago, Illinois, United States
2015 – 2017	<b>Vice-Chair</b> , Fundamentals of Disaster Medicine Committee, Chicago, Illinois, United States
2014 - 2015	<b>Member</b> , Fundamentals of Disaster Medicine Committee, Chicago, Illinois, United States.

#### **NATIONAL**

#### AMMI Canada & Public Health Agency Canada

2003 - 2004 Member, Emerging Infectious Disease Research Network, Operations/Logistics

Team, Canada.

### British Columbia Ministry of Health

2014 Jun - 2015 - Jun Advisor, British Columbia Critical Care Working Group, British Columbia, Canada.

#### Canadian Armed Forces (Royal Canadian Air Force)

2012 - 2015 <b>Member</b> , Operational Medicine Working	Group
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2012 - 2015 Internal Medicine Representative, Combat Casualty Care Working Group

2012 **Coordinator.** Internal Medicine Research

#### Canadian Critical Care Society

2013 Mar - 2015 Member, Canadian Medical Association Public Health Agency of Canada - Working

Group for Clinical Guidance Development for the Clinical Care Community During

an Influenza Pandemic

Canadian Critical Care Trials Group (CCCTG)

2006 - present Member, Canadian Critical Care Trials Group

Centre for Addictions and Mental Health

2001 - 2002 Advisory Committee Rainbow Addiction Services, Canada.

Centre for Excellence in Emergency Preparedness

2004 - 2014 **Member**, Canada.

Ministry of Health and Long-Term Care

2005 - 2006 Public Health Agency Implementation Task Force, Canada.

Royal College of Physicians and Surgeons of Canada

2013 Jan – 2018 Oct Member, Examination Board - Critical Care Medicine, Canada.

PROVINCIAL / REGIONAL

Blood Programs Coordinating - Ministry of Health and Long-Term Care

2010 Nov - 2012 Jan Member, Ontario Contingency Planning Working Group, Ontario, Canada.

Ministry of Health and Long-Term Care

2005 Member, Hospital Emergency Dept. and Ambulance Effectiveness Working Group,

Minister's Task Force, Ontario, Canada.

Ministry of Health and Long-Term Care, Emergency Management Unit

2005 - 2009 Advisor, CBRN Reference Group and Scientific Advisory Committee, Ontario,

Canada.

Ontario Agency for Health Protection & Promotion

2007 - 2008 Secretary, Founding board – Order in council appointment, Ontario, Canada.

2007 - 2008 **Director**, Founding board – Order in council appointment, Ontario, Canada.

Ontario Association of Emergency Managers

2004 - 2008 Member, Professional Development Committee, Ontario, Canada.

Ontario Provincial Pandemic Planning Committee

2004 - 2007 Advisor, Operations Sub-committee, Ontario, Canada.

2004 - 2007 **Project Lead**, Adult Hospital Admission/Discharge Criteria Working Group,

Ontario, Canada.

2004 - 2007 Project Lead, Adult Critical Care Admission/Discharge/Triage Working Group,

Ontario, Canada.

**ORNGE** 

2012 - 2016 Member, Professional Practice Advisory Council, Ontario, Canada.

**LOCAL** 

Aids Committee of Toronto

2002 - 2004 Board of Directors, Toronto, Ontario, Canada.

Bereavement Resource Council of Niagara

1993 - 1995 Hotel Dieu Hospital Representative, Ontario, Canada.

**Brock University** 

1999 - 2002 Med-Experience Plus Advisory Committee, St Catharines, Ontario, Canada.

1994 - 1995 Health Studies Council, Class Rep, St Catharines, Ontario, Canada.
 1993 - 1994 Alcohol Policy & Practices Committee, St Catharines, Ontario, Canada.

Hotel Dieu Hospital

1993 - 1995 Volunteer, Palliative Care Team, St Catharines, Ontario, Canada.

London Ambulance Service NHS Trust

2021 - Member, Clinical Audit & Research Steering Group (CARSG)

McMaster University

2004 - 2006 **Resident Representative**, Hamilton Regional Outbreak Committee, Ontario,

Canada.

1996 - 1997 Medical Student Council Executive Member (treasurer), Hamilton, Ontario, Canada.

McMaster University, Medical Programme

1996 **Responsible Sexuality Programme Facilitator**, Hamilton, Ontario, Canada.

Mount Sinai Hospital

2013 - 2015 Member, ICU End of Life Committee
 2012 - 2015 Member, Emergency Preparedness Committee

2010 - 2015 Chair, Acute Resuscitation Committee, Toronto, Ontario, Canada.

2013 Member, Conscious Sedation Policy Working Group
 2011 Jan - 2013 Member, Clinical Ethics Committee, Ontario, Canada.

2011 - 2014 Chair, Organ and Tissue Donation Committee, Ontario, Canada.

2008 **Member**, High-Risk Medication Patient Safety Task Force, Toronto, Ontario,

Canada.

Niagara District Health Council

1995 - 1996 Community Leader, Community Visioning Committee, Ontario, Canada.

Princess Margaret Hospital

2014 Jun 1 - 2015 Jan Co-Chair, PMH Acute Care Committee, Toronto.

St. Monica's Anglican Church

2013 - present **Board Member** 

University of Toronto

2000 - 2001 **Postgraduate Student Representative**, Undergraduate Medical Education

Committee, Toronto, Ontario, Canada.

#### **Peer Review Activities**

**EDITORIAL BOARDS** 

Member

2013 Feb - 2016 Jan Emerging Health Threats Journal - Critical care

<u>Advisor</u>

2007 - present Journal of Disaster Medicine and Public Health Preparedness, Global Advisory

Committee

**GRANT REVIEWS** 

**External Grant Reviewer** 

2019 European Society Intensive Care Medicine Research & Industry Awards

2011 Aug 25 Health Research Council of New Zealand, Health Research Council of New Zealand

The Natural Sciences and Engineering Research Council of Canada (NSERC)

MANUSCRIPT REVIEWS

Reviewer

2020 Canadian Journal of Anaesthesia

2020 Trends in Anaesthesia and Critical Care

2019 Resuscitation 2016-2017 PlosOne

2015 - 2016 Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine

2015 - 2016 BMC Anesthesiology

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2014 - present	New England Journal of Medicine
2014 - 2015	Canadian Journal of Surgery
2013 - 2014	Journal of Epidemiology and Global Health
2012 - present	CMAJ Open
2011 - 2012	The International Journal of Tuberculosis and Lung Disease
2010 - present	Journal of Critical Care
2009 - present	Intensive Care Medicine
2009 - present	Pediatrics
2008 - 2009	Canadian Journal of Infectious Diseases & Med Micro
2008 - present	Critical Care Medicine
2007 - present	Chest
2007 - present	Critical Care
2007 - present	Disaster Medicine & Public Health Preparedness
2007 - present	Journal of Disaster Medicine and Public Health
2006 - present	American Journal of Infection Control
2005 - present	Canadian Medical Association Journal
2004 - 2014	Emerging Infectious Diseases
2014	Journal of Applied Biomedicine
2011	Archives of Disease in Childhood, Number of Reviews: 1
2007 - 2009	Journal of General Internal Medicine
2004 - 2005	Clinical Infectious Diseases

# Other Research and Professional Activities

# RESEARCH PROJECT

2018 – present	External Collaborator. Australian Partnership for Preparedness Research on Infectious Disease Emergencies (APPRISE). https://www.apprise.org.au/
2015 - 2016	<b>Collaborator/Site PI</b> . Fluid Translation of Research into Practice Study (Fluid-TRIPS). https://www.georgeinstitute.org/projects/fluid-translation-of-research-into-practice-study-fluid-trips
2013 - present	Principal Investigator. PREDICCT Study Group. https://preedicct.org/
2011 - 2019	International Severe Acute Respiratory Infection Consortium (ISARIC) Working Group 4 Member. Sprint SARI Co-Investigator/Country Co-PI/Member Global Steering Committee (2014-pres). https://isaric.tghn.org/sprint-sari/
2010 - 2015	<b>Site Investigator</b> . Resuscitation Outcomes Consortium (ROC) - Registry. The National Institutes of Health (NIH) and Canadian Institutes of Health Research (CIHR). https://roc.uwctc.org/tiki/tiki-index.php?page=roc-public-home
2010 - 2015	<b>Site Investigator</b> . Resuscitation Outcomes Consortium (ROC) - Prehospital Resuscitation Using an Impedance Valve & Early vs. Delayed Analysis (ROC PRIMED Trial). The National Institutes of Health (NIH) and Canadian Institutes of Health Research (CIHR). https://roc.uwctc.org/tiki/tiki-index.php?page=roc-public-home

2010 - 2015	<b>Site Investigator</b> . Strategies for Post Arrest Care: The SPARC Hypothermia Project. The Heart and Stroke Foundation of Ontario. Collaborator(s): http://stmichaelshospitalresearch.ca/research-programs/rescu/our-research/cardiac-studies/strategies-for-post-arrest-resuscitation-care-sparc/.
2013 May - 2013 Aug	<b>Co-Investigator</b> . Retrospective review of acute leukemics admitted to ICU. Collaborator(s): Sangeeta Mehta.
2007 - 2009	<b>Principal Investigator</b> Retrospective Cohort Pilot Study to Evaluate Triage Tool for use in a Pandemic.
2003 May - 2008 Aug	<b>Co-investigator</b> . Health Canada/Toronto Public Health SARS Unit Assessment. University of Toronto, Dept of Medicine, Toronto, Ontario, Canada. Supervisor(s): Dr Lindsay Nicole
2003 May - 2003 Jun	<b>Co-Investigator</b> . SARS IVIG. University of Toronto, Dept of Medicine, Toronto, Ontario, Canada
2003 Mar - 2003 Sep	<b>Co-Investigator</b> . CDC/Health Canada/Toronto Public Health Investigation into SARS Phase II Outbreak at NYGH. University of Toronto, Dept of Medicine, Toronto, Ontario, Canada. Supervisor(s): Dr Donald Low
2000 Jul 1 - 2001 Jun 30	<b>Principal Investigator</b> . C. difficile Toxemia Study. University of Toronto, Dept of Medicine, Toronto, Ontario, Canada. Supervisor(s): Dr. Wayne Gold
1995 - 1996	Research Assistant. Youth Leisure & Substance Use Study. Brock University, St Catharines, Ontario, Canada

# C. Research Funding

## 1. GRANTS, CONTRACTS AND CLINICAL TRIALS

#### **PEER-REVIEWED GRANTS**

**FUNDED** 

2021 - 2024

Co-Investigator. The Canadian Severe Acute Respiratory Infection, Prospective, Perpetual Observational Study: Informing Clinical Care and the Public Health Response. Principal Investigators: Fowler, Robert A; Murthy, Srinivas. Co-investigators: Archambault, Patrick; Carrier, François M; Cheng, Matthew P; Christian, Michael D; Cook, Deborah J; Douglas, James J; Guerguerian, Anne-Marie; Joffe, Ari R; Jouvet, Philippe A; Katz, Kevin C; Kho, Michelle E; Kumar, Deepali; Kutsogiannis, Demitrios J; Lamontagne, Francois; Lee, Todd C; Marshall, John C; McGeer, Allison J; Menon, Kusum; Pinto, Ruxandra; Rewa, Oleksa G; Stelfox, Henry T; Tsang, Jennifer L; Turgeon, Alexis F. Operating Grant: COVID-19 Research Gaps and Priorities. Circulatory and Respiratory Health. \$455,175 (CAD).

2021 Mar – 2023

**Co-Investigator.** NIHR Emergency Response and Preparedness Grant, Research for Patient Benefit (RfPB) Programme: NIHR201453. The primary aim of the proposed project is to decrease pre-hospital deaths during the acute phase of terrorism incidents through the development of response and treatment protocols to address this

	therapeutic vacuum. Co-Principal Investigators: C. Park, K. Brohi. Co-Investigators: M. Christian, S. Glasgow, R. Fothergill, M. Smith. £347,180.00 GBP.
2015 Oct - 2020	<b>Co-Investigator.</b> Establishing Feasibility & Safety of Providing Critical Care for Patients with Ebola through the design of a simulated Ebola Treatment Centre. CIHR Infection and Immunity; Population and Public Health; Health Services and Policy Research. Co-Principal Investigators: Fowler R, AdhikariA. Co-investigators: Bah E, Chan A, <b>Christian M</b> , Hajek J, Hall T, Lamah M, Lamontagne F, Marshall J, Mishra S, Murthy S, Piquette D, Simor A, Vandershuren A. \$249,973 CAD [Grants]
2013 Oct - 2014 Dec	<b>Co-Principal Investigator</b> . ACCP - Task Force for Mass Critical Care During a Disaster. Centers for Disease Control and Prevention (CDC). CDC-RFA-TP13-1303. \$75,000 USD (\$99,675 CAD). [Grants]
2012 Jan - 2014 Dec	<b>Co-Principal Investigator</b> . CHEST Network Consensus Statement Project. American College of Chest Physicians. 200,000 USD (\$265,800 CAD). [Grants]
2011 Oct - 2012 Mar	<b>Principal Investigator</b> . Planning Meeting for the PREEDICCT Study. Canadian Institute for Health Research. Planning Grants. MPI-117659. Collaborator(s): R Fowler, D Fisman, D Zygun, J Marshall. 23,842 CAD. [Grants]
2008 Mar - 2011 Mar	<b>Principal Investigator</b> . Prognostic Scoring for Patients with Severe Disease due to Influenza Catalyst Grant: Pandemic Preparedness (Mobilization of the Research Community for Outbreak Responses). Canadian Institute of Health Research. CIHR. 99,455 CAD. [Grants]
2007 Mar - 2008 Jul	<b>Principal Investigator</b> . A Pilot Project To Evaluate A Triage Tool For Use During A Pandemic. Ontario Ministry of Health & Long Term Care. Research Unit & Emergency Mgmt Unit. Collaborator(s): D. Cook. 33,862.77 CAD. [Grants]

# **NON-PEER-REVIEWED GRANTS**

FUNDED	
2010 Jan - present	<b>Co-Investigator</b> . A Phase III International, Randomized, Double-Blind, Double-Dummy Study to Evaluate the Efficacy and Safety of 300mg or 600mg of Intravenous Zanamivir Twice Daily Compared to 75 mg of Oral Oseltamivir Twice Daily in the Treatment of Hospitalized Adults and Adolescents with Influenza (Protocol NAI11373). GlaxoSmithKline. PI: Dr. Allison McGeer. [Clinical Trials]
2010 May - 2011 Apr	<b>Co-Investigator</b> . A Randomized, Double-Blinded, Active controlled Dose-Ranging Study of CB-183,315 in Patients with Clostridium Difficile Infection. Cubist Pharmaceuticals, Inc. PI: Dr. Allison McGeer. [Clinical Trials]
2009 Nov - 2010 Oct	<b>Co-Investigator</b> . An Open-label, Multi-center, Single-arm Study to Evaluation the Safety and Tolerability of Intravenous Zanamivir in the Treatment of Hospitalized Adult, Adolescent and Pediatric Subjects with Confirmed Influenza Infection

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(Protocol No. NAI113678). GlaxoSmithKline. PI: McGeer, Allison. [Clinical Trials]

2008 Jul - 2009 Jun Collaborator. Enhancing Surge Capacity and Partnership Effort [ESCAPE]. US

Federal Government. Association Secretary of Preparedness and Response - Health.

PI: Sandrock Christian. 5,000,000. [Grants]

Grant aimed at providing equal and ethical delivery of healthcare in a disaster at all levels of healthcare response in both rural and urban areas of Northern California.

2007 Jan - 2008 Dec Co-Investigator. Peramavir Phase II. PI: Dr. Allison McGeer. [Clinical Trials]

### **D. Publications**

#### 1. PEER-REVIEWED PUBLICATIONS

#### **Journal Articles**

- 1. Hilbert-Carius, P., Struck, M.F., Rudolph, M., Knapp, J., Rognås, L., Adler, J., Slagt, C., Jacobsen, L., Pich, H., **Christian, M.D**. and Dandrifosse, D., 2021. Point-of-Care Ultrasound (POCUS) Practices in the Helicopter Emergency Medical Services in Europe. [In Press]. **Coauthor or Collaborator**
- 2. Aziz S, Foster E, Lockey DJ, **Christian MD**. Emergency scalpel cricothyroidotomy use in a prehospital trauma service: a 20-year reviewEmergency Medicine Journal Published Online First: 17 February 2021. doi: 10.1136/emermed-2020-210305. **Senior Responsible Author**.
- 3. McLachlan S, Bungay H, Wallman S, **Christian MD**, Ley E, Fenton R. Scoping the Demand for Night Operation of Essex & Herts Air Ambulance: A Prospective Observational Study. Air Medical Journal. 2021. Air Medical Journal, ISSN: 1067-991X, Vol: 40, Issue: 1, Page: 28-35. https://doi.org/10.1016/j.amj.2020.11.008 Coauthor or Collaborator
- 4. Richards-Belle A, Orzechowska I, Gould, DW, Thomas K, Doidge JC, Mouncey PR, **Christian MD**, Shankar-Hari M, Harrison DA, Rowan KM, the ICNARC COVID-19 Team. COVID-19 in critical care: epidemiology of the first epidemic wave across England, Wales and Northern Ireland. Intensive Care Med (2020). https://doi.org/10.1007/s00134-020-06267-0. **Coauthor or Collaborator.**
- Richards-Belle A, Orzechowska I, Doidge J, Thomas K, Harrison DA, Koelewyn A, Christian MD, Shankar-Hari M, Rowan KM, Gould DW. Critical care outcomes, for the first 200 patients with confirmed COVID-19, in England, Wales and Northern Ireland: A report from the ICNARC Case Mix Programme. Journal of the Intensive Care Society. October 202. <a href="https://doi.org/10.1177/1751143720961672">https://doi.org/10.1177/1751143720961672</a> Coauthor or Collaborator.
- 6. Branson R, Dichter JR, Feldman H, Devereaux A, Dries D, Perry Jr JF, Benditt J, Hossain T, Ghazipura M, King M, Baldisseri M. Christian MD, Domingiuez-Cherit G, Henry K, Martland AMO, Huffines M, Ornoff D, Persoff J, Rubinson L. The US Strategic National Stockpile (SNS) Ventilators in COVID-19: A Comparison of Functionality and Analysis regarding the Emergency Purchase of 200,000 devices. Chest. 2020 Sep 21. [Online Pre-publication] <a href="https://doi.org/10.1016/j.chest.2020.09.085">https://doi.org/10.1016/j.chest.2020.09.085</a> Coauthor or Collaborator.

- 7. Burry LD, Barletta JF, Williamson DW, Kanji S, Maves RC, Dichter J, **Christian MD**, Geiling, J. and Erstad BL. It Takes a Village... Contending with Drug Shortages During Disasters. Chest. 2020. [Online Pre-publication] https://doi.org/10.1016/j.chest.2020.08.015 **Coauthor or Collaborator.**
- 8. Hilbert-Carius, P., Struck, M.F., Hofer, V. Hinkelbein J, Rognås L, Adler J, **Christian MD**, Wurmb T, Bernhard M, and Hossfeld B. Mechanical ventilation of patients in helicopter emergency medical service transport: an international survey. Scand J Trauma Resusc Emerg Med 28, 112 (2020). <a href="https://doi.org/10.1186/s13049-020-00801-1">https://doi.org/10.1186/s13049-020-00801-1</a> **Coauthor or Collaborator.**
- 9. Aziz S, Arabi YM, Alhazzani W, Evans L, Citerio G, Fischkoff K, Salluh J, Meyfroidt G, Alshamsi F, Oczkowski S, Azoulay E, Price A, Burry L, Dzierba A, Benintende A, Morgan J, Grasselli G, Rhodes A, Møller MH, Chu L, Schwedhelm S, Lowe JJ, Bin D, Christian MD. Managing ICU surge during the COVID-19 crisis: Rapid Guidelines. Intensive Care Med (2020) 46:1303–1325. https://doi.org/10.1007/s00134-020-06092-5 Senior Responsible Author.
- 10. **ISARIC clinical characterisation group**. Global outbreak research: harmony not hegemony. The Lancet Infectious Diseases. 2020 Jun 2. DOI:https://doi.org/10.1016/S1473-3099(20)30440-0. **Coauthor or Collaborator**.
- 11. Sprung CL, Joynt GM, Christian MD, Truog RD, Rello J, Nates JL. Adult ICU Triage During the Coronavirus Disease 2019 Pandemic: Who Will Live and Who Will Die? Recommendations to Improve Survival. Critical Care Medicine. (2020). doi: 10.1097/CCM.0000000000004410. Coauthor or Collaborator.
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#### **Abstracts**

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- 7. Masse, V, Yale, P, Meade M, Fowler R, Adhikari N, Henzier D, Christian M, Herridge MS, Lamontagne F. Corticosteroid Use In A Cohort Of Icu Patients Infected With Influenza. American Thoracic Society 2011 International Conference, May 13-18, 2011 Denver Colorado; 05/2011. Coauthor or Collaborator.
- 8. M Kho, E McDonald, N Zytaruk, A Tkaczyk, R Fowler, **M Christian**, A Kumar, K Burns, J Marshall, D Cook. Costs of Clinical Research Preparation for the H1N1 Pandemic in Canada: A Single Center, Multi-Site Analysis. American Journal of Respiratory & Critical Care Medicine. 2011(183):A2387. **Coauthor or Collaborator**.

#### **Books**

1. **Christian M**. et al. In: Pamplin, JC. Borgman, MA, editors. Fundamental Critical Care Support: Resource Limited. Society of Critical Care Medicie. Mount Prospect, IL. 2020. [ISBN: 978-1-620750-87-2]. Contributor.

## **Book Chapters**

- 1. **Christian MD**, Jeffers N. Chapter 9: Teamwork in Paramedic Practice. In: Rutherford G, editor. Human Factors in Paramedic Practice. 2020. p. 125-140. [ISBN-13: 9781859598641]. **Principal Author**.
- 2. Cardinal P, **Christian MD**, Jeffers N, Brindley PG. Task Management in Acute Care Medicine. In: Optimizing Crisis Resource Management to Improve Patient Safety and Team Performance A handbook for acute care health professionals: Peter Brindley, Pierre Cardinal (Editors). Royal College of Physicians and Surgeons of Canada, 2017. *Endorsed by the Canadian Critical Care Society and Canadian Association of Critical Care Nurses*. [ISBN: 978-1-926588-41-4]. **Co-Principal Author**.
- 3. McCann DGC, Christian M, Schwartz B, Kollek D. Chapter 4: IMS and Communications. In: Kollek D, editor(s). Disaster Preparedness for Health Care Facilities. 2013. p. 143-160. Co-Principal Author.
- 4. Srinivas M, Henry B, Christian M. Chapter 11: Infectious Diseases Following Disasters. In: Kollek D, editor(s). Disaster Preparedness for Health Care Facilities. 2013. p. 290-305. Senior Responsible Author.
- 5. **Michael Christian**. Long-Term ICU and Healthcare Lessons Learned from the 2003 SARS Pandemic. In: Preparing Your ICU for Disaster Response SCCM. 2012. p. 211-217. **Principal Author**.

- 6. **Christian MD**, Lawless B, Trpkovski J, Dichter JR. Surge Management for Critical Care Leaders. In: Flaatten H, Moreno RP, Putensen C, Rhodes A, editor(s). Organisation and Management of Intensive Care. 2010. p. 277-294. [ISBN: 9783941468276]. **Principal Author**.
- 7. **Christian MD**, Farmer C, Young B. Disaster Triage and Allocation of Scarce Critical Care Resources. In: Geiling J & Burns SM, editor(s). Fundamentals of Disaster Management. 3rd Edition. Society of Critical Care Medicine; 2008. [ISBN: 9780936145587]. **Principal Author**.
- 8. Burkle FM, **Christian MD**, Rubinson L. Mass Casualty Incidents: Organizational and Triage-Management Issues Which Impact Critical Care. In: Gabrielli A, Yu M, Layon AJ, editor(s). Civetta, Taylor, and Kirby's Critical Care. 4th Edition. Lippincott Williams & Wilkins; 2008. [ISBN: 9780781768696]. **Coauthor or Collaborator**.
- 9. **Christian M.D.**, Stewart T.E., Lapinsky S.E. Critical Care and Biological Disasters: Lessons learned from SARS and Pandemic Influenza Planning. In: Cashman JN & Grounds RM, editor(s). Recent Advances in Anaesthesia and Intensive Care Medicine. 24th edition. Cambridge (United Kingdom): Cambridge University Press; 2007. [ISBN: 9780521706490]. **Principal Author**.
- 10. **Christian M.D.**, Lapinsky S.E., Stewart T.E. Critical Care Pandemic Preparedness Primer. In: Vincent JL, Pickett K, editor(s). Yearbook Of Intensive Care And Emergency Medicine. Berlin (Germany): Springer-Verlag; 2007. p. 999-1010. [ISBN: 3540494324]. **Principal Author**.
- 11. **Christian M**. Critical Care During Epidemics Fundamentals of Disaster Medicine Course. Society of Critical Care Medicine; 2006. **Principal Author**.

#### **Editorials**

- 1. **Christian, MD**. It Is Time to Rethink the Role of the Sequential Organ Failure Assessment Score in Triage Protocols. Critical Care Medicine: February 2021;49(2):365-368 doi: 10.1097/ccm.000000000004796 **Principal Author**.
- 2. **Christian MD**, Couper K, COVID-19 and the Global OHCA Crisis: An urgent need for system level solutions, Resuscitation (2020), doi: https://doi.org/10.1016/j.resuscitation.2020.11.004 **Principal Author**.
- 3. **Christian MD**, Kissoon N. Caring for Critically Ill Adults in PICUs Is Not "Child's Play". Pediatric Critical Care Medicine: April 29, 2020 doi: <a href="https://10.1097/PCC.000000000002430">https://10.1097/PCC.0000000000002430</a> **Principal Author**.
- 4. **Christian MD**, Fowler R, Muller MP, Gomersall C, Sprung CL, Hupert N, Fisman D, Tillyard A, Zygun D, Marshall JC on behalf of the PREEDICCT Study Group. Critical Care Resource Allocation: Trying to PREEDICCT Outcomes Without a Crystal Ball. Critical Care. 2013 Jan 23;17(1):107. **Principal Author**.
- 5. Rubinson L, **Christian MD**. Allocating mechanical ventilators during mass respiratory failure: Kudos to New York State, but more work to be done. Disaster Med Public Health Prep. 2008 Mar;2(1):7-10. **Senior Responsible Author**.

#### 2. NON-PEER-REVIEWED PUBLICATIONS

### **Journal Articles**

1. Mulla A, Bigham BL, Frolic A, **Christian, MD**. Canadian Emergency Medicine and Critical Care Physician Perspectives on Pandemic Triage in COVID-19, 29 July 2020, PREPRINT (Version 1) available at Research Square DOI: https://doi.org/10.21203/rs.3.rs-50315/v1. **Senior Responsible Author**.

2. **Christian M**. Respiratory complications of illicit drug use. Respiratory Rounds. 2000;1(9):1-6. (reprints from: Division of Respiratory Medicine, Mount Sinai Hospital, 640-600 University Ave., Toronto, ON. M5G 1X5).

#### **Manuals**

- 1. **Christian M**. A Facilitator's Study Guide for the Gliksman Study on Substance Use in Ontario Universities. 1st Edition. St. Catharines (Canada): Student Health Services, Brock University; 1996. A 42 page manual used as the foundation for the Alcohol Education Facilitator Training Programme at Brock University.
- 2. **Christian M**. First Week Seminars. 1995. Student Affairs, Brock University. St. Catharine's, Ontario, Canada. A 34 page manual developed to train TA's across the university to facilitate a 1 hour programme aimed at assisting first year university students' transition to university.

# Monographs

1. **Christian M**, Woods K, & Lajoie L. McMaster Medical Student Survival Guide. McMaster Medical Student Council. McMaster University. Hamilton, Ontario, Canada. 1997.

## **Reports & Guidelines**

- Christian MD, Mazurik L, Libman M, Fowler R, Kissoon N, Kumar A, Lamontange F, Murthy S, Wax R, McEwen J, Bogglid A, Garber G, Hota S, Keystone J, McGeer A, Vanderkooi O, Downer J, Lapinsky S, MacDonald R, Schwartz B, Callum J. Ebola Clinical Care Guidelines: A guide for clinicians in Canada. Report #2. Canadian Critical Care Society, Canadian Association of Emergency Physicians, Association of Medical Microbiology & Infectious Diseases Canada. Oct 2014. http://www.canadiancriticalcare.org/assets/Ebola%20Clinical%20Care%20Guidelines ENG.pdf
- 2. **Christian MD**, Mazurik L, Libman M, Fowler R, Kissoon N, Kumar A, Lamontange F, Murthy S, Wax R, McEwen J, Bogglid A, Garber G, Hota S, Keystone J, McGeer A, Vanderkooi O, Downer J, Lapinsky S, MacDonald R, Schwartz B, Callum J. Guide de pratique Clinique pour la prise en charge de la maladie à virus Ebola: Guide à l'intention des cliniciens du Canada. Société canadienne de soins intensifs, Association canadienne des médecins d'urgence. Association pour la microbiologie médicale et l'infectiologie Canada. Oct 2014. http://www.canadiancriticalcare.org/assets/Ebola%20Clinical%20Care%20Guidelines FR.pdf
- 3. **Christian MD**, Libman M, Mazurik M, Fowler R, Kissoon N, Kumar A, Lamontange F, Murthy S, Wax R, McEwen J, Garber G, Keystone J, McGeer A, Vanderkooi O, Downer J, Lapinsky S, MacDonald R. Ebola Clinical Care Guidelines: A guide for clinicians in Canada. Report #1. Canadian Critical Care Society, Canadian Association of Emergency Physicians, Association of Medical Microbiology & Infectious Diseases Canada. Aug 2014.
- 4. **Christian MD** & Dichter JR. Report to the Committee on Guidance for Establishing Standards of Care for Use in Disaster Situations. 2009 Sep. National Academy of Science, Institute of Medicine. Sept 2009.
- 5. **Christian MD**. Wax R, Lazar N, Hawryluck L, Herridge M, Fortier W, Muller M, Cook T, Burkle F. Critical Care During a Pandemic: Final report of the Ontario Health Plan for an Influenza Pandemic (OHPIP) Working Group on Adult Critical Care Admission, Discharge & Triage. April 2006. DOI: 10.13140/2.1.1326.4164

- Dunkley G, Christian MD, Cole D, Deane K, Katt M, Meek A, Mowat DL, O'Brien-Pallas L, Sanderson R, Simor A, Sutcliffe P, Yomada R, Zelmer J, Sullivan T. From Vision to Action: A plan for the Ontario Agency for Health Protection and Promotion. March 2006. ISBN 1-4249-0098-0 (PDF) ISBN 1-4249-0097-2 (Print) DOI: 10.13140/2.1.2899.2809
- 7. Dunkley G, **Christian MD**, Cole D, Deane K, Katt M, Meek A, Mowat DL, O'Brien-Pallas L, Sanderson R, Simor A, Sutcliffe P, Yomada R, Zelmer J, Sullivan T. Building an Innovative Foundation: A Plan for Ontario's New Public Health Agency, Part One. Oct 2005. ISBN 0-7794-9044-4 (Print), ISBN 0-7794-9045-2 (PDF) DOI: 10.13140/2.1.1195.3440
- 8. Schwartz B, Cass D, Christian MD, Dundas P, Farr B, LeBlanc L, Ladha L, Mazza C, Burton M, Brafafnolo G, Shah N, Weber M, Smith R. Improving Access to Emergency Services: A system Commitment. Report of the Hospital Emergency Department and Ambulance Effectiveness Working Group. Sept 2005. DOI: 10.13140/2.1.3947.8565
- 9. Nicolle LE, Perkins P, Paton S, Henry B, McGeer A, Vearncombe M, **Christian M**, Barry C, Simor A, Ofner M, Mederski B, Bravel D, Kock J. Acute care facility experiences in providing care for SARS patients in Toronto March August 2003. 2005 Aug. Report to Health Canada, April 2005.
- 10. **Christian MD**. Adult Hospital & Critical Care Admission, Discharge and Triage Working Groups' Interim Report & Recommendations. 2005 Apr 19. Report to the Operations Sub-committee of the Ontario Health Pandemic Influenza Plan Steering Committee. April 19, 2005. DOI: 10.13140/2.1.2374.9921
- 11. Yardley JK, Baker J, Christian MD, McCaul K, Hornibrook T, McFadden C. Youth Leisure and Substance Use Report Volume 5: Relationships Among Youth Psychological and Health Factors and Substance Use Variables. 1997. St. Catharines, Ontario: Brock University, Faculty of Physical Education and Recreation, 1997. (72 pages). A research report based on the 1995 Youth Leisure and Substance Use Survey, Niagara Region, Ontario, Canada.
- 12. Yardley JK, McFadden C, McCaul K, Baker I, McCaul K, & Christian MD, Hornibrook T. Youth Leisure and Substance Use Report Volume 6: Youth School Outcomes their and Relationship with Substance Use Variables. 1997. St. Catharines, Ontario: Brock University, Faculty of Physical Education and Recreation, April 1997, (89 pages). A research report based on the 1995 Youth Leisure and Substance Use Survey, Niagara Region, Ontario, Canada. Coauthor or Collaborator.
- 13. Yardley JK, McCaul K, Baker J, Hornibrook T, Christian MD, & McFadden C. Youth Leisure and Substance Use Report Volume 4: Relationships Among Youth Recreation Patterns and Substance Use Variables. 1997. St. Catharines, Ontario: Brock University, Faculty of Physical Education and Recreation, 1997. (78 pages). A research report based on the 1995 Youth Leisure and Substance Use Survey, Niagara, Ontario, Canada.
- 14. Yardley JK, McCaul K, Baker J, Hornibrook T, **Christian MD**, & McFadden C. Youth Leisure and Substance Use Report Volume 1: Youth Recreation Patterns. 1996 Aug. St. Catharines, Ontario: Brock University, Faculty of Physical Education and Recreation, August, 1996. (71 pages). A research report based on the 1995 Youth Leisure and Substance Use Survey, Niagara Region, Ontario, Canada.
- 15. Yardley JK, McFadden C, Hornibrook T, McCaul K, Baker S, McCaul K, & Christian MD. Youth Leisure and Substance Use Report Volume 2: Substance Use. 1996 Aug. St. Catharines, Ontario: Brock University, Faculty of Physical Education and Recreation, August, 1996. (72 pages). A research report based on the 1995 Youth Leisure and Substance Use Survey, Niagara Region, Ontario, Canada.

16. Yardley JK, Baker J, **Christian MD**, McCaul K, Hornibrook T, McFadden C. Youth Leisure and Substance Use Report - Volume 3: Psychological and Health Outcomes. 1996 Aug. St. Catharines, Ontario: Brock University, Faculty of Physical Education and Recreation, August, 1996. (73 pages). A research report based on the 1995 Youth Leisure and Substance Use Survey, Niagara Region, Ontario, Canada.

# **E. Presentations and Special Lectures**

#### 1. INTERNATIONAL

## **Abstracts and Other Papers**

- 2013 Nov Senior Responsible Author. INTRA ARTERIAL CATHETERISATION A quality improvement project comparing two styles of catheters. Critical Care Canada Forum. Toronto, ON, Canada. Presenter(s): Campbell VT, Acharya S, Christian MD.
- 2012 Oct 29 **Co-Author/Presenter**. Mass casualty simulation for critical care residents. Critical Care Canada Forum 2012. Toronto, Ontario, Canada. Presenter(s): Maude St. Onge. St-Onge M, Beckett A, Abrahamson S, Mazurik L, Piquette D, Hawryluck L, Scales D, Thompson M, **Christian MD** University of Toronto.
- 2012 Aug Co-Author. Trainee Satisfaction with a Blended Learning Experience as Part of a Simulation-Based Advanced Cardiac Life Support Recertification Course. Association for Medical Education in Europe (AMEE). Presenter(s): Dr. Luke Devine.
- 2011 Dec 1 **Co-Author**. Mock Code Blue. Ontario Simulation Exposition 2011. Toronto, Ontario, Canada. Presenter(s): Sev Perelman.
- 2011 Oct **Presenter**. Critical Care Provider's Perceptions of Pandemic Preparedness Following the H1N1 Pandemic. CHEST. Honolulu, Hawaii, United States. Presenter(s): **Christian MD**.
- 2011 Oct **Presenter**. An Audit of AED Use in a Tertiary Care Teaching Hospital. CHEST. Honolulu, Hawaii, United States. Presenter(s): **Christian MD**.
- 2011 Sep **Presenter**. Analysis of Policy Options For The Implementation of ICU Triage In A Public Health Care System During A Mass Casualty Event. European Society of Intensive Care Medicine. Berlin, Germany. Presenter(s): **Christian MD**.
- 2010 Oct 11 **Co-Author**. Evaluation of the Introduction of an Antimicrobial Stewardship Program to a Medical-Surgical Intensive Care Unit. ESICM. Presenter(s): Burry L, Howie S, Khory T, Lapinsky S, Minnema B, **Christian M**, Stewart T, Wax R, Mehta S, Thomson M, Bell C, Morris A.
- 2006 Nov 29 Presenter. A Triage Protocol for Critical Care During a Pandemic. Federation of Infection Societies Conference. Cardiff, Wales, United Kingdom. Presenter(s): Christian MD, Hawryluck L, Wax RS, Cook T, Lazar NM, Herridge MS, Muller MP, Gowans DR, Fortier W, Burkle FM. Oral Abstract.
- 2006 Oct 25 **Presenter**. A Triage Protocol for Critical Care During a Pandemic. Critical Care 2006: Toronto International Symposium on Critical Care. Toronto, Ontario, Canada. Presenter(s): **Christian**

- **MD**, Hawryluck L, Wax RS, Cook T, Lazar NM, Herridge MS, Muller MP, Gowans DR, Fortier W, Burkle FM. Oral Abstract.
- 1997 Mar 23 **Co-Author**. Predicting Adolescent Health: Beyond Gender and Self-esteem Main Effects. American Alliance for Health, Physical Education, and Recreation National Convention. St. Louis, Missouri, United States. Presenter(s): Christian MD.& Yardley, JK. Poster.

## **Invited Lectures and Presentations**

- 2021 Apr 22 **Invited Plenary Moderator/Chair.** Voices of Healthcare Workers in COVID-19. 3rd World Sepsis Congress. (virtual). Berlin, Germany.
- 2021 Apr 7 **Invited Plenary Speaker.** Addressing therapeutic gaps in trauma care: A systems approach to saving lives. TAC 2021: The Annual Scientific Meeting and Conference of the Trauma Association of Canada. "Flattening the Curve on Traumatic Injury." (virtual). Vancouver, BC, Canada.
- 2021 Apr 5 **Invited Speaker.** Managing Shortage in ICU Resources: Practical Points. 12th Saudi Critical Care Conference (virtual). Riyadh, Kingdom of Saudi Arabia.
- 2021 Mar 24 **Invited Panelist**. Keynote Panel Discussion: Covid-19 Frontline Heroes Moving Beyond The Mental Health 'tsunami' & Rebuilding Wellbeing, Increasing Resilience. The Big, Bold Mental Health Summit: COVID-19 Workforce 2021, Virtual Summit, London, England.
- 2021 Mar 23 **Invited Panelist**. Project ECHO COVID-19 Clinical Rounds, Critical Care. Triage of Scarce resources version 2.0. (virtual), ECHO Institute<sup>TM</sup>, University of New Mexico Health Sciences Center. USA.
- 2020 Oct 7 **Invited Panelist.** WJ Sibbald Symposium: How to Allocate Scarce Resources During a Pandemic. Panelists: **Michael Christian**, James Downar, Lauren Ferrante, Alison Fox-Robichaud, Haley Gershengorn, Scott Halpern and Doug White. Canadian Critical Care Forum (virtual), Toronto, ON, Canada.
- 2020 Apr 16 **Invited Panelist**. Triage of Critical Care Resources During COVID-19. American College of Web Physicians. International Webinar
- 2019 Nov 25 **Invited Speaker.** Out of the frying pan and into the fire: Building resilience to operational stress and exposure to trauma. World Extreme Medicine Expo. Edinburgh, Scotland, U.K.
- 2019 Oct 24 **Invited Speaker.** What can we learn from London HEMS? German Congress of Orthopaedicsand Traumatology, Berlin, Germany.
- 2019 Jun 6 **Invited Speaker**. Adapting to a fluid and fast moving situation during a major disaster. Risky Business 2019. London, England.
- 2018 Dec 12 **Invited Speaker.** The Roots of Resilience. UK Intensive Care Society, State of the Art Meeting. London, England.
- 2018 Dec 10 **Invited Speaker.** Best Practice Management: Penetrating injury/ complex trauma. 'Prepare your team'. UK Intensive Care Society, State of the Art Meeting. London, England.

- 2018 Nov 25 **Invited Speaker.** 'Resilience: One Team's Trauma': A film premiere and presentation on psychological resilience in the Helicopter Emergency Medical Services. World Extreme Medicine Conference. Edinburgh, Scotland.
- 2018 Feb 23 **Course Instructor**. Fundamental Disaster Management. Society of Critical Care Medicine. Brooks Army Medical Centre, San Antonio, Texas, United States.
- 2017 Oct 30 **Chair**. Disaster Response Network meeting. American College of Chest Physicians. CHEST 2017. Toronto, ON.
- 2017 Oct 29 Chair. Transport Critical Care Medicine: Managing Risk in Moving Patients. American College of Chest Physicians. CHEST 2017. Toronto, ON.
- 2017 Oct 7 **Invited Speaker.** London Terrorism & Major Incidents in 2017. 24 Jornadas Municipales Sobre Catástrofes. Madrid, Spain.
- 2016 Oct 25 Chair. Crisis Resource Management Team Skills For Patient Safety. American College of Chest Physicians. CHEST 2016. Los Angeles, California.
- 2016 Oct 25 **Invited Speaker.** CRM: From Patient Safety to Disaster Response. American College of Chest Physicians. CHEST 2016. Los Angeles, California.
- 2016 Oct 23 Chair. Disaster Response NetWork meeting. American College of Chest Physicians. CHEST 2016. Los Angeles, California.
- 2016 Oct 23 Chair. Beyond Our Comfort Zone. American College of Chest Physicians. CHEST 2016. Los Angeles, California.
- 2016 Oct 23 **Invited Speaker**. Teaching Preparedness. American College of Chest Physicians. CHEST 2016. Los Angeles, California.
- 2015 Oct 25 **Chair.** From Marburg Virus to Ebola Vaccine. American College of Chest Physicians. Montreal, QC, Canada.
- 2015 Oct 26 Chair. Disaster Network Session. American College of Chest Physicians. Montreal, QC, Canada.
- 2015 Oct 27 **Invited Speaker.** Rescue Missions: What Have We Learned Provincialism, Petty Politics and Pandemics. American College of Chest Physicians. Montreal, QC, Canada.
- 2015 Oct 27 Chair. Problem Based Learning 2015: Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement. American College of Chest Physicians. Montreal, QC, Canada.
- 2015, Oct 27 **Invited Speaker.** CHEST Living Guidelines: The Best of Evidence Based Medicine Mass Critical Care Guideline. American College of Chest Physicians. Montreal, QC, Canada.
- 2015 Mar 26 **Invited Speaker.** Emergency Preparedness for Clinicians From Guidelines to the Front Line. United Sates Centers for Disease Control and Prevention, (webinar).
- 2014 Nov 1 **Moderator**. Critical Care Response Teams. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2014 Oct 31 **Invited Speaker**. Is Canada Prepared for ICU Patients with Ebola? Critical Care Canada Forum. Toronto, Ontario, Canada.

- 2014 Oct 29 **Moderator**. Poster Presentation ICU Infections. American College of Chest Physicians. Austin, Texas, United States.
- 2014 Oct 27 Chair. Ebola Preparedness (2 sessions). American College of Chest Physicians. Austin, Texas, United States.
- 2014 Oct 26 **Invited Speaker**. An Evidence-Based Approach to Mass Critical Care Events. American College of Chest Physicians. Austin, Texas, United States.
- 2014 Oct 26 **Invited Speaker**. Attention! Military Medicine Impacts Civilian Health -Rescue. American College of Chest Physicians. Austin, Texas, United States.
- 2014 Oct 26 **Invited Speaker**. Overview and Lessons Learned from Mass Casulalty Incidents. American College of Chest Physicians. Austin, Texas, United States.
- 2014 Jan 9 **Speaker**. Critical Care During Epidemics. Society of Critical Care Medicine. San Francisco, California, United States.
- 2014 Jan 9 **Facilitator**. Hands-On Training Triage Exercise. Society of Critical Care Medicine. San Francisco, California, United States.
- 2013 Oct 29 **Moderator**. Patient Safety. American College of Chest Physicians. Chicago, Illinois, United States.
- 2013 Jan 18 **Course Instructor**. Fundamental Disaster Management. Society of Critical Care Medicine. Puerto Rico, United States.
- 2012 Mar 16 **Invited Speaker**. SARS Lessons for Emergency Preparedness. Argerich Hospital. Buenos Aires, Argentina.
- 2011 Jan 19 **Invited Speaker**. Interface of Ethics & Reality in Pandemic Planning and Surge Management. Society of Critical Care Medicine 40th Critical Care Congress. San Diego, California, United States. Presenter(s): **Christian MD**.
- 2011 Jan 19 Invited Speaker. Military Critical Care Response on the Ground in Haiti. Society of Critical Care Medicine 40th Critical Care Congress. San Diego, California, United States. Presenter(s): Christian MD.
- 2011 Jan 14 **Facilitator**. Hands-On Training Triage Exercise. Society of Critical Care Medicine 40th Critical Care Congress. San Diego, California, United States. Presenter(s): **Christian MD**.
- 2011 Jan 14 **Invited Speaker**. Disaster Triage and Allocation of Scarce Critical Care Resources. Society of Critical Care Medicine 40th Critical Care Congress. San Diego, California, United States. Presenter(s): **Christian MD**.
- 2011 Jan 14 Invited Speaker. Critical Care During Epidemics. Society of Critical Care Medicine 40th Critical Care Congress. San Diego, California, United States. Presenter(s): Christian MD.
- 2009 Sep 1 **Invited Speaker**. Report to the Committee on Guidance for Establishing Standards of Care for Use in Disaster Situations. National Academy of Science, Institute of Medicine. Washington, District of Columbia, United States. Presenter(s): **Christian MD.**& Dichter JR.

- 2009 Mar 27 Invited Speaker. SARS—Lessons for Pandemic Planning & Bioterrorism. 5th Annual San Diego Health Policy Conference. San Diego, California, United States. Presenter(s): Christian MD.
- 2008 May 8 Invited Speaker. Disaster Critical Care. 4th annual Practical Critical Care Conference, University of Virginia. Charlottesville, Virginia, United States. Presenter(s): Christian MD. May 8-9, 2008.
- 2008 Feb 2 **Invited Speaker**. Developing A Disaster Critical Care Triage Protocol. Society of Critical Care Medicine 37th Congress. Honolulu, Hawaii, United States. Presenter(s): **Christian MD**. February 2-6, 2008.
- 2007 Nov 16 **Invited Speaker**. Who Goes First? Who Goes Last? Rationing Vital Health Care. University at Buffalo Law School, Baldy Center For Law & Social Policy, Limited Health Care Resources: Prioritizing Access in a Community Emergency A Cross Border Perspective. Buffalo, New York, United States. Presenter(s): Buckley MA, Burhans R, **Christian MD**, Dillon K, Gougelet R, McEldowney V, Merrill T, Schwartz B, Scott L.
- 2005 Oct 26 **Invited Speaker**. Preparing for the next pandemic. Canadian Critical Care Society, Toronto Critical Care Symposium. Toronto, Ontario, Canada. Presenter(s): **Christian MD**. October 26-28, 2005.
- 2002 Mar 6 **Invited Speaker**. Rave Doctors: Applied harm reduction (workshop). Society of Adolescent Medicine. Boston, Massachusetts, United States. Presenter(s): Tellier P & Christian M.

## **Professional Development**

2013 Oct 26 **Participant**. Physician Leadership Development Seminar. American College of Chest Physicians. Chicago, Illinois, United States.

#### 2. NATIONAL

#### **Abstracts and Other Papers**

- Critical Care Stakeholders' Response To A Proposed Pandemic Plan & Triage Protocol For Critical Care In Ontario. Canadian Critical Care Forum. Toronto, Ontario, Canada. Presenter(s): Christian, MD. Hawryluck, L., Wax, RS., Cook, T., Lazar NM., Herridge, MS., Muller MP., Gowans, DR., Fortier W., Burkle, FM. Poster.
- Fungemia due to Candida and Mucor in an Immunocompetent Patient. AMMI Canada CACMID. Victoria, British Columbia, Canada. Presenter(s): **Christian MD**, Lee CH. Poster Number: SP.29.
- 2005 May 7 Providing care for SARS patients in Toronto acute care facilities during the 2003 outbreak. Community and Hospital Infection Control Association, National Education Conference, Charting New Horizons. Winnipeg, Manitoba, Canada. Presenter(s): Gravel D, Paton S, Perkins P, Henry B, Mcgeer A, Vearncombe M, Christian M, Barry C, Simor A, Ofner M, Medersk B, Koch J, Nicolle LE.
- 2005 Apr 14 Acute Care Facility Experiences in Providing Care for SARS Patients in Toronto. Association of Medical Microbiology and Infectious Diseases Annual Conference. Ottawa, Ontario, Canada.

- Presenter(s): Gravel D, Paton S, Perkins P, Henry B, Mcgeer A, Vearncombe M, Christian M, Barry C, Simor A, Ofner M, Medersk B, Koch J, Nicolle LE. (poster P2.15).
- Leisure Activity and Substance Use Connections Among Youth. 8th Canadian Congress on Leisure Research, University of Ottawa. Ottawa, Ontario, Canada. Presenter(s): Yardley, J.K., McCaul, K., Baker J., Hornibrook, T., & Christian, M. In Proceedings (pp. 317-32).

#### **Invited Lectures and Presentations**

- 2021 Apr 13 **Invited Speaker.** Challenging Airway Management & Pre-Hospital Anaesthesia. Pre-hospital Care Program, Bart's Medical School, Queen Mary's University London. (virtual with national audience). London, England.
- 2019 May 1 **Invited Speaker.** Auditing Pre-hospital Care. ICNARC Case Mix Programme Annual Meeting 2019. London, England.
- 2019 Apr 10 **Keynote Address**. Out of the Frying Pan and into the Fire: Building Resilience to Operational Stress and Exposures to Trauma. National Conference on Post-Traumatic Stress Disorder (PTSD): Working together to inform Canada's Federal Framework on PTSD. Ottawa, ON, Canada.
- 2019 Apr 9 **Invited Speaker**. Configuration & Mandate of London Air Ambulance: Insights for Pre-hospital Care in Canada. 4th annual Canadian Air Medical Transport Conference (CAMT). Vancouver, BC, Canada.
- 2019 Apr 9 **Invited Speaker**. Air Medical & Critical Care Practice Updates: Cutting Edge Clinical Practice. 4th annual Canadian Air Medical Transport Conference (CAMT). Vancouver, BC, Canada.
- 2019 Apr 8 **Invited Speaker**. Air Medical Cutting-Edge Research & Associated Research Projects. 4th annual Canadian Air Medical Transport Conference (CAMT). Vancouver, BC, Canada.
- 2019 Jan 21 **Invited Speaker.** A review of the medical response to recent major incidents in London. Resuscitation & Major Trauma Meeting. Association of Anaesthetists. London, England.
- 2018 Nov 28 **Invited Speaker**. Responding to Terrorism. Royal College of Emergency Medicine, EMAT 2018. Cardiff, Wales.
- 2018 May 10 **Invited Speaker.** CRM & human factors in managing pre-hospital trauma: Powerful tools for paramedics. College of Paramedics' National Conference 2018. Oxford, UK.
- 2018 Feb 4 **Invited Speaker**. Out of the Frying Pan and Into the Fire: Building Resilience to Operational Stress & Exposure to Trauma. Canadian Critical Care Conference. Whistler, BC.
- 2018 Feb 4 **Invited Speaker**. Tea Time & Terrorism: Lessons from London HEMS for Critical Care Crisis & Disaster Preparedness. Canadian Critical Care Conference. Whistler, BC.
- 2017 Nov 13 Invited Speaker. Responding to Terrorism. Association of Air Ambulances. London, UK.
- 2016 Mar 4 **Invited Speaker.** Key concerns for Critical Care leaders in disasters. Canadian Critical Care Conference. Whistler, BC.

- 2016 Mar 4 **Invited Speaker.** How can we learn from disasters and outbreaks? Canadian Critical Care Conference. Whistler, BC.
- 2015 Jun 5 **Invited Speaker**. Building Crisis Leadership Capacity In Your Organization: Lessons from the aviation industry. Paramedic Chiefs of Canada 2015 Conference. Niagara Falls, Ontario, Canada.
- 2013 Aug 19 **Instructor**. Simulation Workshop. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. August 19-23, 2013. (Continuing Education).
- 2013 Jun 26 **Instructor**. Teaching Trauma. Canadian Armed Forces Physician Assistant Course. Jun 24-26, 2013. (Continuing Education).
- 2013 Jun 25 **Instructor**. Teaching Trauma. Canadian Armed Forces Physician Assistant Course. Jun 24-26, 2013. (Continuing Education).
- 2013 Jun 24 **Instructor**. Teaching Trauma. Canadian Armed Forces Physician Assistant Course. Jun 24-26, 2013. (Continuing Education).
- 2013 Jun 19 **Instructor**. Teaching Trauma. Canadian Armed Forces Physician Assistant Course. (Continuing Education).
- 2013 Jun 18 **Instructor**. Teaching Trauma. Canadian Armed Forces Physician Assistant Course. (Continuing Education).
- 2013 Apr 29 **Instructor**. Simulation Workshop. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. April 29-May 3, 2013. (Continuing Education).
- 2013 Apr 28 **Instructor**. Simulation Workshop. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. (Continuing Education).
- 2013 Mar 8 **Instructor**. Advanced Military Trauma Resuscitation Program. Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Mar 7 **Instructor**. Simulation Workshop. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Feb 8 **Instructor**. Advanced Military Trauma Resuscitation Program Disaster Medicine. Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Feb 8 **Instructor**. Advanced Military Trauma Resuscitation Program Hypothermia. Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Feb 4 **Instructor**. Teaching Neurology. Canadian Armed Forces Physician Assistant Course. Feb 4-7, 2013. (Continuing Education).
- 2013 Jan 23 **Instructor**. Disaster Management. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 23 **Instructor**. Neuro Trauma. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).

- 2013 Jan 21 **Instructor**. Scenario 4 Abdominal/Pelvic/Massive Transfusion. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 21 **Instructor**. The Team Approach/Dynamics. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 21 **Instructor**. Scenario 1 PEA. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2012 Jul 13 **Instructor**. Disaster/Humanitarian Relief. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. (Continuing Education).
- 2012 Jul 13 **Instructor**. Mass Casualty Simulations. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada.
- 2012 Jul 12 **Instructor**. Simulations. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. (Continuing Education).
- 2012 Jul 9 **Instructor**. Airway Skills. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. (Continuing Education).
- 2012 Jul 9 **Instructor**. Mechanical Ventilation Skills. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. (Continuing Education).
- 2012 Mar 9 **Instructor**. Course Instruction. Advanced Military Trauma Resuscitation Program Canadian Forces Trauma Training. Montreal, Quebec, Canada. (Continuing Education).
- 2011 Oct Instructor. Tropical & Travel Medicine Basic Medical Officer Course. Canadian Forces Health Services Training Centre. Canada. (Continuing Education).
- 2011 Jun Instructor. Hypothermia and Trauma Care (Simulation) Physician Assistant Course. Canadian Forces, National Defence. Canada. Presenter(s): Christian, MD. (Continuing Education).
- 2011 Jun Instructor. Burn and Wound Management, Physician Assistant Course. Canadian Forces, National Defence. Ontario, Canada. (Continuing Education).
- 2010 Oct 25 Invited Speaker. Plenary: Report from the CCCF Consensus on Protecting Health Care Workers in a Pandemic. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): Christian, MD. October 25-28, 2010.
- 2010 Oct 25 **Invited Speaker**. Triage Development of a Framework. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): **Christian, MD**. October 25-28, 2010.
- 2010 Oct 25 **Invited Speaker**. Surge Planning Matching Ventilators with Circumstances. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): **Christian, MD**. October 25-28, 2010.
- 2010 Jun 7 **Instructor**. Advanced Trauma Life Support, Physician Assistant Course. Canadian Forces Health Services College. Angus, Ontario, Canada. Presenter(s): Dr. **Michael Christian**. (Continuing Education).

- 2010 Jun 2 **Instructor**. Wound Infections & Management, Physician Assistant Course. Canadian Forces Health Services College. Angus, Ontario, Canada. Presenter(s): Dr. **Michael Christian**. (Continuing Education).
- 2010 Jun 2 **Instructor**. Burn Management, Physician Assistant Course. Canadian Forces Health Services College. Angus, Ontario, Canada. Presenter(s): Dr. **Michael Christian**. (Continuing Education).
- 2010 Jun 2 **Instructor**. Inhalational Injuries, Physician Assistant Course. Canadian Forces Health Services College. Angus, Ontario, Canada. Presenter(s): Dr. **Michael Christian**. (Continuing Education).
- 2009 Sep 2 Chair. Disaster Response NetWork Steering Committee, PLENARY SESSION 3: Practical Aspects of Epidemic Management Chair: Dr. Public Health Agency of Canada. Winnipeg, Manitoba, Canada. Presenter(s): Marrie, T, Johnston, L, Law, B. Sept. 2nd & 3rd, 2009.
- 2009 Sep 2 **Invited Speaker**. Pandemic Triage. Public Health Agency of Canada. Winnipeg, Manitoba, Canada. Presenter(s): **Christian, MD**. Sept. 2nd & 3rd, 2009.
- 2008 Nov 11 **Invited Speaker**. Surge Planning Update for 2008. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): **Christian MD**. November 11-13, 2008.
- 2008 Aug 11 **Invited Speaker**. Influenza & Pandemic Preparedness. Canadian Symposium for Fellows in Infectious Diseases and Microbiology. Toronto, Ontario, Canada. Presenter(s): **Christian MD**. August 11-15, 2008.
- 2007 Nov 29 **Invited Speaker**. Emergency Management and Epidemics and Pandemics. Canadian Forces College. Toronto, Ontario, Canada. Presenter(s): **Christian MD**.
- 2007 May 31 **Invited Speaker**. Multiple Trauma Patient Management in Pandemic. University of Alberta, Trauma Symposium. Edmonton, Alberta, Canada. Presenter(s): **Christian MD**.
- 2006 May 29 **Invited Speaker**. Incident Management System Exercise. Public Health Agency of Canada & Centre for Excellence in Emergency Preparedness, First National Health Emergency Preparedness Conference. Hamilton, Ontario, Canada. Presenter(s): **Christian MD** & Lindsay J. May 29 & 30, 2006.
- 2005 Oct 25 **Invited Speaker**. Disaster Management. Canadian Critical Care Society, Residents' Day Toronto Critical Care Symposium. Toronto, Ontario, Canada. Presenter(s): **Christian MD**.
- 2002 Oct 30 **Invited Speaker**. Raves & Party Drugs: Is it all Ecstasy? Hospital for Sick Children, Canadian Association of Adolescent Medicine Conference. Toronto, Ontario, Canada. Presenter(s): Tellier P, Leslie K, **Christian MD**.
- 2002 Oct 24 **Invited Speaker**. Club Drugs: Case Studies. GLMA Annual Conference. Toronto, Ontario, Canada. Presenter(s): Tellier P, Grenier Y, **Christian MD**.
- 2002 Oct 12 **Invited Speaker**. Hyponatremia & Ecstasy. BBCM Health Summit. Montreal, Quebec, Canada. Presenter(s): **Christian MD**.
- 2000 Sep 21 **Invited Speaker**. Myocardial Infarction and Multiple Pulmonary Emboli in a Middle Aged Woman. Canadian Society of Internal Medicine Annual Meeting. Edmonton, Alberta, Canada. Presenter(s): **Christian M** & Newton G. Case presentation as a finalist for the Ted Giles prize.

1996 May 9 Invited Speaker. Leisure Activity and Substance Use Connections Among Youth. University of Ottawa, 8th Canadian Congress on Leisure Research. Ottawa, Ontario, Canada. Presenter(s): Yardley, J.K., McCaul, K., Baker, J., Hornibrook, T., & Christian, M. May 9-11, 1996.

#### 3. PROVINCIAL / REGIONAL

#### **Invited Lectures and Presentations**

- 2021 Apr 28 **Invited Speaker**. Out of the frying pan and into the fire: Building resilience to operational stress and exposure to trauma. St George's University Medical School, Emergency Medicine Society, London, England.
- 2019 Nov 5 **Invited Speaker**. The role of pre-hospital physicians in trauma management: Lessons from London HEMS. Trauma Rounds (Provincial Webcast). Vancouver General Hospital, Vancouver, BC.
- 2019 Nov 4 Facilitator/Presenter. Human Factors Workshop (day long). BC Emergency Health Services (BC Ambulance). Vancouver, BC.
- 2019 Nov 1 Interview. (Podcast). Medic Minutes BC Emergency Health Services (BC Ambulance). Vancouver, BC. https://lnns.co/tphDHN3O1PS
- 2019 Nov 1 **Invited Speaker.** Out of the frying pan and into the fire: Building resilience to operational stress and exposure to trauma. BCEHS Provincial Clinical Rounds. Vancouver, BC.
- 2019 Oct 30 **Invited Speaker**. Emergency Preparedness Research. Trauma Services BC Research Café. Vancouver, BC.
- 2019 Mar 12 **Invited Speaker.** The Future of HEMS Research. Hampshire & Isle of White Air Ambulance Clinical Governance Day. Thruxton, England.
- 2019 Mar 12 **Invited Speaker.** Responding to Terrorism. Hampshire & Isle of White Air Ambulance Clinical Governance Day. Thruxton, England.
- 2019 Feb 26 **Invited Speaker**. Out of the Frying Pan and Into the Fire: Building Resilience to Operational Stress & Exposure to Trauma. Bart's Pre-hospital Care Program Forum. London, England.
- 2018 Oct 18 **Invited Speaker**. Human Factors & CRM Led Faculty Development Day. Paramedic Program, Worcester University, England.
- 2018 Mar 8 **Invited Speaker**. Traumatic Cardiac Arrest Interactive Scenario. UK College of Paramedics, East of England Region Clinical Conference, Cambridge, England.
- 2017 Jun 21 **Invited Speaker**. One Team's Experience A Traumatic Incident. Aeromed 2017. Chelmsford, England.
- 2016 Jun 8 **Invited Speaker**. Disaster Management: A North American Systems Perspective. Aeromed 2016. Chelmsford, England.
- 2015 Jun 9 **Invited Speaker**. The Role of Systems In High Quality Health Care Delivery And Patient Safety. University of Toronto, Critical Care Medicine, Leadership in Medicine Education Day.

- 2015 Apr 30 **Invited Speaker**. It's In The Name! The Role Of Systems In High Quality Health Care Delivery And Patient Safety (Plenary). Health Quality Symposium 2015, Niagara Falls, Ontario.
- 2015 Mar 17 **Invited Speaker**. Creating A High Performance Team Environment Lessons From Aviation & Military Medicine. Health Quality Symposium 2015, Niagara Falls, Ontario.
- 2015, Mar 31 **Invited Speaker.** Global Initiatives on Research Response to Emerging Infections and Outbreaks. University of Toronto, City Wide Infectious Disease Rounds.
- 2015 Mar 17 **Invited Speaker**. Triage & Resource Allocation. University of Toronto, Critical Care Medicine, Disaster Medicine Education Day.
- 2014 Mar 28 **Facilitator**. Pandemic Triage. CBRNE Collaborative. Toronto. A Health Network Crises Simulation.
- 2011 Jun 17 Invited Speaker. Considerations for Surge Management in Critical Care. London Health Sciences Centre Department of Critical Care. London, Ontario, Canada. Presenter(s): Dr. Michael Christian. Citywide Critical Care Grand Rounds.
- 2010 Jun 3 **Invited Speaker**. Continuing Medical Education Labs for Paramedics. ORNGE Transport. Toronto, Ontario, Canada. Presenter(s): Dr. **Michael Christian**.
- 2010 Apr 8 **Invited Speaker**. Continuing Medical Education Labs for Paramedics. ORNGE Transport. Toronto, Ontario, Canada. Presenter(s): Dr. **Michael Christian**.
- 2007 Oct 11 **Invited Speaker**. Disaster Response Beyond the ER. Ontario Hospital Association, CBRN Conference. Toronto, Ontario, Canada. Presenter(s): **Christian MD**.
- 2007 Oct 10 Invited Speaker. CBRN Emergency Operations Table Top Exercise. Ontario Hospital Association, CBRN Pre-Conference Workshop. Toronto, Ontario, Canada. Presenter(s): Christian MD.
- 2006 Sep 27 **Invited Speaker**. Emergency Preparedness Overview. Ontario Hospital Association, Understanding Your Risks & Preparing Your Facility for an Emergency. Ontario, Canada. Presenter(s): **Christian MD**.
- 2006 Jun 15 **Invited Speaker**. Pandemic Influenza. Niagara Health System Medical Rounds. Niagara-on-the-lake, Ontario, Canada. Presenter(s): **Christian MD**. June 15, 2006.
- 2006 Apr 10 **Invited Speaker**. Public Health Agency Goals and Objectives, Current Status. Ontario Hospital Association, Infection Control and Prevention Conference. Toronto, Ontario, Canada. Presenter(s): **Christian MD**.
- 2006 Jan 6 **Invited Speaker**. Medical Planning and Critical Care during a Pandemic. Ontario Hospital Association, Pandemic Planning: Are you ready? Toronto, Ontario, Canada. Presenter(s): **Christian MD**.
- 2005 Jun 3 **Invited Speaker**. Medical Planning and Care. Ontario Hospital Association, Pandemic Planning: Are you ready? Toronto, Ontario, Canada. Presenter(s): **Christian MD**.

#### 4. LOCAL

## **Abstracts and Other Papers**

2011 Jun **Presenter**. Time to Antibiotic Administration Among Inpatients with Severe Sepsis or Septic Shock. University of Toronto, Critical Care Medicine Residents Day. Toronto, Ontario, Canada. Presenter(s): Mok K, Burry L, Nelson S, McIntyre M, **Christian MD**.

#### **Invited Lectures and Presentations**

- 2018 Mar 13 **Invited Speaker**. Out of the Frying Pan and Into the Fire: Building Resilience to Operational Stress & Exposure to Trauma. UCL Pre-Hospital Care Forum, London, England.
- 2015 Jun 18 **Invited Speaker**. The Role Of Medical Students in Patient Safety, McMaster University Medical Student Clerkship Orientation, 2015.
- 2014 Jul 16 **Presenter**. A Blast Through the ICU. Department of Medicine, University Health Network/Mount Sinai Hospital. Toronto, Ontario, Canada. Presenter(s): Dr. Stephen Lapinsky, Dr. Ewan Goligher, Dr. Niall Ferguson, Dr. Margaret Herridge, Dr. Lisa Burry.
- 2014 Jul 9 **Speaker**. Team Response to a Patient in Crisis. MSICU. Toronto, Ontario, Canada. MSICU Inter-professional Rounds.
- 2011 Oct Facilitator. Simulation Training. Intensive Care University (ICU). Toronto. Presenter(s): Dr. Michael Christian.
- 2011 Oct Invited Lecturer. Disaster Management and Surge Planning. Critical Care Medicine International Fellowship Program. Toronto, Ontario, Canada.
- 2011 Aug 29 **Facilitator**. Simulation Training. Intensive Care University (ICU). Toronto. Presenter(s): Dr. **Michael Christian**.
- 2010 Dec 14 **Presenter**. Disaster Response to Haiti and Infectious Disease Implications. Division of Infectious Diseases. Toronto. Presenter(s): Dr. **Michael Christian**.
- 2010 May 20 **Invited Speaker**. Earthquake Relief in Haiti 2010 Interesting Infections. Mount Sinai Hospital. Toronto, Ontario, Canada. Presenter(s): **Christian, MD**. Infection Control & Prevention Academic Rounds.
- 2010 May 18 **Invited Speaker**. Sepsis Management. Mount Sinai Hospital. Toronto, Ontario, Canada. Presenter(s): **Christian, MD**. Education Day Respiratory Therapy Staff.
- 2010 May 2 **Invited Speaker**. Earthquake Response in Haiti 2010. Credit Valley Hospital. Mississauga, Ontario, Canada. Presenter(s): **Christian**, **MD**.
- 2006 Sep 21 **Invited Speaker**. Health Emergency Preparedness Are We Ready? Sault Area Hospital, J.C. Patterson Clinical Conference. Sault St. Marie, Ontario, Canada. Presenter(s): **Christian MD**. Sept 21 & 22, 2006.
- 2006 Sep 21 Invited Speaker. Infection Control/Antibiotic Resistant Organisms: Challenges we Face. Sault Area Hospital, J.C. Patterson Clinical Conference. Sault St. Marie, Ontario, Canada. Presenter(s): Christian MD. Sept 21 & 22, 2006.

- 2006 Apr 26 **Invited Speaker**. Pandemic Influenza. Sault Area Hospital Medical Rounds. Sault Ste Marie, Ontario, Canada. Presenter(s): **Christian MD**.
- 2005 Apr 27 **Invited Speaker**. Research challenges in outbreak and pandemic planning/response. Hospital for Sick Children, Research in Progress Rounds. Toronto, Ontario, Canada. Presenter(s): **Christian MD**.
- 2005 Apr 6 Invited Speaker. Health Care Emergency Preparedness. McMaster University, Postgraduate Medicine Multidisciplinary Academic Day. Hamilton, Ontario, Canada. Presenter(s): Christian MD & Kolleck D.
- 2004 Sep 15 Lecturer. Nosocomial Illness Prevention Lessons Learned From The SARS Event At North York General Hospital. North York General Hospital, Let's put the bug out: Infection Control Conference. Sault Ste Marie, Ontario, Canada. Presenter(s): Christian MD. Sept 15 & 16, 2004.
- 2002 Jun 24 **Invited Speaker**. HIV & Club Drugs. University Health Network City Wide HIV Rounds. Toronto, Ontario, Canada. Presenter(s): **Christian MD**.
- 2002 Jan 30 **Invited Speaker**. Respiratory Complications of Illicit Drug Use. Women's College Hospital Faculty Rounds. Toronto, Ontario, Canada. Presenter(s): **Christian MD**.

# F. Teaching and Design

#### 1. INNOVATIONS AND DEVELOPMENT IN TEACHING AND EDUCATION

2010 Jul Development of an interactive problem-based learning module on triage, Continuing

Education, Faculty of Medicine, Dept of Medicine

Triage module for the Society of Critical Care Medicine's Fundamentals of Disaster Management Course. Authors M. Christian & J. Geiling.

# G. Research Supervision

#### 1. PRIMARY OR CO-SUPERVISION

#### **Undergraduate Education**

2017 – 2018 Primary Supervisor. Jonathan Charnock BSc Dissertation. Bart's Pre-Hospital BSc

programme.

2010 May - 2010 Aug Primary Supervisor. Gary Carbell. Critical Care Forum Pandemic Project and

AED Audit.

2008 - 2009 **Primary Supervisor**. Kristofer Bandayrel. *Information Technology Systems for* 

Critical Care Triage and Medical Response during an Influenza Pandemic: A Review

of Current Systems.

#### **Graduate Education**

2010 Sep - 2012 Co-Supervisor. PhD. Katie Mok. Supervisee Position: Pharmacist, Supervisee

Institution: Mount Sinai Hospital. A study to determine the time from recognition of

severe sepsis or septic shock to Abx administration among in-patients.

## Postgraduate MD

2009 Nov - 2010 Dec

2009 Jun - 2010 Aug

2009 Jul - 2010

2019 Dec – present **Primary Supervisor**. Research Fellow. Shadman Aziz. London's Air Ambulance, Barts NHS Health Trust. A 20-year retrospective audit of pre-hospital surgical airways performed by London's Air Ambulance.

2013 Apr - 2013 Oct **Primary Supervisor**. Clinical Fellow. Subhash Acharya. Supervisee Position: Fellow, Critical Care, Supervisee Institution: Mount Sinai Hospital/University Health Network. *INTRA ARTERIAL CATHETERISATION - A quality improvement project comparing two styles of catheters*.

**Primary Supervisor**. Subspecialty. Paul Bunce. Supervisee Position: Fellow. A retrospective case cohort study investigating vascular events in hospitalized patients infected with H1N1 & preparation of a manuscript for publication.

**Primary Supervisor**. MD. Joshua Landy. *ACTING! An eduCational Theatre Intervention to learN triage*.

**Primary Supervisor**. Subspecialty. Srinivas Murthy. *preparation of a review published in DMPHP on Infectious Diseases following Disasters and a textbook chapter for the Centre of Excellence in Emergency Preparedness on Emerging Infections*.

#### Other

2013 Apr - 2013 Oct **Primary Supervisor**. Vagia Campbell, HBHA, RRT. Supervisee Position: Charge Respiratory Therapist, Critical Care, Supervisee Institution: Mount Sinai Hospital. *INTRA ARTERIAL CATHETERISATION - A quality improvement project comparing two styles of catheters*.