

CJEM JCMU

MAY / MAI 2018 Vol. 20 Supplement 1

CAEP/ACMU 2018 Scientific Abstracts



CAMBRIDGE
UNIVERSITY PRESS

Karen Brunner • Charles Kowalski • Gunnar Erhardt • Paul Ellis • James Christenson • Krista Watson • Brian Goldman • Adrian Crowe • Wayne Pickett • Hillary Widdifield • Arthur Ryder • Suneel Upadhye • Marisa Homer • S.A. Van Zyl • Raj Waghmare • Aaron Johnston • Aisha Mirza • Peter Graves • Kevi Singh • Edward Berdusco • Rahel Ahmed • Marco Sivilotti • Phil Davis • John Allen • Debbie Phillips • Andrew McRae • Kirsten Johnson • Simon Berthelot • Steve Fisher • Joseph Chong • Anthony Brilz • David Migneault • Howard Ovens • Daniel Barer • Venkatesh Thiruganasambandamoorthy • Michael Heiber • Paul Atkinson • Matyas Hervieux • Janna Tumbach • Anthony Lyons • Anders Ganstal • Amoljeet Lail • John Ashbourne • Katherine Smith • Alan Vukusic • Mary Fotheringham • Katherine E. Smith • Aaron Sibley • Josh Koczerginski • Nadim Lalani • Chris Hicks • Eric Mercier • Steve Lin • Jerrod Hendry • Gary Joubert • Stephanie Boyd • Alexandre Place • Anil Chopra • Carolyn Snider • Margaret Fraser • Charles Ngeribara • Tomislav Jelic • Alain Vadeboncoeur • John Sampson • Samina Ali • Nemer El-Batnigi • Bernard Mathieu • Baisi Olaogun • Gillian Sheppard • Mark Mensour • Kylie Bosman • Sean Moore • Carlye Jensen • Ivy Cheng • Jeffrey Eisen • Anne-Marie Humniski • Gregory Mosdosy • Spencer Sample • Jean-Francois Bader • Seyed-Alireza Mohajerani • Adam Amadu • Martin Betz • Gail Chapman • Al Drummond • George Mastoras • Pierre Desaulniers • Tom Chan • Robert Berckmans • Justin Yan • Martin McNamara • Laurie Lafontaine • Richard Bullock • Jason Exner • Eddy Lang • Amber Hayward-Stewart • Mark Saul • Basia Farnell • Emily Conway • Jim Christenson • Catherine Hagen • David Petrie • Gisele Leger • Natalie Le Sage • Ian Stiell • Boon Chang • Lorne Wiesenfeld • Laurie Robichaud • Murray Hein • Paul Olszynski • Procope Inc (Brad Brookman) • Michael Schweitzer • Jacie Grobb • Kylan McAskile • Isabelle Bertrand • Milind Ramesh Limaye • William Papenfus • Justin Kopp • Nancy White • Sev Perelman • Troy Turner • Shirley Lee • Debra Eagles • Brian Schwartz • Peter Toth • Erin Carvalho • Shelley McLeod • Catherine Varner • Chrystal Horwood • Wilhelmina Engelbrecht • Graeme Gallins • Janice MacIsaac • Kelly Wyatt • Thomas Miller • Clare Atzema • Fayaz Harji • Wes Palatnick • Jocelyn Gravel Eileen Bridges • Philip Davis • Dave Dushenski • Robert Hislop • Ken Paul Buchholz • Laurie Morrison • Brian Deady • Sandy Dong • Remy Cohan • Rob Woods • Rick Anderson • Leila Salehi • Tom Currie • Emergency Medicine LHSC • Jonathan Dreyer • Abraham Meyer • Nedalina Alexeva • Guy Hebert • Christian Vaillancourt • Navdeep Dhaliwal • Carrie Wilhelm-Boyles • Nancy Zuzic • Andrew Amieck • Anthony Herd • Ann McKenzie • Lane Rathgeber • Francois Bader • Seyed-Alireza Mohajerani • Adam Amadu • Martin Betz • Gail Chapman • Al Drummond • George Mastoras • Pierre Desaulniers • Tom Chan • Robert Berckmans • Justin Yan • Martin McNamara • Laurie Lafontaine • Richard Bullock • Jason Exner • Eddy Lang • Amber Hayward-Stewart • Mark Saul • Basia Farnell • Emily Conway • Jim Christenson • Catherine Hagen • David Petrie • Gisele Leger • Natalie Le Sage • Ian Stiell • Boon Chang • Rob Stenstrom • Etienne Van Der Linde • Kerstin de Wit • Katherine Turner • Anthony Echezona • Sophie Gosselin • Jeffrey Perry • Mark Fletcher • Benjamin Fuller • Jill McEwen • Jo-Ann Talbot • Ian Wishart • Andrew Hall • Patrick Archambault • Chuanyi Nie • Andrew Grant • David Barbic • Christina Bova • Jeff Coleman • Laurie Mazurik • Sally Barrio • Tyler & Mona Bates • Luke Bearss • John Carter • Stephane Borreman • Michael Bayer • John Pesenti • Jason Osborne • Corinne Hohl • Christine Wing-hung Pun • Francois Rossouw • Philip Moran • Frank Scheuermeyer • Amy Plint • Karen Woolfrey • Jean-Francois Couture • Lance Iverson • Louise Rang • Merrill Pauls • Patricia Murphy • Magdalena Lisztwan • Christina Ames • Georgina Manca • Tareg Bey • Sara Gray • Teresa Chan • Lambert Van Sittert • Michael Woo • Andrew Healey • Chris Loreto • Bjug Borgundvaag • Frank Ballauf • Clint Houlie • Colin Sutton • Marcel Emond • Jennifer Artz • UHN ER Education Fund • Tomas Novak • Shawn Spelliscy • Richard (Philip) McGuire • Rebecca Rosenblum Professional Corporation • Ken Lam • Paul Labrecque • Shawn Dowling • Ryan Arbeau • Michelle Welsford • Julian Regehr • Tracy Meyer • Vera Klein • Phil Schieldrop • Steven Socransky • Leslie Myers • Alecs Chochinov • Heather King • Richard Fleet • Raoul Daoust • Ken Buchholz • Samer Aziz • Hugh Scott • Carrol Ann Lapierre • John Rowen • Taofiq Oyedokun • James Andruchow • Gerald Brennan • Don Melady • Grant Innes • Alim Pardhan • Judy Morris • Susan Laidlaw • Stuart Rose • Karen Black • Graham Cummins • David Rosenstain • Roger Walmsley • Jeffrey Eppler • Miriam Mann • Muhanad Al-Husari • Paul Pageau • Richard Chan • Jeff Perry • Douglas Sinclair • Simon Ward • Shanna Scarrow • Ahmed Taher • Chryssi Paraskevopoulos • Shannon Fernando • Jacques Lee • Lynn Garrow • Lynn Baudet • Jonathan Jowett • Eileen Bridges • Philip Davis • Dave Dushenski • Robert Hislop • Ken Paul Buchholz • Laurie Morrison • Brian Deady • Sandy Dong • Remy Cohan • Rob Woods • Rick Anderson • Leila Salehi • Tom Currie • Emergency Medicine LHSC • Jonathan Dreyer • Abraham Meyer • Nedalina Alexeva • Guy Hebert • Christian Vaillancourt • Navdeep Dhaliwal • Carrie Wilhelm-Boyles • Nancy Zuzic • Andrew Amieck • Anthony Herd • Ann McKenzie • Lane Rathgeber

THANK YOU.



CJEM JCMU

Vol. 20, No. S1
May 2018/
mai 2018

Table of Contents • Table des matières

Message from Research Committee Chair	S1
CAEP/ACMU 2018 Research Awards	S2
ABSTRACTS	
Plenary Oral Presentations	S5
Oral Presentations	S6
Moderated Poster Presentations	S40
Poster Presentations	S57
INDEXES	
Keyword Index	S118
Author Index	S122

Canadian Journal of Emergency Medicine Editorial Board

Editor-in-Chief

Ian G. Stiell, MD, MSc
University of Ottawa, Canada

Deputy Editors

Paul Atkinson, MB, BCh, BAO, MA
Dalhousie University, Canada

Eddy Lang, MD, CM
University of Calgary, Canada

Managing Editor

Jennifer Brinkhurst, BAH
Ottawa, Canada

Assistant Managing Editor

Jacqueline Fraser, RNBN
Saint John, Canada

Editor Emeritus

James Ducharme, MD
McMaster University, Canada

Grant Innes, MD
University of Calgary, Canada

Decision Editors

David Barbic, MD, MSc
University of British Columbia, Canada

Peter Alistair Cameron, MBBS, MD
The Alfred Hospital and Monash University, Australia

Alix Carter, MD, MPH
Dalhousie University, Canada

Teresa Chan, MD
McMaster University, Canada

Kerstin de Wit, MBChB, BSc, MSc, MD
McMaster University, Canada

Quynh Doan, MDCM, MHSc, PhD
University of British Columbia, Canada

Jeffrey Freeman, MD
University of British Columbia, Canada

Ran Goldman, MD, BSc
University of Toronto, Canada

Sophie Gosselin, MD
McGill University, Canada

Robert S. Green, MD
Dalhousie University, Canada

Kirk Magee, MD, MSc
Dalhousie University, Canada

Andrew McRae, MD, PhD
University of Calgary, Canada

Shawn Mondoux, BEng, MSc, MD
McMaster University, Canada

Catherine Patocka, MDCM, MHPE
University of Calgary, Canada

Brian Steinhart, MD
University of Toronto, Canada

Daniel K. Ting, MD
University of British Columbia - Interior Site, Canada

Peter J. Zed, BSc, PharmD
University of British Columbia, Canada

Associate Editors

Garth Dickinson, MD
University of Ottawa, Canada

Marcel Émond, MD, MSc
Université Laval, Canada

Jeff Eppler, MD
Kelowna General Hospital, University of British Columbia, Canada

Mete Erdogan, BSc, PhD, MHI
Dalhousie University, Canada

Devin R. Harris, MD, MHSc
University of British Columbia, Canada

Niranjan Kissoon, MD
University of British Columbia, Canada

Patrick McLane, PhD
Alberta Health Services, University of Alberta, Canada

Laurie J. Morrison, MD, MSc
University of Toronto, Canada

Heather Murray, MD, MSc
Queen's University, Kingston, Canada

Jeffrey Perry, MD, MSc
University of Ottawa, Canada

Roy Purssell, MD
University of British Columbia, Canada

Michael J. Schull, MD, MSc
University of Toronto, Canada

John M. Tallon, MD, MSc
University of British Columbia, Dalhousie University, Canada

Suneel Upadhye, BS, MD
McMaster University, Canada

Social Media Editors

Rohit Mohindra, MASc, MD
McGill University, Canada

Shahbaz Syed, MD, BSc
University of Ottawa, Canada