



REGIONAL
PARAMEDIC
PROGRAM
FOR EASTERN
ONTARIO



The Ottawa
Hospital | L'Hôpital
d'Ottawa

**RPPEO ANNUAL DISSEMINATION
ACTIVITIES REPORT:
RESEARCH, LEADERSHIP, QUALITY AND
EDUCATION**

April 1, 2021 to March 31, 2022

Inspired by research. **Inspiré** par la recherche.
Driven by compassion. **Guidé** par la compassion.

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Purpose

The purpose of the Regional Paramedic Program for Eastern Ontario (RPPEO) Annual Dissemination Activities Report: Research, Leadership, Quality and Education is to inform the senior management team, the paramedic community and paramedic stakeholders, of research, leadership, quality and education projects and dissemination activities in paramedicine that have been conducted over the last fiscal year.

Inclusion Criteria

All RPPEO personnel or regional paramedics working in collaboration with RPPEO personnel, who are either a primary investigator or a co-investigator on a paramedicine study or project, including current EMS residents and RPPEO volunteers.

PRIMARY & CO-INVESTIGATORS

Michael Austin, MD, FRCPC, *Associate Medical Director*

Zachary Cantor, PCP, *Coordinator*

Harrison Carmichael, HBSc, MD

Valerie Charbonneau, MD, MSc, FRCPC

Richard Dionne, MD, CCFP-EM, *Medical Director*

Susan Duncan, PCP, *Quality Coordinator*

Shannon Leduc, MSc, ACP, *Paramedic Researcher*

Simeon Mitchell, MDCM, FRCPC

Penny Price, MMngt, *Program Director*

Jason Rouleau, B.Soc.Sc, *Paramedic Researcher*

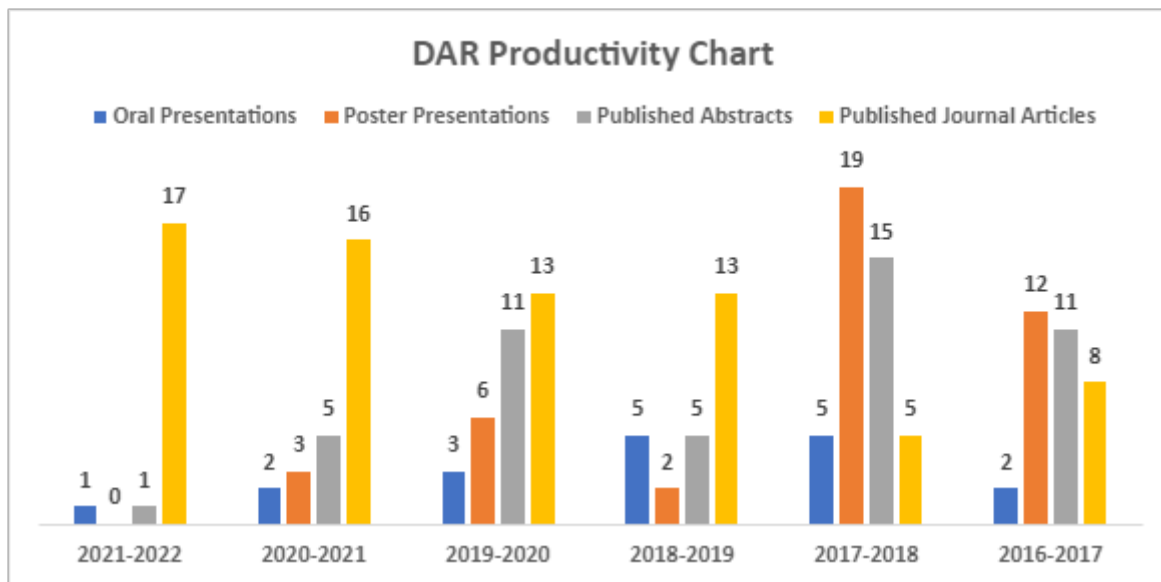
Julie Sinclair, MScN, A-EMCA, RN, *Research Coordinator, Paramedic Researcher*

Christian Vaillancourt, MD, MSc, FRCPC, CSPQ, *Associate Medical Director*

Charlene Vacon, PhD, PCP, *Coordinator*

SUMMARY OF DISSEMINATION ACTIVITIES

YEAR	TOTAL PRESENTATIONS	ORAL PRESENTATIONS	POSTER PRESENTATIONS	PARAMEDIC/ ALLIED HEALTH CARE PROVIDER PRESENTER	PUBLISHED ABSTRACTS	PUBLISHED JOURNAL ARTICLES	PARAMEDIC/ALLIED HEALTH CARE PROVIDER PRIMARY AUTHOR
2021-2022	1	1	0	1	1	17	1
2020-2021	5	2	3	2	5	16	3
2019-2020	9	3	6	6	11	13	5
2018-2019	7	5	2	3	5	13	4
2017-2018	24	5	19	18	15	5	3
2016-2017	14	2	12	3	11	8	2



EXTERNAL GRANTS

N/A

INTERNAL GRANTS

N/A

PRESENTATIONS



ORAL PRESENTATIONS (INTERNAL)

N/A

ORAL PRESENTATIONS (EXTERNAL)

Leduc S*, Wells G, Thiruganasambandamoorthy T, Kelly P, Vaillancourt C. (June 2021) **Alternative care models for paramedic patients from long-term care centers; a national survey of Canadian paramedic services.** Canadian Association of Emergency Physicians (CAEP) Annual Conference – *Virtual presentation.*

POSTER PRESENTATIONS (INTERNAL)

N/A

POSTER PRESENTATIONS (EXTERNAL)

N/A

INVITED PRESENTATIONS

Vaillancourt C. (October 2021) Future of Prehospital Cardiac Arrest Care – Drones and Other Smart Technology. European Society of Emergency Medicine (EUSEM), Lisbon, Portugal - *Guest Speaker.*

Vaillancourt C. (October 2021) Optimizing Metrics for Chest Compressions. European Society of Emergency Medicine (EUSEM), Lisbon, Portugal – *Guest Speaker.*

Vaillancourt C. (October 2021) Prehospital Research: Examples and Challenges. EMS month, Department of Emergency Medicine, Ottawa, ON.

Leduc S, Drennan I. (October 2021) Building Research in Paramedicine. Collaborative Specialization in Resuscitation Sciences, Foundations of Resuscitation Science Course, Li Ka Shing Knowledge Institute. Toronto, ON - *Virtual presentation.*

Leduc S, McLeod B. (June 2021) ‘Community Paramedicine Implementation’. Home and Community Care Conference - *Virtual presentation.*

* denotes paramedic/allied health care provider primary author

Austin MA. (May 2021) Do Paramedics Need Physicians? 3rd. Annual EMS and Paramedic Research Day, Alberta Health Services, Calgary, Alberta, Canada - *Virtual invited panel speaker.*

Leduc S, Thiruganasambandamoorthy V, **Vaillancourt C.** (April 2021) Experts on Call. Research at the Ottawa Hospital. Panel discussion, 'How to survive and thrive after a medical emergency'. Ottawa, ON - *Virtual presentation.*

PUBLISHED ABSTRACTS

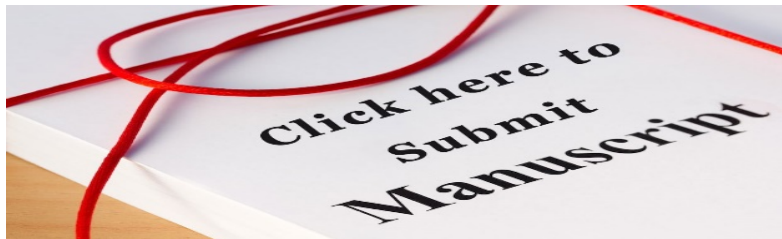
RPPEO ABSTRACTS

N/A

OTHER ABSTRACTS

Leduc S*, Wells G, Thiruganasambandamoorthy V, Kelly P, Vaillancourt C. **Alternative care models for Paramedic patients from long-term care centers; A National survey of Canadian Paramedic services** *Can J Emerg Med.* 2021;23 (Suppl 1) (L023).

JOURNAL ARTICLES



PUBLISHED RPPEO JOURNAL ARTICLES

N/A

OTHER PUBLISHED JOURNAL ARTICLES

Bhatt M, Plint A.C, Tang K, Malley R, Pham Huy A, McGahern C, Dawson J, Pelchat M, Dawson L, Varshney T, Arnold C, Galipeau Y, **Austin M,** Thampi N, Alnaji F, Langlois M-A, Zemek R.L. **Household transmission of SARS-CoV-2 from unvaccinated asymptomatic and symptomatic household-members with confirmed COVID-19 infection.** *CMAJ Open Published online.* 2022;10(2):E357-E366.

Tran UE, Yadav K, **Austin M,** Nemnom MJ, Eagles D. **An evaluation of emergency pain management practices in fragility fractures of the pelvis.** *CJEM.* 2022;24(3):273-277.

* denotes paramedic/allied health care provider primary author

Lane D.J, Grunau B, Kudenchuk P, Dorian P, Wang HE, Daya M.R, Lupton J, Vaillancourt C et al. **Amiodarone, Lidocaine, or Placebo in out-of-hospital cardiac arrest: A post hoc Bayesian analysis of a randomized clinical trial.** *BMJ Heart.* 2022;0:1–7.

Stiell I.G, Maloney J, Dreyer J, Munkley D, Spaite D.W, Lyver M.B, Sinclair JE, Wells G.A, OPALS study group. **Advanced life support for out-of-hospital chest pain: The Opals study.** *PEC. Published online.*

Dainty K.N, Seaton M.B, Cowan K, Laupacis A, Dorian P, Douma M, Garner J, Goldstein J, Shire D, Sinclair D, Thurlow, Vaillancourt C. **Effect of intravenous or intraosseous calcium vs saline on return of spontaneous circulation in adults with out-of-hospital cardiac arrest a randomized clinical trial.** *JAMA.* 2021;326(22):2268-2276.

Wyckoff M, Singletary E, Soar J, Olasveengen T, Greif R, Liley H, Zideman D, Bhanji F, Vaillancourt C. **2021 International consensus on Cardiopulmonary resuscitation and emergency cardiovascular care science with treatment recommendations.** *Resuscitation.* 2021;169:229-311.

Nichol G, Zhuang R, Russell R, Aufderheide T, Bulger E, Callaway C, Christenson J, Daya M.R, Holcomb J.B, Idris A, Kudenchuk P.J, Morrison L, Podbielski J.M, Schreiber M, Sopko G., Sugarman J, Vaillancourt C, Wang H, Wade C.E, Ornato J.P, Hoyt D, Weisfeldt M.L, May S. **Variation in time to notification of enrollment and rates of withdrawal in emergency care trials.** *Resuscitation.* 2021; 168:160-166.

Fernando S.M, Di Santo P, Sadeghirad B, Lascarrou J.B, Rochweg B, Mathew R, Sekhon MS, Munshi L, Fan E, Brodie D, Rowan K.M, Hough C.L, McLeod S.L, Vaillancourt C, Cheskes S, Ferguson N.D, Scales D.C, Sandroni C, Nolan J.P, Hibbert B. **Targeted temperature management following out-of-hospital cardiac arrest – A systematic review and network meta-analysis of temperature targets.** *Intensive Care Med.* 2021;47(10):1078-1088.

Nichol G, Aufderheide T, Callaway C, Daya M, Idris A, Morrison L, Vaillancourt C, Vilke G, Brown S. **Device-specific analysis of CPR process vs. outcome in patients with out-of-hospital cardiac arrest.** *Resuscitation.* 2021;167:95-104.

Dainty K.N, Seaton M.B, Cowan K, Laupacis A, Dorian P, Douma M, Garner J, Goldstein J, Shire D, Sinclair D, Thurlow C, Vaillancourt C. **Partnering with survivors & families to determine research priorities for out-of-hospital cardiac arrest in Adults. A James Lind Alliance Priority Setting Partnership.** *Published Electronically, Resuscitation Plus.* 2021;7:1-8.

Goodloe J, Topjian A, Hsu A, Dunne R, Panchal A, Levy M, McEvoy M, Vaillancourt C, Cabanas J, Eisenberg M.S, Rea T.D, Kudenchuk P.J, Gienapp A, Flores G, Fuchs S, Adalgais K, Owusu-Ansah S, Terry M, Sawyer K., Fromm P, Panczyk M, Kurz M, Lindbeck G, Tan D, Edelson D, Sayre M. **Interim guidance for emergency medical services management of out-of-hospital cardiac arrest resuscitation during the COVID-19 pandemic.** *AHA writing group. Published Electronically, Circ Cardiovasc Qual Outcomes.* 2021;14:1-8.

* denotes paramedic/allied health care provider primary author

Heidet M, Laurie Fraticelli L, Grunau B, Cheskes S, Baert V, Vilhelm C, Hubert H, Tazarourte K, [Vaillancourt C](#), Tallon J, Chollet-Xémard C, Vaux J, Christenson J, Khoury C.E, on behalf of the Gr-ReAC and CanROC investigators. **Rationale, Development and implementation of the ReACanROC Registry for out-of-hospital cardiac arrests in France and Canada.** *Published Electronically, BMJ Emerg Med Journal.* 2021;0:1-7.

Goodloe J, Topjian A, Hsu A, Dunne R, Panchal A, Levy M, McEvoy M, [Vaillancourt C](#), Cabanas J, Eisenberg M.S, Rea T.D, Kudenchuk P.J, Gienapp A, Flores G, Fuchs S, Adalgais K, Owusu-Ansah S, Terry M, Sawyer K, Fromm P, Panczyk M, Kurz M, Lindbeck G, Tan D, Edelson D, Sayre M. **Interim guidance for emergency medical services management of out-of-hospital cardiac arrest resuscitation during the COVID-19 pandemic.** AHA writing group. *Published Electronically, Circ Cardiovasc Qual Outcomes.* 2021;14:1-8.

Heidet M, Laurie Fraticelli L, Grunau B, Cheskes S, Baert V, Vilhelm C, Hubert H, Tazarourte K, [Vaillancourt C](#), Tallon J, Chollet-Xémard C, Vaux J, Christenson J, Khoury C.E, on behalf of the Gr-ReAC and CanROC investigators. **Rationale, development and implementation of the ReACanROC registry for out-of-hospital cardiac arrests in France and Canada.** *Published Electronically, BMJ Emerg Med Journal.* 2021;0:1-7.

Schmicker R.H, Nichol G, Kudenchuk P, Christenson J, [Vaillancourt C](#), Wang H.E, Callaway C.W, Aufderheide T.P, Idris A.H, Daya M.R. **CPR compression strategy 30:2 is difficult to adhere to, but has better survival when done correctly.** *Resuscitation.* 2021;165:31-37.

Carmichael H. (Resident), [Vaillancourt C](#), Shrier I, Charrette M, Hobden E, Stiell I.S. **Evaluating the paramedic application of the prehospital Canadian C-Spine rule in sport-related injuries.** *Can J Emerg Med.* 2021;23(3):356-364.

Perry J.J, [Vaillancourt C](#), Hohl C.M, Thiruganasambandamoorthy V, Morris J, Emond M, Lee J, Ian G. Stiell I.G. **Optimizing collaborative relationships in emergency medicine research.** *Can J Emerg Med.* 2021;23(3):291-296.

SUBMITTED RPPEO JOURNAL ARTICLES

[Vaillancourt C](#), Charette M, [Sinclair J](#), [Dionne R](#), Kelly P, Maloney J, Nemnom M.J, Wells G.A, Stiell I.G.: **Implementation of the Canadian C-Spine rule by paramedics: A safety evaluation.** *Submitted, Ann Emerg Med, Feb. 2022.*

[Leduc S*](#), Wells G.A, Thiruganasambandamoorthy V, [Cantor Z](#), Kelly P, Rietschlin M, [Vaillancourt C](#). **The hospital care and outcomes of long-term care patients treated by paramedics during an emergency call: Exploring the potential impact of community paramedicine.** *Submitted, CJEM, March 2022.*

[Leduc S*](#), Wells G, Thiruganasambandamoorthy V, Kelly P, [Vaillancourt C](#). **Alternative care models for paramedic patients from long-term care centers; a national survey of Canadian paramedic services.** *Submitted, CJEM, March 2022.*

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AWARDS ACHIEVED



Top Pediatric Abstract Award

Canadian Association of Emergency Physicians (CAEP) research competition:

Dr. Christian Vaillancourt's Pragmatic cluster-randomized multi-center paramedic C-Spine implementation in the Pediatric Population.

Plenary Presentation (2nd highest ranked)

Canadian Association of Emergency Physicians (CAEP) research competition:

Dr. Christian Vaillancourt's Pragmatic cluster-randomized multi-center paramedic C-Spine implementation in the Pediatric Population.

Guardian Angel Award (forth)

The Ottawa Hospital Foundation:

Dr. Christian Vaillancourt nominated by patient for exceptional care and kindness above and beyond the call of duty.

NEW RPPEO CLINICAL OHRI INVESTIGATOR APPOINTMENTS

Shannon Leduc, MSc, ACP

Commander Clinical Programs, Ottawa Paramedic Service

Affiliate Investigator, Ottawa Hospital Research Institute

RPPEO CLINICAL OHRI INVESTIGATORS

Richard Dionne, MD, CCFP-EM

Medical Director, Regional Paramedic Program for Eastern Ontario

Emergency Physician, The Ottawa Hospital

Clinician Investigator, Ottawa Hospital Research Institute

Program Director, Prehospital and Transport Medicine Month, Emergency Medicine, University of Ottawa

Michael Austin, MD, FRCPC

Associate Medical Director, Regional Paramedic Program for Eastern Ontario

Emergency Physician, The Ottawa Hospital

Clinician Investigator, Ottawa Hospital Research Institute

Program Director, Prehospital and Transport Medicine Diploma Program, Emergency Medicine, University of Ottawa

Assistant Professor, Emergency Medicine, University of Ottawa

Christian Vaillancourt, MD, MSc, FRCPC

Associate Medical Director, Regional Paramedic Program for Eastern Ontario

Senior Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute

Full Professor, Emergency Medicine, University of Ottawa

Research Chair, Emergency Cardiac Resuscitation, Emergency Medicine, University of Ottawa