



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, 2019 to March 31, 2020



Report created by Jane Marchand, Administrative Assistant at RPPEO

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

## Contents

PURPOSE .....	3
INCLUSION CRITERIA.....	3
PRIMARY & CO-INVESTIGATORS.....	3
SUMMARY OF DISSEMINATION ACTIVITIES.....	4
EXTERNAL GRANTS.....	4
INTERNAL GRANTS .....	4
ORAL PRESENTATIONS (INTERNAL) .....	5
ORAL PRESENTATIONS (EXTERNAL).....	5
POSTER PRESENTATIONS (INTERNAL).....	5
POSTER PRESENTATIONS (EXTERNAL) .....	5
INVITED PRESENTATIONS.....	6
PUBLISHED ABSTRACTS.....	7
RPPEO ABSTRACTS.....	7
CANADIAN RESUSCITATION OUTCOMES CONSORTIUM(CanROC) ABSTRACTS .....	8
OTHER ABSTRACTS.....	8
JOURNAL ARTICLES .....	8
PUBLISHED RPPEO JOURNAL ARTICLES.....	8
PUBLISHED CanROC JOURNAL ARTICLES.....	9
OTHER PUBLISHED JOURNAL ARTICLES.....	9
SUBMITTED RPPEO JOURNAL ARTICLES .....	10
AWARDS ACHIEVED.....	10
RPPEO CLINICAL OHRI INVESTIGATORS .....	10

## Regional Paramedic Program for Eastern Ontario

**Department: Planning and Support Services**

**Vice-President: Joanne Read**

**Director: Penny Price**

### 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, *Paramedic Researcher*

**Harrison Carmichael**, HBSc, MD

**Catherine Cox**, ACP, *Superintendent, Quality Assurance (at time of project)*

**Valerie Charbonneau**, MD, MSc, FRCPC

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

**Susan Duncan**, PCP, *Quality Coordinator*

**Mark Froats**, MD, FRCPC

**Shannon Leduc**, MSc(C), ACP, *Paramedic Researcher*

**Simeon Mitchell**, MDCM, FRCPC

**Kerry Morris**, ACP, *Coordinator, Education (at time of project)*

**Jen Price**, CCP, MSc (HQ), *Data and Quality Coordinator*

**Penny Price**, MMngt, *Program Director*

**Andrew Reed**, EMCA, BPE, MSc, MD, FRCPC, *Associate Medical Director*

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

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

**Frank St-Jean**, CCP, *Manager, Education, Certification and BHITS*

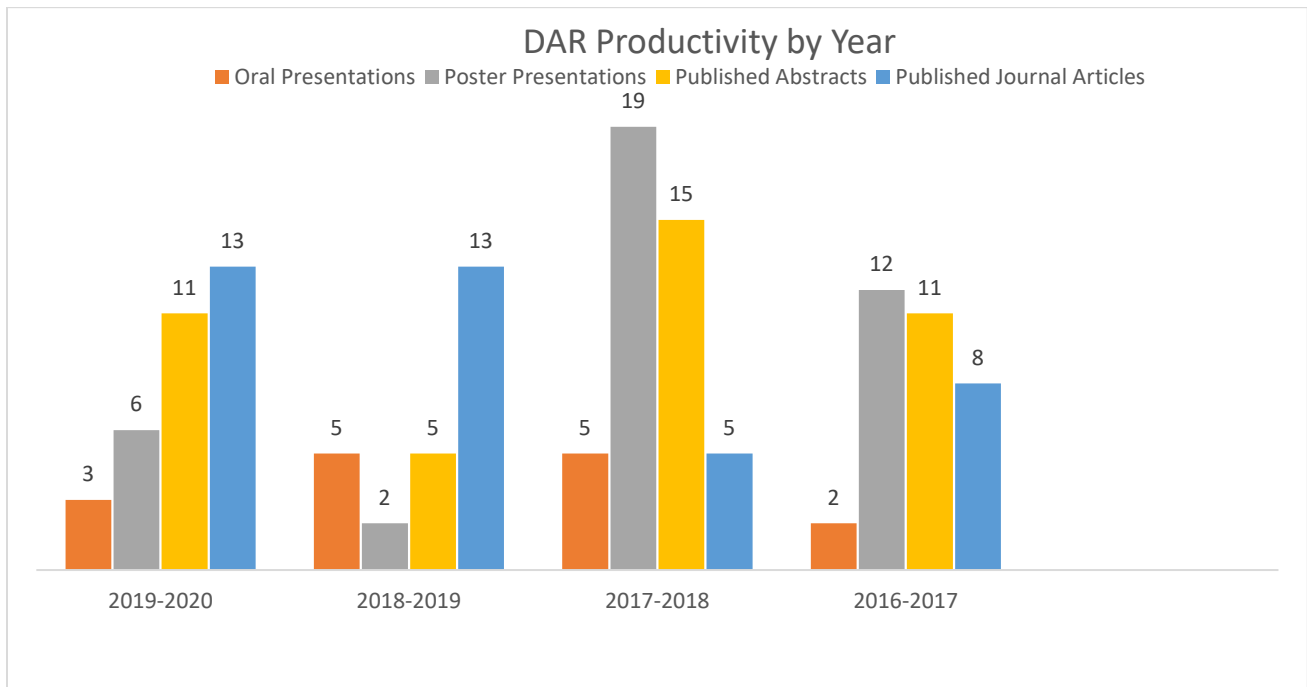
**Christian Vaillancourt**, MD, MSc, FRCPC, CSPQ, *Associate Medical Director*

**Charlene Vacon**, PhD, PCP, *Manager*

**Andrew Willmore**, MD, FRCPC, *Associate Medical Director*

## 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
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

Austin MA. **Prehospital analgesia in adults using inhaled Methoxyflurane: A feasibility Study.**  
Department of Emergency Medicine, uOttawa - Academic Grant Extension (\$9,901.00)

## ORAL PRESENTATIONS (INTERNAL)

N/A

## ORAL PRESENTATIONS (EXTERNAL)

Vacon C\*. (September 2019). **Woman in Canadian Paramedicine – A Portrait of Provincial and National Data**. Paramedics Across Canada Expo (PACEExpo) Research Symposium, Winnipeg, Manitoba. (Leadership)

Edward H, Rodier P, Vacon C\*, Hillier T, Weigel P, Adair M, Stephenson L, Thain N. (June 2019) **Paramedic Leadership Competency Framework Presentation**. Paramedic Chiefs of Canada Leadership Summit (PCC), Charlottetown, PEI. (Leadership)

Vacon C\*. (May 2019) **Women in Ontario Paramedicine – A portrait of provincial and national data**. Renfrew Research Symposium, Calabogie, Ontario. (Leadership) - Invited

## POSTER PRESENTATIONS (INTERNAL)

Price J\*, De Mendonca B, Dionne R, Duncan S, Labelle N, Moffat G, Morris K, Sheehan N, Sinclair J, St-Jean Frank, Reed A. (November 2019) **Enhancing the informed consent process for prehospital transport refusals – A focused quality review**. The Ottawa Patient Safety Conference, Ottawa, Ontario. (Quality)

Austin M, Sinclair J, Leduc S, Duncan S, Rouleau J, Price P, Evans C, Vaillancourt C. (May 2019) **Evaluation of outcomes after implementation of a provincial prehospital bypass standard for trauma patients – An Eastern Ontario experience**. Department of Emergency Medicine, uOttawa, Ottawa, Ontario. *For Poster Viewing*. (Research)

## POSTER PRESENTATIONS (EXTERNAL)

Austin M, Sinclair J, Leduc S, Duncan S, Rouleau J, Price P, Evans C, Vaillancourt C. (January 2020). **122. What happens to bypassed patients meeting Field Trauma Triage standards?** (NAEMSP) National Association of EMS Physicians, San Diego, California. (Research)

Austin M, Sinclair J\*, Leduc S, Duncan S, Rouleau J, Price P, Evans C, Vaillancourt C. (September 2019). **Evaluation of outcomes after implementation of a provincial prehospital bypass for trauma patients – An Eastern Ontario experience**. Paramedics Across Canada Expo (PACEExpo) Research Symposium, Winnipeg, Manitoba. (Research)

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\* denotes paramedic/allied health Care provider primary author

Austin M, Sinclair J, Leduc S, Duncan S, Rouleau J, Price P, Evans C, Vaillancourt C. (June 2019) **Evaluation of outcomes after implementation of a provincial prehospital bypass standard for trauma patients – An Eastern Ontario experience.** Paramedic Chiefs of Canada Leadership Summit (PCC), Charlottetown, PEI. *For Poster Viewing.* (Research)

Austin M, Sinclair J, Leduc S\*, Duncan S, Rouleau J, Price P, Evans C, Vaillancourt C. (May 2019). **Evaluation of outcomes after implementation of a provincial prehospital bypass standard for trauma patients – An Eastern Ontario experience.** Canadian Association of Emergency Physicians (CAEP) Annual Conference, Halifax, Nova Scotia. (Research)

## INVITED PRESENTATIONS

Vaillancourt C. (March 2020) Improving Survival of Cardiac Arrest. International Conference on Emergency Medicine, Riyadh, Saudi Arabia. (Plenary Speaker)

Vaillancourt C. (March 2020) Implementation of C-Spine Rule in the Field. International Conference on Emergency Medicine, Riyadh, Saudi Arabia. (Plenary Speaker)

Leduc S, Drennan I. (December 2019) “Building EMS Research for Best Practice”. Collaborative Specialization in Resuscitation Science Graduate Seminar Series. University of Toronto. (Oral presentation)

Testa V, Leduc S, Heber A, Carleton R.N, Colman I, Corsi D, Fikretoglu D, Heisel M, Thavorn K. & Hatcher S. (October 21-23, 2019). “Implementation of a First Responder Operational Stress Injury Clinic Using TDF and CFIR Frameworks (#19278)”. 10<sup>th</sup> Annual Military and Veteran Health Research Forum: Gatineau, QC. (Forum)

Vaillancourt C. (October 2019) Prehospital Research: Examples and Challenges. EMS month, Department of Emergency Medicine, Ottawa, ON.

Vacon C. (May 2019) Women in Canadian Paramedicine – A Portrait of Provincial and National Data. County of Renfrew Research Symposium, Burnstown, ON. (Oral presentation)

Vacon C. (May 2019) Grace Macpherson: Paramedicine Pioneer. County of Renfrew Research Symposium, Burnstown, ON. (Oral presentation)

Leduc S, Nolan M, Smith M, Batt A. (May 2019) ‘Advancing Paramedic Practice Through Research and Innovation’. County of Renfrew Paramedic Service Research Symposium, Calabogie, ON. (Panel discussion)

Vaillancourt C. (May 2019) Debate on Public Access Defibrillation – Worth the investment? CanROC Annual Scientific Meeting, Vancouver, BC.

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\* denotes paramedic/allied health Care provider primary author

**Vaillancourt C.** (May 2019) Patient and Paramedic Engagement in Research. OSSU Outreach Event, Ottawa, ON.

**Leduc S,** Cheskes S, Schlamp R. (May 2019) Focus Session: Engaging Paramedics in Research. Canadian Resuscitation Outcomes Consortium Assembly, Vancouver, BC. (Oral presentation)

**Leduc S.** (May 2019) Pro-Con Debate; Parent Transport with Child Always vs. Not. Con argument opposing Dr. Allan DeCaen Program Director and Clinical Professor University of Alberta Pediatric Intensive Care Unit. Canadian Resuscitation Outcomes Consortium Assembly, Vancouver BC. (Oral presentation)

**Vaillancourt C.** (April 2019) Prehospital Research: Examples and Challenges, Collaborative Specialization in Resuscitation Science (CSRS) Science and Sushi Seminar. St. Michael's, Toronto, ON.

**Leduc S.** (May 2019) Chaired the Young Investigator half day conference session on behalf of the Trainee and Career Development Committee. Canadian Resuscitation Outcomes Consortium Assembly, Vancouver BC. (Oral presentation)

**Leduc S,** Brooks S, Drennan I. (May 2019) Toward a CanROC Resuscitation Training and Career Development Program. Canadian Resuscitation Outcomes Consortium Assembly, Vancouver BC. (Plenary discussion)

**Leduc S,** Vaillancourt C. (April 2019) Prehospital Research Examples and Challenges; Building EMS Research and Practice. Collaborative Specialization in Resuscitation Sciences, Graduate Student Seminar Series, Li Ka Shing Knowledge Institute. Toronto ON. (Oral presentation)

## PUBLISHED ABSTRACTS

### RPPEO ABSTRACTS

Austin M, Sinclair J\*, Leduc S, Duncan S, Rouleau J, Price P, Evans C, Vaillancourt C. (January 2020). **122. What happens to bypassed patients meeting Field Trauma Triage standards?** *PEC* (Research)

Austin M, Sinclair J, Leduc S\*, Duncan S, Rouleau J, Price P, Evans C, Vaillancourt C. (May 2019). **P008: Evaluation of outcomes after implementation of a provincial prehospital bypass standard for trauma patients – An Eastern Ontario experience.** *Can J Emerg Med* 2019;21(S1):S65-S66 (Research)

Vacon, C\*. (May 2019). **Grace MacPherson: Paramedic pioneer.** *Canadian Paramedicine* 2019;42(3):8. (Leadership)

Vacon, C\*. (May 2019). **Women in Canadian paramedicine. – A portrait of provincial and national data.** *Canadian Paramedicine* 2019;42(3):9 (Infographics). (Leadership)

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\* denotes paramedic/allied health Care provider primary author

## CANADIAN RESUSCITATION OUTCOMES CONSORTIUM(CanROC) ABSTRACTS

Cheskes S, Snobelen P, McLeod S, Brooks S, [Vaillancourt C](#), Chan T, Dainty KN, Nolan M. **Abstract 147: AED on the Fly: A Drone Delivery Feasibility Study for Rural and Remote Out-Of-Hospital Cardiac Arrest.** *Circulation* 2019;140(S2):A147-A147.

## OTHER ABSTRACTS

Kopsaftis Z, Carson-Chahhoud KV, [Austin M](#), Wood-Baker R. (January 2020). **Oxygen therapy in the pre-hospital setting for acute exacerbations of chronic obstructive pulmonary disease.** *Cochrane Systematic Review.* 2020;1.

Segal, E, Ross D, Proulx MH, Xue X, [Vacon C](#). **Derivation and validation of the Montreal prehospital ST-elevation myocardial infarction activation rule.** *PubMed.* 2019.

Carmichael H, [Vaillancourt C](#), Stiell I.G, Shrier I, Hobden E, Charrette M. **Evaluating the Application of the Prehospital Canadian C-Spine Rule By Paramedics in Sport-Related Injuries.** *CJEM.* 2019;21(S1):S33-S34.

Godbout J., Moore S.W., Sawadsky B., Pan A., [Vaillancourt C](#). **Can a screening tool safely identify low risk cardiac patients to be transported with primary care flight paramedics?** *CJEM.* 2019.

[Vaillancourt C](#), Charette M, Cyr K, Hodges S, Thiruganasambandamoorthy V, Dainty K, Morrison L, Jenneson S, Tallon J, Segal E, Sibley A, Measham J, Thoma B, Allain D. **MP50: National survey of 9-1-1 ambulance communication centers' resources related to prehospital recognition of agonal breathing and cardiac arrest.** *CJEM.* 2019;21(S1):S60-S60.

Godbout J, Moore S.W, Sawadsky, Pan A, [Vaillancourt C](#). **Can a screening tool safely identify low risk cardiac patients to be transported with primary care flight paramedics?** *CJEM.* 2019.

## JOURNAL ARTICLES

### PUBLISHED RPPEO JOURNAL ARTICLES

Sinclair JE\*, [Austin M](#), Froats M, [Leduc S](#), Maloney J, Dionne R, Reed A, [Vaillancourt C](#). **Characteristics, prehospital management, and outcomes in patients assessed for hypoglycemia: Repeat access to prehospital or emergency care.** *Prehosp Emerg Care.* 2019;23(3):364-376.

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\* denotes paramedic/allied health Care provider primary author



## PUBLISHED CanROC JOURNAL ARTICLES

Sawyer KN, Humbert A, Leroux BG, Nichol G, Kudenchuk PJ, Daya MR, Grunau B, Wang HE, Ornato JP, Rittenberger JC, Aufderheide TP, Wittwer L, Colella MR, [Austin M](#), Kawano T, Egan D, Richmond N, Vithalani VD, Scales D, Baker AJ, Morrison LJ, Vike GM, Kurz MC, Resuscitation Outcomes Consortium. **Relationship between duration of targeted temperature management, ischemic interval and good functional outcome from out-of-hospital cardiac arrest.** *Crit Care Med.* 2020;48(3):370-377.

## OTHER PUBLISHED JOURNAL ARTICLES

N Kelly, Humbert A, Leroux B, Nichol G, Kudenchuk P, Daya M, Grunau B, [Austin M](#) et al. **Relationship between duration of targeted temperature management, ischemic interval, and good functional outcome from out-of-hospital cardiac arrest.** *CCM.* 2020;48(3):370-377.

Kopsaftis Z, Carson-Chahoud KV, [Austin MA](#), Wood-Baker R. **Oxygen therapy in the pre-hospital setting for acute exacerbations of chronic obstructive pulmonary disease.** *Cochrane Database of Systematic Reviews* 2020;1.

Olasveengen T, Mancini M.B, [Vaillancourt C](#), Brooks S.C, Castren M, Chung S.P, Considine J, Escalante R, Gazmuri R.J, Hatanaka T, Kudenchuk P, Lim S.H, Løfgren B, Nishiyama C, Perkins, Ristagno G, Smyth M, Stanton D, Travers A, Nolan J, Morley P, for the International Liaison Committee on Resuscitation: **Emergency Care: Dispatcher instruction in CPR(BLS):Systematic review.** Published electronically. *ILCOR CoSTR.*

Segal, E, Ross D, Proulx MH, Xue X, [Vacon C\\*](#). **Derivation and validation of the Montreal prehospital ST-elevation myocardial infarction activation rule.** *J Electrocardio.* 2020;59:10-16.

Kurz M.C, Bobrow B.J, Buckingham J, Cabanas J.G, Eisenberg M, Fromm P, Panczyk M.J, Rea T, Seaman K, [Vaillancourt C](#), on behalf of the American Heart Association Advocacy Coordinating Committee.: **Telecommunicator cardiopulmonary resuscitation: A policy statement from the American Heart Association.** Published electronically, *Circulation.* 2020;141(12):e686-e700.

Soar J, Maconochie I, Wyckoff M, Olasveengen T, Singletary E, Greif R Aickin R, Bhanji F, Donnino M, [Vaillancourt C](#) et al. **International consensus on cardiopulmonary resuscitation and emergency cardiovascular care science with treatment recommendations: Summary from the Basic Life Support; Advanced Life Support; Pediatric Life Support; Neonatal Life Support; education, implementation, and teams; and first aid task forces.** Published electronically, *Circulation.* 2019;140(24):e826-e880.

Zia A, MacDonald R, Moore S, Ducharme J, [Vaillancourt C](#). **Assessment of pain management during interfacility air medical transport of intubated patients.** *Air Medical Journal.* 2019;38(6):421-425.

Miles I.H, MacDonald R.D, Moore S.W, Ducharme J, [Vaillancourt C](#). **Evaluation of pain management in medical transfer of trauma patients by air.** *CJEM.* 2019;21(6):776-783.

Fernando S.M, Tran A, Cheng W, Rochweg B, Taljaard, [Vaillancourt C](#), Rowan K.M, Harrison D.A, Nolan J.P, Kyeremanteng K, McIsaac D.I, Guyatt G.H, Perry J.J. **Pre- and intra-arrest prognostic factors associated with survival following in-hospital cardiac arrest – A systematic review and meta-analysis.** Published electronically, *BMJ*. 2019;367:1-13.

Considine J, Gazmuri R.J, Perkins G.D, Kudenchuk P.J, Olasveengen T.M, [Vaillancourt C](#), Nishiyama C, Hatanaka T, Mancini M.E, Chung S.P, Morley P. **Chest compression components (rate, depth, chest wall recoil and leaning): A scoping review.** *Resuscitation*. 2019;146:188-202.

Nikolaou N, Dainty K, Couper K, Morley P, Tijssen J, [Vaillancourt C](#), on behalf of International Liaison Committee on Resuscitation's (ILCOR) Basic Life Support and Pediatric Task Forces. **A systematic review and meta-analysis of the effect of dispatcher-assisted CPR on outcomes from sudden cardiac arrest in adults and children.** *Resuscitation*. 2019;138:82-105.

## SUBMITTED RPPEO JOURNAL ARTICLES

None

## AWARDS ACHIEVED

None

## 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, CSPQ**

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