

CURRICULUM VITAE

NAME**Steven J. Hawken**

Senior Scientist, Ottawa Hospital Research Institute
Associate Professor, School of Epidemiology, Public Health and Preventive
Medicine, University of Ottawa
Adjunct Scientist, Institute for Clinical Evaluative Sciences
Affiliate Investigator, Children's Hospital of Eastern Ontario Research
Institute

OFFICE**ADDRESS**

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EDUCATION

2014 Ph.D. Epidemiology, University of Ottawa
2001 M.Sc. Applied Statistics, University of Guelph
1995 B.Sc. Honours Biological Science, University of Guelph

EMPLOYMENT HISTORY

2021- Senior Scientist, Clinical Epidemiology Program, Ottawa Hospital Research
Institute, Ottawa, ON, Canada

2020- Associate Professor, School of Epidemiology and Public Health, University of
Ottawa, Ottawa ON, Canada

2016- BORN Agent, Better Outcomes Registry and Network (BORN)

2015- Affiliate Investigator, Children's Hospital of Eastern Ontario Research Institute

2015- Member, Faculty of Graduate and Postdoctoral Studies, University of Ottawa,
Ottawa, ON, Canada

- 2015- Adjunct Scientist, Institute for Clinical Evaluative Sciences, Ottawa, ON, Canada
- 2014-2021 Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, ON, Canada
- 2015-2020 Assistant Professor, School of Epidemiology and Public Health, University of Ottawa, Ottawa ON, Canada
- 2009-2015 Senior Methodologist/Lead Analyst, ICES uOttawa, Ottawa Hospital Research Institute, Ottawa, ON, Canada
- 2007-2009 Biostatistician and Research Manager, Dept. of Epidemiology and Community Medicine, University of Ottawa, ON, Canada
- 2006-2007 Program Lead for Research and Data Mining, Canadian Institute for Health Information, Ottawa, ON, Canada
- 2005-2006 Senior Analyst, Canadian Institute for Health Information, Ottawa, ON, Canada
- 2000-2005 Biostatistician, Population Health Research Institute, McMaster University, Hamilton, ON, Canada

ADDITIONAL COURSES AND TRAINING

- May 25-26, 2020 Statistical Machine Learning for Biomedical Data, Intensive Workshop
Dr. Noah Simon, University of Washington
Course delivered virtually
- May 6-7, 2019 Regression Modeling Strategies
Frank E Harrell Jr, Vanderbilt University School of Medicine
Ottawa, ON, Canada
- June 18-19, 2018 Epigenomic Data Analysis
Bioinformatics.ca
Vancouver, BC, Canada
- June 11-12, 2018 Informatics and Statistics for Metabolomics
Bioinformatics.ca
Montreal, QC, Canada
- June 5-7, 2018 Analysis of Metagenomic Data
Bioinformatics.ca
Toronto, ON, Canada
- May 16-19, 2018 Symposium on Data Science and Statistics
American Statistical Association

Reston, Virginia, USA

RECOGNITIONS

- 2016 Canadian Newborn & Child Screening Symposium, Poster Award for:
Sood MM, Murphy MSQ, Wong CA, Atkinson KM, **Hawken S**, Burns KD, Potter BK, Chakraborty P, Wilson K. Predictive value of metabolic biomarkers at birth for the development of chronic kidney disease or kidney failure in early childhood. Canadian Newborn & Child Screening Symposium. Ottawa, Ontario. 21-22 Apr 2016.
- 2016 Canadian Newborn & Child Screening Symposium, Poster Award for:
Hawken S, Ducharme R, Murphy MSQ, Atkinson KM, Potter BK, Chakraborty P, Wilson K. Validation in ethnic subgroups of a gestational age prediction algorithm developed using routinely collected newborn screening metabolic profiles in Ontario. Canadian Newborn & Child Screening Symposium. Ottawa, Ontario. 21-22 Apr 2016.
- 2015 University of Ottawa Faculty of Medicine, Best Thesis Award, PhD in Epidemiology Program
- 2014 University of Ottawa Faculty of Medicine, Award of Excellence in Graduate Studies, PhD in Epidemiology Program

RESEARCH AND ACADEMIC ACTIVITIES**EXTERNAL RESEARCH FUNDING**

Year	Source	Title	Role	Amount
2022-2025 (3 years)	CIHR Operating Grant: Cannabis Research in Longitudinal studies	Cannabis use in pregnancy and associations with child developmental outcomes: an extension to the Ottawa and Kingston (OaK) Birth Cohort	Co-Applicant (NPA Daniel Corsi)	\$289,249
2021-2027 (6 years)	CIHR Training Grant: Health Research Training Platform - Drug Safety and Effectiveness	The CANadian Mother-Child COLlaborative Training Platform - The CAMCCO-L Training Platform	Principal Applicant (NPA: Anick Bérard)	\$2,400,000
2021-2026 (5 years)	CIHR Project Grant	Congenital CMV AND HEARING in Ontario: Optimizing Screening to Improve Child Health Outcomes (CAN HEAR ONTARIO)	Co-Applicant (NPA: Jason Brophy)	\$950,896

2021-2024 (3 years)	CIHR Project Grant	The "Atrial FIBrillation in Pregnancy: assessing severe maternal morbidity and anticoagulation strategies" (AFIB-PREG) Study	Co-Applicant (NPA: Isabelle Malhamé)	\$275,400
2021-2026 (5 years)	CFI Infrastructure Grant	Canadian Mother-Child Cohort Active Surveillance Initiative (CAMCCO)	Co-Applicant, Ontario Co-PI (NPA Anick Bérard)	\$3,049,982 total / \$200,000 Ontario
2020- 2024	CIHR Team Grant: Personalized Health	Advancing personalized health decision for end-of-life through Implementation Science	Co-Applicant, Algorithm Development Lead	\$1,998,900 total / \$499,725 per year
2021-2022 (1 year)	Op Grant: Emerging COVID-19 Research Gaps & Priorities - Post COVID-19 condition	Health equity and the post COVID-19 condition	Co-PA (NPA: Claire Kendall)	\$221,728
2021-2022 (1 year)	CIHR Project Grant Priority Announcement: Data Analysis Using Existing Databases and Cohorts	Gestational weight loss in obese women and risk for adverse perinatal outcomes: a population-based retrospective cohort study	Co-Applicant (NPA: Mary Guo)	\$75,000 bridge funding
2021-2022 (1 year)	CIHR Project Grant Priority Announcement: Data Analysis Using Existing Databases and Cohorts	Connection to Perinatal Care for the Management of Maternal Non-Communicable Diseases: The CONNECT Project	Co-Applicant (NPA: Darine El-Chaar)	\$75,000 bridge funding
2019-2020 (1 year)	Health Research Foundation Artificial Intelligence Fellowship	Harnessing the power of artificial intelligence for prediction of an expectant mother's real-time risk of preterm delivery	Nominated Principal Applicant	\$100,000
2019-2024 (5 years)	CIHR Project Grant	The INITIATE Study: Initiating nicotine dependence treatment for smokers admitted to emergency departments	Co-investigator (PI Kerri-Anne Mullen)	\$888,625
2017-2019 (2 years)	CIHR Catalyst Grant	Improving the health of infants and children through research that links large health administrative databases with clinical, screening, and laboratory data	Nominated Principal Investigator	\$197,610
2017-2019 (2 years)	Grand Challenges Explorations Bill and Melinda	Metabolic gestational age assessment in low resource settings	Co-investigator (PI Kumanan Wilson)	\$948,502 USD

	Gates Foundation,			
2017-2018 (1 year)	CIHR	Health outcomes in children of mothers who received influenza vaccination during pregnancy	Co-investigator (PI Deshayne Fell)	\$75,000
2016-2017 (1 year)	CIHR Canadian Immunization Research Network	Vaccine coverage and safety in children with epilepsy	Co-investigator, PI for Ontario (PI Karina Top)	\$120,000
2016-2017 (1 year)	Grand Challenges Explorations –Bill and Melinda Gates Foundation	Development of an algorithm for metabolic prediction of risk of neonatal sepsis, hypoxic ischemic encephalopathy and infant death.	Co-investigator (PI Kumanan Wilson)	\$211,259.82 USD
2015-2017 (2 years)	Grand Challenges Explorations –Bill and Melinda Gates Foundation	Development of a global algorithm for metabolic gestational age dating	Co-investigator (PI Kumanan Wilson)	\$1,206,353 USD
2015-2017 (2 years)	Health Canada	Bayesian Modelling of Air Pollution Exposure and Health Outcomes in the BORN Cohort	Co-PI and Lead Analyst (Markey Johnson, Health Canada Lead)	\$107,500
2015-2016 (1 year)	CIHR Operating Grant	Crystalloid FLUID Choices for Resuscitation of Hospitalized Patients: A Pragmatic Cluster Cross Over Pilot Trial	Co-investigator (PI Lauralyn McIntyre).	\$99,504 CAD
2014-2016 (1.5 years)	Grand Challenges Explorations –Bill and Melinda Gates Foundation	Using Newborn Screening Data to Estimate Gestational Age	Co-investigator (PI Kumanan Wilson)	\$113,080
2013-2016 (3 years)	CIHR Operating Grant	Assessing Potentially Inappropriate Prescribing (PIP) and predicting patient outcomes in Ontario's elderly population using the modified STOPP criteria in large administrative health databases (the PIP-STOPP study)	Co-investigator (PI Lise Bjerre)	\$192,451 CAD
2012-2014 (3 years)	CIHR Banting Doctoral Research Award	Determining the Risk of Adverse Events following Recommended Pediatric Vaccinations in Ontario, Canada	Principle Applicant (Co-supervisors K.Wilson and J. Little)	\$105,000
2004-2009 (5 years)	CIHR Operating Grant	Early origins of obesity and co-morbidities - the FAMILY cohort	Co-investigator (Co-PIs Stephanie Atkinson and Koon Teo)	\$1,311,631 CAD

INTERNAL RESEARCH FUNDING

Year	Source	Title	Role	Amount
2022-2023 (18 months)	CHEO Precision Child Mental Health Directed Research Grant	ELEGANT study: PrEcision mental hEalth using Artificial iNtelligence for early inTervention	Co-Applicant (PA: Christine Armour)	\$250,000
2018-2020 (2 years)	University of Ottawa, Faculty of Medicine Translational Research Grant	The missing link: Integrating placental pathology into existing pregnancy, birth and childhood health repositories.	Principal Investigator	\$37,500
2012-2014 (3 yrs)	University of Ottawa Faculty of Graduate and Postdoctoral Studies	University of Ottawa Excellence Scholarship	Student (Co-supervisors K. Wilson and J. Little)	\$30,000 CAD

TEACHING:

May 12th, 2021 **Observational Research**
Dept of Medicine OMC Academic Half Day

August 17-18, 2021 **Introduction to Biostatistics**
Summer Institute in Epidemiology
University of Ottawa

August 25-26, 2020 **Introduction to Biostatistics**
Summer Institute in Epidemiology
University of Ottawa

August 13-14, 2019 **Introduction to Biostatistics**
Summer Institute in Epidemiology
University of Ottawa

August 28-29, 2018 **Introduction to Biostatistics**
Summer Institute in Epidemiology
University of Ottawa

Graduate Courses

Jan 2016-present **EPI5143 Epidemiological Research Using Large Databases**
University of Ottawa

- Responsible for teaching (3 hours of lecture per week) and course development of this full semester graduate course.
- Course content includes:
 - Programming skills (using SAS and R) required to manipulate and analyze data from large health administrative databases.
 - Concepts needed to conduct high quality research using large health administrative databases.

Guest Lectures

Jan 31 2022	MSc Epidemiology Seminar – Big Data and Medical AI
March 16th 2021	EPI8166: PhD Seminar - Handling Missing Data
Feb 22, 2021	EPI5366: MSc Seminar -What is Big Data and Medical AI?
October 23, 2018	‘Big Data’ Research with Linked Health Administrative Data Clinical Epidemiology Program Training Course 2018
September 23, 2016	POP 8920 Investigative Methods in Population Health University of Ottawa
October 27, 2016	EPI 7108 Analytic Epidemiology University of Ottawa
December 14, 2016	EPI 5212 Introduction to Communicable Disease Epidemiology University of Ottawa

Trainee Supervision

Completed:

2016/09 – 2018/12 MSc	Laura Walsh University of Ottawa Project: The influence of prenatal exposure to 2009 pandemic H1N1 influenza vaccination and influenza infection during pregnancy on the development of infectious and atopic disease during childhood (Co-Supervisor) Present Position: Data Analyst, BORN Ontario
2016/09 – 2018/12 MSc	Jessica Yau University of Ottawa Project: Association of newborn screening analytes with type of delivery among term and preterm births

(Co-Supervisor)

Present Position: Epidemiologist, Public Health Agency of Canada

2016/09 – 2019/10

MSc

Chunhe Yao

University of Ottawa

Project: Validation of case-finding algorithms derived from health administrative data for identifying neonatal sepsis

(Co-Supervisor)

Present Position: Analyst, Statistics Canada

2017/09 - 2021/02

MSc

Emeril Santander

University of Ottawa

Project: An Investigation of the Association between Metabolic Screening Analytes and Bilirubin Levels in Ontario Newborns

(Co-Supervisor)

Present Position: Data Analyst, Newborn Screening Ontario

2016/09 – Oct 2021

PhD

Brienne Olibris

University of Ottawa

Project: Use and Risks of Adverse Perinatal Outcomes and Major Birth Defects Associated with Assisted Reproductive Technologies: An Epidemiological and Health Policy Analysis of Canadian and Australian Populations

(Principal Supervisor)

Present Position: Medical Student

In Progress:

Beginning Nov 2022

Postdoctoral Fellowship

Wenshan Li

Ottawa Hospital Research Institute

Project: Using Machine Learning to Predict Cognitive Decline Among Long-Term Care Residents in Ontario

Awarded AMS Fellowship in Compassion and Artificial Intelligence (\$75,000)

Supervisor

Beginning Sept 2022

MSc

Amrin Ahmed

University of Ottawa

Project: Environmental Exposures and Pediatric Health Outcomes

Principal Supervisor

2021/10 – current

PhD

Danielle Roy

University of Ottawa

Project: Thesis Proposal: Plasma Biomarkers, Genetics and Clinical factors for Predicting Risk of Venous Thromboembolism (VTE) in Ambulatory Cancer Patients Receiving Chemotherapy
(Principal Supervisor)
Present Position: PhD Student

Thesis Committee Member

Completed: 5 MSc: Robin Ducharme (2014), Jason Chan (2016), Xinbei Zhao (2017), Meghan Laverty (2019), Romina Fakhraei (2019), 1PhD: Lisa Currie (2021)

In progress: 1 MSc: Arum Han, 1 PhD: Erin Collins

Thesis Examiner

Aug 10, 2021	Nikola Rasevic, MSc Epidemiology
Nov 4, 2020	Ryan Iverson MSc Epidemiology
April 30, 2020	Francois Thériault PhD, Epidemiology
Aug 20, 2019	Julie Hudson MSc, Mathematics
May 27, 2019	Shazia Hira Chaudhry MSc, Epidemiology
Jan 29, 2019	Iris Perelman MSc, Epidemiology
Nov 1, 2017	Alvi Anan Rahman MSc, Epidemiology
July 12, 2016	Kristian Macdonald MSc, Epidemiology

Thesis Defense Chairperson

June 22, 2022	Josephine Zein MSc, Neuroscience
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July 17, 2018 Sarwat Khan
MSc, Microbiology and Immunology

Sept 28, 2017 Faranak Vahid-Ansari
PhD, Neuroscience

Thesis Proposal Examiner

August 20, 2020 Patrick Duong
PhD, Rehabilitation Science

PhD Comprehensive Examiner

October 2022 Komal Valliani
(exact date TBD) Comprehensive Exam
PhD, Epidemiology

April 6, 2018 Ghayath Janoudi
Comprehensive Exam
PhD, Epidemiology

May 3, 2017 Lisa Currie
Comprehensive Exam (re-examination)
PhD, Epidemiology

Dec 12, 2016 Lisa Currie
Comprehensive Exam
PhD, Epidemiology

EDITORIAL REVIEW

- American Journal of Epidemiology
- American Journal of Infection Control
- BMC Health Services Research
- BMC Medical Research Methodology
- BMC Neurology
- BMC Pediatrics
- Human Vaccines and Immunotherapeutics
- Open Medicine

- Neurological Sciences
- Pharmacoepidemiology and Drug Safety
- PLOS One
- Vaccine
- Springer Science – Content reviewer for a biostatistics textbook on the Self-controlled case series design by Paddy Farrington et.al.

DATA SAFETY MONITORING COMMITTEES

2021-current	Member, Data Safety Monitoring Committee Study: Transcatheter Mitral Valve Repair for Inotrope Dependent Cardiogenic Shock – The CAPITAL MINOS Trial Principal Investigator: Dr. Benjamin Hibbert, University of Ottawa Heart Institute
August 2018-Present	Member, Data Safety Monitoring Committee Study: Rivaroxaban Post-Transradial Access for the Prevention of Radial Artery Occlusion Principal Investigator: Dr. Benjamin Hibbert, University of Ottawa Heart Institute
June 2018-Present	Member, Data Safety Monitoring Committee Study: Comparison of Milrinone versus Dobutamine in a Heterogeneous Population of Critically Ill Patients Principal Investigator: Dr. Benjamin Hibbert, University of Ottawa Heart Institute

GRANT REVIEW COMMITTEES

Internal Grant Reviews

March 2018	Peer Reviewer, OHRI Internal Grant Review CIHR Project Grant Spring 2018 Grant title: Making it count: Using administrative data to identify and describe sexual and gender-based violence (SGBV) NPA: Doug Manuel
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External Grant Reviews

December 2021	Peer Reviewer, PSI Foundation - Health Research Operating Grant
October 2021	Peer Reviewer, Ontario Early Researcher Award – Life Science

Clinical

- May 2021 Peer Review Committee Member, OSSU AMS Fellowship in Compassionate AI (LOI stage and full proposal stage ~16 hours + 2 half-day committee meetings)
- Oct 2020 Peer Review Committee Member, OSSU AMS Small Grants in Compassionate AI (~10 hours + half-day committee meeting)
- October 2020 Peer Reviewer, CHEO External Grant Review
CIHR Project Grant Fall 2020
Grant title: Vaping in Canada: Investigating the geographic distribution and sociodemographic correlates of e-cigarette use
NPA: Daniel Corsi
- September 2019 Peer Reviewer, CHEO External Grant Review
CIHR Team Grant Fall 2019
Grant title: Pan-Canadian network to investigate cannabis use in pregnancy and neurodevelopmental outcomes in children
NPA: Daniel Corsi
- August 2019 Peer Reviewer, CHEO External Grant Review
CIHR Project Grant Fall 2019
Grant title: Creation of a Standardized Protocol Tool and eLearning Programme for Research Using Routinely-Collected Health Data: A RECORD Initiative to Improve Methods
NPA: Eric Benchimol
- February 2019 Peer Reviewer, CHEO External Grant Review
CIHR Project Grant Spring 2019
Grant title: Neurodevelopmental outcomes in children following in utero exposure to opioids
NPA: Daniel Corsi
- January 2019 Peer Reviewer, Operating Grant: Data Analysis Using Existing Databases and Cohorts
Canadian Institutes of Health Research
- December 2017 Peer Reviewer, 2017 University Medical Research Fund (UMRF) competition
The Royal Ottawa Health Care Group
- January 2018 Peer Reviewer, Operating Grant: Secondary Data Analysis for Cancer Prevention and Control
Canadian Institutes of Health Research

INVITED TALKS:

- 2022 August 4 ‘Health Research with Big Data’
OMNI Summer Education Rounds
Ottawa Hospital Research Institute
Ottawa, Ontario, Canada
- 2022 July 13 ‘Developing and validating models for predicting perinatal and pediatric
health outcomes using linked metabolomics, birth registry and clinical
databases in Ontario’
OMNI Summer Education Rounds
Ottawa Hospital Research Institute
Ottawa, Ontario, Canada
- 2022 Oct 26 ‘Research Using Routinely Collected Health Data’
Department of Adult Neurology
The Ottawa Hospital
Ottawa, Ontario, Canada
- 2021 July 29 ‘Health Research with Big Data’
OMNI Summer Education Rounds
Ottawa Hospital Research Institute
Ottawa, Ontario, Canada
- 2019 Nov 4 ‘BORN Data Analysis and its Clinical Application’
Keynote Speaker, National Training Program for Maternal and Neonatal
Care
Guangzhou, China
- 2019 Nov 3 ‘Big Data Research with Linked Health Administrative Data’
Keynote Speaker, International Summit on Perinatal and Midwifery Care
Guangzhou, China
- 2019 October 22 ‘Expertise Available at The Ottawa Methods Centre’
Co-presented with Tim Ramsay, Kelley Cobey, Justin Presseau.
Department of Medicine Grand Rounds
The Ottawa Hospital General Campus
Ottawa, Ontario, Canada
- 2019 July 11 ‘Big Data Research with Linked Health Administrative Data’
OMNI Summer Education Rounds
Ottawa Hospital Research Institute
Ottawa, Ontario, Canada

- 2019 April 18 ‘The power of big data linkage for maternal-newborn health research: Secondary metabolomic analysis of Newborn Screening Ontario data
Ottawa Hospital Research Institute Scientist Retreat
Ottawa, Ontario, Canada
- 2018 October 23 ‘Postnatal gestational age estimation from newborn screening bloodspots: From linear regression to artificial neural networks’
Clinical Epidemiology Program Rounds, Ottawa Hospital Research Institute
Ottawa, Ontario, Canada
- 2018 October 16 ‘Developing and validating models for predicting perinatal and pediatric health outcomes using linked metabolomics, birth registry and clinical databases in Ontario’
Bioinformatics Seminar, University of Guelph
Guelph, Ontario, Canada
- 2018 October 10 ‘Introducing Epic: New Technologies and New Opportunities for Clinical Research with Big Data’
Research in Progress Rounds, Department of Anesthesiology, University of Ottawa
Ottawa, Ontario, Canada
- 2018 September 18 ‘The top 10 ways to ensure your clinical research project fails, or: “Scary stories my biostatistician told me around the campfire”’
Institute for Mental Health Research Training Series, The Royal Ottawa Healthcare Group
Ottawa, Ontario, Canada
- 2018 March 1 ‘Harnessing the Power of Data Linkage of Metabolomics, Clinical and Health Administrative Databases from Ontario, Canada: Modeling and Risk Prediction for Perinatal and Pediatric Health Outcomes’
Epidemiology Rounds, University of Iowa School of Public Health
Iowa City, Iowa, USA
- 2016 December 1 ‘Harnessing metabolic markers from newborn blood samples for precision medicine: accurate gestational age prediction and beyond’
Newborn Screening Reference Centre
Manila, The Philippines.
- 2016 April 15 ‘Accurate prediction of gestational age using newborn screening metabolite data’
Clinical Epidemiology Program Rounds, Ottawa Hospital Research Institute
Ottawa, Ontario, Canada

PUBLICATIONS:**Totals:**

Chapters in Books	1
Submitted manuscripts	3
Manuscripts accepted/in press	0
Manuscripts in refereed journal (peer reviewed)	104
Major invited contributions and/or technical reports	2
Abstracts and/or papers read	40

Refereed Chapters in Books:

Campbell H, **Hawken S**, Theodoratou E, Demarsh A, Hutchings K, Johnson CY, Masson L, Sharp L, Tait V, Little J. (2009). Cumulative Assessment of the Role of Human Genome Variation in Colorectal Cancer. In: Human Genome Epidemiology: 2nd ed., Oxford University Press.

Submitted Manuscripts

1. **Hawken S.**, Ducharme R., Murphy M.S.Q., Olibris B., Bota A.B., Wilson L.A., et al. Development and external validation of machine learning algorithms for postnatal gestational age estimation using clinical data and metabolomic markers. Plos One (under review). *Lead author of the manuscript, co-led the planning and design of the study and responsible for planning and conducting all data analyses and presentation/interpretation of results.*
2. **Hawken S.**, Ward V., Bota A.B., Lamoureux M., Ducharme R., Wilson L.A., Otieno N., Munga S., Nyawanda B.O., Atito R., Stevenson D.K., Chakraborty P., Darmstadt G.L., Wilson K. Real world external validation of metabolic gestational age assessment in Kenya. Plos Global Public Health (under review). *Lead author of the manuscript, co-led the planning and design of the study and responsible for planning and conducting all data analyses and presentation/interpretation of results.*

Published Manuscripts

1. **Hawken S.**, Ward V., Bota A.B., Lamoureux M., Ducharme R., Wilson L.A., Otieno N., Munga S., Nyawanda B.O., Atito R., Stevenson D.K., Chakraborty P., Darmstadt G.L., Wilson K. Real world external validation of metabolic gestational age assessment in Kenya. Plos Global Public Health (under review). *Lead author of the manuscript, co-led the planning and design of the study and responsible for planning and conducting all data analyses and presentation/interpretation of results.*
2. **Hawken S.**, Olibris B., Ducharme R., Bota A.B., Murray J.C., Potter B.K., Walker M., Chakraborty P., Wilson K. Validation of gestational age determination from ultrasound or a metabolic gestational age algorithm using exact date of conception in a cohort of newborns

- conceived using assisted reproduction technologies. (2022). *AJOG Global Reports* (In press). <https://doi.org/10.1016/j.xagr.2022.100091>. *Lead author of the manuscript, co-led the planning and design of the study and responsible for planning and conducting all data analyses and presentation/interpretation of results.*
3. Bota, B., Ward, V., Lamoureux, M., Santander, E., Ducharme, R., **Hawken, S.**, Potter, B. K., Atito, R., Nyamanda, B., Munga, S., Otieno, N., Chakraborty, S., Saha, S., Stringer, J. S., Mwape, H., Price, J. T., Mujuru, H. A., Chimhini, G., Magwali, T., Chakraborty, P., ... Wilson, K. (2022). Unlocking the global health potential of dried blood spot cards. *Journal of global health*, 12, 03027. <https://doi.org/10.7189/jogh.12.03027>
 4. Walker, M. C., Willner, I., Miguel, O. X., Murphy, M., El-Chaâr, D., Moretti, F., Dingwall Harvey, A., Rennicks White, R., Muldoon, K. A., Carrington, A. M., **Hawken, S.**, & Aviv, R. I. (2022). Using deep-learning in fetal ultrasound analysis for diagnosis of cystic hygroma in the first trimester. *PloS one*, 17(6), e0269323. <https://doi.org/10.1371/journal.pone.0269323>
 5. Rushton, M., Kappel, C., Lima, I., Tuna, M., Pritchard, K., **Hawken, S.**, & Dent, S. (2022). Cardiac Monitoring and Heart Failure in Advanced Breast Cancer Patients Treated With Trastuzumab in Ontario, Canada. *Frontiers in cardiovascular medicine*, 9, 850674. <https://doi.org/10.3389/fcvm.2022.850674>
 6. Murphy, M., Ducharme, R., **Hawken, S.**, Corsi, D. J., Petreich, W., El-Chaâr, D., Bisnaire, L., McIsaac, D. I., Fell, D. B., Wen, S. W., & Walker, M. C. (2022). Exposure to Intrapartum Epidural Analgesia and Risk of Autism Spectrum Disorder in Offspring. *JAMA network open*, 5(5), e2214273. <https://doi.org/10.1001/jamanetworkopen.2022.14273>
 7. Roy, D. C., Wang, T. F., Mallick, R., Carrier, M., Mollanji, E., Liu, P., Zhang, L., **Hawken, S.**, & Wells, P. (2022). Growth Differentiation Factor-15, High-Sensitivity Cardiac Troponin T, and N-Terminal pro-B-type Natriuretic Peptide for Predicting Risk of Venous Thromboembolism in Ambulatory Cancer Patients Receiving Chemotherapy. *Thrombosis and haemostasis*, 122(7), 1169–1176. <https://doi.org/10.1055/a-1792-7720>
 8. Carrington, A. M., Manuel, D. G., Fieguth, P., Ramsay, T. O., Osmani, V., Wernly, B., Bennett, C., **Hawken, S.**, Magwood, O., Sheikh, Y., McInnes, M., & Holzinger, A. (2022). Deep ROC Analysis and AUC as Balanced Average Accuracy, for Improved Classifier Selection, Audit and Explanation. *IEEE transactions on pattern analysis and machine intelligence*, PP, 10.1109/TPAMI.2022.3145392. Advance online publication. <https://doi.org/10.1109/TPAMI.2022.3145392>
 9. Mullen KA, Garg A, Gagnon F, Wells G, Kapur A, **Hawken S**, Pipe AL, Walker K, Thiruganasambandamoorthy V, Klepaczek M, Reid RD. The INITIATE trial protocol: a randomized controlled trial testing the effectiveness of a “quit card” intervention on long-term abstinence among tobacco smokers presenting to the emergency department. *Trials* 22, 733 (2021). <https://doi.org/10.1186/s13063-021-05693-9>
 10. Thampi N, Knight BD, Thavorn K, Webster RJ, Lanctot K, **Hawken S**, McNally JD. Health

- care costs of hospitalization of young children for respiratory syncytial virus infections: a population-based matched cohort study. *CMAJ Open*. 2021 Oct 19;9(4):E948-E956. doi: 10.9778/cmajo.20200219. PMID: 34667075; PMCID: PMC8526091.
11. Di Santo P, Mathew R, Jung RG, Simard T, Skanes S, Mao B, Ramirez FD, Marbach JA, Abdel-Razek O, Motazedian P, Parlow S, Boczar KE, D'Egidio G, **Hawken S**, Bernick J, Wells GA, Dick A, So DY, Glover C, Russo JJ, McGuinty C, Hibbert B; CAPITAL DOREMI investigators. Impact of baseline beta-blocker use on inotrope response and clinical outcomes in cardiogenic shock: a subgroup analysis of the DOREMI trial. *Crit Care*. 2021 Aug 10;25(1):289. doi: 10.1186/s13054-021-03706-2. PMID: 34376218; PMCID: PMC8356445.
 12. Jomaa D, **Hawken S**, Lawrence S, Chakraborty P, Henderson. Predicting gestational age improves newborn screening for congenital adrenal hyperplasia: a retrospective cohort study. *J Lab Precis Med*. 2021;6:15. doi: 10.21037/jlpm-21-18.
 13. Myran DT, Staykov E, Cantor N, Taljaard M, Quach BI, **Hawken S**, Tanuseputro P. How has access to legal cannabis changed over time? An analysis of the cannabis retail market in Canada 2 years following the legalisation of recreational cannabis. *Drug Alcohol Rev*. 2021 Jul 12. doi: 10.1111/dar.13351. Epub ahead of print. PMID: 34250645.
 14. Khangura SD, Potter BK, Davies C, Ducharme R, Bota AB, **Hawken S** et al. Health services use by children identified as heterozygous hemoglobinopathy mutation carriers via newborn screening. *BMC Pediatrics* 2021; 21:296.
 15. Currie LM, Fell DB, **Hawken S**, Potter BK, Coyle D, Wen SW, Walker M, Gaudet L. A Retrospective Cohort Study Investigating the Impact of Maternal Pre-Pregnancy Body Mass Index on Pediatric Health Service Utilization. *J Obstet Gynaecol Can*. 2021 Nov;43(11):1267-1273. doi: 10.1016/j.jogc.2021.04.017. Epub 2021 May 21. PMID: 34029752.
 16. Abdullah K, Fell DB, Radhakrishnan D, **Hawken S**, Johnson DW, Mandhane P et al. Risk of asthma in children diagnosed with bronchiolitis during infancy: Protocol of a longitudinal cohort study linking emergency department-based clinical data to provincial health administrative databases. *BMJ Open*.
 17. Fakhraei R, Crowcroft N, Bolotin S, **Hawken S**, Wilson K, Gaudet L, Amirthalingam G, Biringer A, Cook J, Dubey V, Halperin S, Jamieson F, Kwong JC, Sadarangani M, Walker MC, Lavery M, Fell DB. Obstetric and perinatal health outcomes following pertussis immunization during pregnancy in Ontario, Canada. *CMAJ Open* 2021; 9(2): E349-57; doi: 10.9778/cmajo.20200239. (<https://pubmed.ncbi.nlm.nih.gov/33849984/>)
 18. Lavery M, Crowcroft N, Bolotin S, **Hawken S**, Wilson K, Amirthalingam G, Biringer A, Cook J, Dubey V, Halperin S, Jamieson F, Kwong JC, Sadarangani M, Walker MC, Fakhraei R, Fell DB. Health outcomes in young children following maternal Tdap vaccination during pregnancy: a propensity-score matched cohort study. *Pediatrics* 2021; 2021;147(5): e2020042507; doi: 10.1542/peds.2020-042507. (<https://pubmed.ncbi.nlm.nih.gov/33849984/>)

19. Shoemaker ES, Saiyin T, Smith S, Loutfy M, Darling L, Walker M, Hawken S, Begum J, Bibeau C, Bertozzi B, Fraleigh A, Kwaramba G, Johnson K, Cousineau A, Kendall CE. Patterns of cesarean birth among women living with HIV in Ontario: A cross-sectional, population-level study. *Birth*. 2021 Sep;48(3):357-365. doi: 10.1111/birt.12545. Epub 2021 Mar 17. PMID: 33733473.
20. Righolt CH, Pabla G, Donelle J, Brna P, Deeks SL, Wilson SE, Smith B, Wilson K, Mahmud SM, Top KA, **Hawken S**. Vaccine coverage among children with epilepsy in two Canadian provinces: A Canadian immunization research network study. *Vaccine*. 2021 Apr 8;39(15):2117-2123. doi: 10.1016/j.vaccine.2021.03.009. Epub 2021 Mar 13. PMID: 33722410.
21. Fergusson DA, Chassé M, Tinmouth A, Acker JP, English S, Forster AJ, **Hawken S**, et al. Pragmatic, double-blind, randomised trial evaluating the impact of red blood cell donor sex on recipient mortality in an academic hospital population: the innovative Trial Assessing Donor Sex (iTADS) protocol. *BMJ Open*. 2021 Feb 23;11(2):e049598. doi: 10.1136/bmjopen-2021-049598. PMID: 33622960.
22. Coyle K, Quan AML, Wilson LA, **Hawken S**, Murray J, Wilson K. Cost-effectiveness of a gestational age metabolic algorithm for preterm and small-for-gestational-age classification. *Am J Obstet Gynecol MFM*. 2021 Jan; 3(1): 100279.
23. **Hawken S**, Murphy MSQ, Ducharme R, Bota AB, Wilson LA, Cheng W, Tumalak MJ, Alcausin MML, Reyes ME, Qiu W, Potter BK, Little J, Walker M, Zhang L, Padilla C, Chakraborty P, Wilson K. External validation of machine learning models including newborn metabolomic markers for postnatal gestational age estimation in East and South-East Asian infants. *Gates Open Res*. 2021 Jun 21;4:164. doi: 10.12688/gatesopenres.13131.2. PMID: 34104876; PMCID: PMC8160452.
24. Bota AB, Ward V, **Hawken S**, Wilson LA, Lamoureux M, Ducharme R et al. Metabolic Gestational Age Assessment in Low Resource Settings: a validation protocol. 2020. *Gates Open Res*. 2021 Jan 28;4:150. doi: 10.12688/gatesopenres.13155.2. PMID: 33501414; PMCID: PMC7801859.
25. Corsi DJ, Donelle J, Sucha E, **Hawken S**, Hsu H, El-Chaâr D, et al. Maternal cannabis use in pregnancy and child neurodevelopmental outcomes. *Nat Med*. 2020 Aug 10. doi: 10.1038/s41591-020-1002-5.
26. Rushton M, Lima I, Tuna M, Johnson C, Ivars J, Pritchard K, **Hawken S**, Dent S. Impact of stopping trastuzumab in early breast cancer: a population-based study in Ontario, Canada. *J Natl Cancer Inst*. 2020 Apr 28;djaa054.doi: 10.1093/jnci/djaa054.
27. Top KA, Righolt CH, **Hawken S**, et al. Adverse Events Following Immunization Among Children With Epilepsy: A Self-Controlled Case Series. *Pediatr Infect Dis J*. 2020;39(5):454-459. doi:10.1097/INF.0000000000002553

28. Chassé M, Tinmouth A, Goldman M, O'Brien SF, **Hawken S**, Murphy MSQ et al. Evaluating the Clinical Effect of Female Blood Donors of Child-Bearing Age on Maternal and Neonatal Outcomes: A Cohort Study. *Transfus Med Rev*. 2019 Dec 2. doi: 10.1016/j.tmr.2019.11.007. [Epub ahead of print]
29. Kuenzig ME, **Hawken S**, Wilson K, Talarico R, Chakraborty P, Sood MM et al. Serum Newborn Screening Blood Metabolites Are not Associated With Childhood-onset Inflammatory Bowel Disease: A Population-based Matched Case-control Study. *Inflamm Bowel Dis*. 2019 Dec 12. doi: 10.1093/ibd/izz296. [Epub ahead of print]
30. Wilson LA, Fell DB, **Hawken S**, Wong CA, Murphy MSQ, Little J, Potter BK, Walker M, Lacaze-Masmonteil T, Juul S, Chakraborty P, Wilson K. Association between newborn screening analytes and hypoxic ischemic encephalopathy. *Sci Rep*. 2019 Oct 31;9(1):15704. doi: 10.1038/s41598-019-51919-x.
31. Wilson LA, Murphy MS, Ducharme R, Denize K, Jadavji NM, Potter B, Little J, Chakraborty P, **Hawken S**, Wilson K. Postnatal gestational age estimation via newborn screening analysis: application and potential. *Expert Rev Proteomics*. 2019 Sep;16(9):727-731. doi: 10.1080/14789450.2019.1654863.
32. Walsh LK, Donelle J, Dodds, L, **Hawken S**, Wilson K, Benchimol EI et al. Health outcomes of young children born to mothers who received 2009 pandemic H1N1 influenza vaccination during pregnancy: a retrospective cohort study. *BMJ* 2019;366:l4151 doi: 10.1136/bmj.l4151.
33. Corsi DJ, Walsh L, Weiss D, Hsu H, El-Chaar D, **Hawken S**, Fell DB, Walker M. Association Between Self-reported Prenatal Cannabis Use and Maternal, Perinatal, and Neonatal Outcomes. *JAMA*. 2019 Jun 18. doi: 10.1001/jama.2019.8734.
34. Fell D, Wilson L, **Hawken S**, Spruin S, Murphy M, Potter B et al. Association between newborn screening analyte profiles and infant mortality. *J Matern Fetal Neonatal Med*. 2019 May 2;1-121. doi: 10.1080/14767058.2019.1615048.
35. Murphy M, **Hawken S**, Cheng W, Wilson L, Lamoureux M, Henderson M et al. Postnatal gestational age estimation using newborn metabolic profiles: A validation study in Matlab, Bangladesh. *Elife*. 2019 Mar 19;8. pii: e42627. doi: 10.7554/eLife.42627.
36. Karaceper MD, Khangura SD, Wilson K, Coyle D, Brownell M, Davies C...**Hawken S** et al. Health services use among children diagnosed with medium-chain acyl-CoA dehydrogenase deficiency through newborn screening: a cohort study in Ontario, Canada. *Orphanet J Rare Dis*. 2019 Mar 22;14(1):70. doi: 10.1186/s13023-019-1001-0.
37. **Hawken S**, Ducharme R, Fell DB, Oron, AP, Wilson K. Effects of sex and birth weight on non-specific health services use following whole-cell pertussis vaccination: a self-controlled case series analysis. *Hum Vaccin Immunother*. 2019 Mar 4:1-6. doi: 10.1080/21645515.2019.1586029.

38. Murphy MSQ, Chakraborty P, Pervin J, Rahman A, Wilson LA, Lamoureux M, Denize K, Henderson M, **Hawken S**, Potter BK, Little J, Wilson K. Incidental screen positive findings in a prospective cohort study in Matlab, Bangladesh: insights into expanded newborn screening for low-resource settings. *Orphanet J Rare Dis.* Jan 2019; 14(1):25. doi: 10.1186/s13023-018-0993-1.
39. Zhao X, Bjerre LM, Nguyen GC, Mack DR, Manuel DG, **Hawken S**, Mojaverian N, Bollegala N, Benchimol EI. Health services impact of transition of adolescents with inflammatory bowel disease from pediatric to adult care: a population-based cohort study using health administrative data. *Journal of Pediatrics.* 2018; ePublication ahead of print 25 September 2018. Doi 10.1016/j.jpeds.2018.08.021.
40. McIntyre L, Taljaard M, McArdle T, Fox-Robichaud A, English SW, ... **Hawken S**, et al. FLUID trial: a protocol for a hospital-wide open-label cluster crossover pragmatic comparative effectiveness randomised pilot trial. *BMJ Open* Aug 2018;8(8):e022780. doi: 10.1136/bmjopen-2018-022780
41. Wilson K, Duque DR, Murphy MSQ, **Hawken S**, Pham-Huy A, Kwong J, Deeks SL, Potter BK, Crowcroft NS, Bulman DE, Chakraborty P, Little J. T-cell receptor excision circle levels and safety of paediatric immunization: A population-based self-controlled case series analysis. *Hum Vaccin Immunother* June 2018; 14(6):1378-1391.
42. Murphy MSQ, **Hawken S**, Cheng W, Wilson LA, Lamoureux M, Henderson M et al. Metabolic profiles derived from residual blood spot samples: A longitudinal analysis. *Gates Open Res.* 2018 May 30; 2:28. doi: 10.12688/gatesopenres.12822.1.
43. Gershon AS, Campitelli MA, **Hawken S**, Victor C, Sproule BA, Kurdyak P, Selby P. Cardiovascular and neuropsychiatric events after varenicline use for smoking cessation. *Am J Respir Crit Care Med* April 2018; 197(7):913-922.
44. Sood MM, Murphy MSQ, **Hawken S**, Wong CA, Potter BK, Burns KD, Tsampalieros A, Atkinson KM, Chakraborty P, Wilson K. Association between newborn metabolic profiles and pediatric kidney disease. *Kidney Int Rep* Feb 2018; 3(3):691-700.
45. **Hawken S**, Ducharme R, Murphy MSQ, Atkinson KM, Potter BK, Chakraborty P, Wilson K. Performance of a postnatal metabolic gestational age algorithm: a retrospective validation study among ethnic subgroups in Canada. *BMJ Open* Sept 2017; 7(9):e015615.
46. Murphy MSQ, **Hawken S**, Atkinson KM, Milburn J, Pervin J, Gravett C, Stringer JSA, Rahman A, Lackritz E, Chakraborty P, Wilson K. Postnatal gestational age estimation using newborn screening blood spots: a proposed validation protocol. *BMJ Global Health* Jul 2017; 2(2) e000365.
47. Mullen KA, Manuel DG, **Hawken SJ**, Pipe AL, Coyle D, Hobler LA, Younger J, Wells GA, Reid RD. Effectiveness of a hospital-initiated smoking cessation programme: 2-year health and healthcare outcomes. *Tob Control.* 2017 May;26(3):293-299.

48. **Hawken S**, Ducharme R, Rosella LC, Benchimol EI, Langley JM, Wilson K, Crowcroft NS, Halperin SA, Desai S, Naus M, Sanford CJ, Mahmud SM, Deeks SL. Assessing the risk of intussusception and rotavirus vaccine safety in Canada. *Hum Vaccin Immunother*. 2017 Mar 4;13(3):703-710.
49. Wilson K, **Hawken S**, Murphy MS, Atkinson KM, Potter BK, Sprague A, Walker M, Chakraborty P, Little J. Postnatal Prediction of Gestational Age Using Newborn Fetal Hemoglobin Levels. *EBioMedicine*. 2017 Feb; 15:203-209.
50. Fell DB, **Hawken S**, Wong CA, Wilson LA, Murphy MSQ, Chakraborty P, Lacaze-Masmonteil T, Potter BK, Wilson K. Using newborn screening analytes to identify cases of neonatal sepsis. *Dec 2017*; 7(1):18020.
51. Atkinson KM, Westeinde J, Ducharme R, Wilson SE, Deeks SL, Crowcroft N, **Hawken S**, Wilson K. Can mobile technologies improve on-time vaccination? A study piloting maternal use of ImmunizeCA, a Pan-Canadian immunization app. *Hum Vaccin Immunother*. 2016 Oct 2;12(10):2654-2661.
52. **Hawken S**, Potter BK, Little J, Benchimol EI, Mahmud S, Ducharme R, Wilson K. The use of relative incidence ratios in self-controlled case series studies: an overview. *BMC Med Res Methodol*. 2016 Sep 23;16(1):126.
53. Wilson K*, **Hawken S***, Potter BK, Chakraborty P, Walker M, Ducharme R, Little J. Accurate prediction of gestational age using newborn screening analyte data. *Am J Obstet Gynecol*. April 2016; 214(4):513:e1-513.e9. *Joint first authors.
54. Fell DB, Wilson K, Ducharme R, **Hawken S**, Sprague AE, Kwong JC, Smith G, Wen SW, Walker MC. Infant Respiratory Outcomes Associated with Prenatal Exposure to Maternal 2009 A/H1N1 Influenza Vaccination. *PLoS One*. Aug 2016; 11(8):e0160342.
55. Karaceper MD, Chakraborty P, Coyle D, Wilson K, Kronick JB, **Hawken S**, Davies C, Brownell M, Dodds L, Feigenbaum A, Fell DB, Grosse SD, Guttman A, Laberge AM, Mhanni A, Miller FA, Mitchell JJ, Nakhla M, Prasad C, Rockman-Greenberg C, Sparkes R, Wilson BJ, Potter BK; Canadian Inherited Metabolic Diseases Research Network. The health system impact of false positive newborn screening results for medium-chain acyl-CoA dehydrogenase deficiency: a cohort study. *Orphanet J Rare Dis*. Feb 2016; 11:12.
56. van Walraven C, **Hawken S**. Competing risk bias in Kaplan-Meier risk estimates can be corrected. *J Clin Epidemiol*. Feb 2016; 70:101-5.
57. Bjerre LM, Ramsay T, Cahir C, Ryan C, Halil R, Farrell B, Thavorn K, Catley C, **Hawken S**, Gillespie U, Manuel DG. Assessing potentially inappropriate prescribing (PIP) and predicting patient outcomes in Ontario's older population: a population-based cohort study applying subsets of the STOPP/START and Beers' criteria in large health administrative databases. *BMJ Open*. Nov 2015; 5(11):e010146.

58. Atkinson KM, Westeinde J, **Hawken S**, Ducharme R, Barnhardt K, Wilson K. Using mobile technologies for immunization: Predictors of uptake of a pan-Canadian immunization app (ImmunizeCA). *Paediatr Child Health*. 2015 Oct;20(7):351-2.
59. **Hawken S**, Potter BK, Benchimol EI, Little J, Ducharme R, Wilson K. Seasonal variation in rates of emergency room visits and acute admissions following recommended infant vaccinations in Ontario, Canada: A self-controlled case series analysis. *Vaccine*. 2014. 32(52):7148-7153.
60. van Walraven C, McAlister FA, Bakal JA, **Hawken S**, Donzé J. External validation of the Hospital-patient One-year Mortality Risk (HOMR) model for predicting death within 1 year after hospital admission. *CMAJ*. 2015 Jul 14;187(10):725-33.
61. **Hawken S**, Kwong JC, Deeks SL, Crowcroft NS, McGeer AJ, Ducharme R, Campitelli MA, Coyle D, Wilson K. Simulation study of the effect of influenza and influenza vaccination on risk of acquiring Guillain-Barré syndrome. *Emerg Infect Dis*. 2015 Feb;21(2):224-31.
62. Awh CC, **Hawken S**, Zanke BW. Treatment response to antioxidants and zinc based on CFH and ARMS2 genetic risk allele number in the Age-Related Eye Disease Study. *Ophthalmology*. 2015 Jan;122(1):162-9.
63. Cowan J, Gaudet L, Mulpuru S, Corrales-Medina V, **Hawken S**, Cameron C, Aaron SD, Cameron DW. A Retrospective Longitudinal Within-Subject Risk Interval Analysis of Immunoglobulin Treatment for Recurrent Acute Exacerbation of Chronic Obstructive Pulmonary Disease. *PLoS One*. 2015 Nov 11;10(11): e0142205.
64. Ramirez FD, Hibbert B, Simard T, Maze R, Pourdjabbar A, Chong AY, Le May M, Shiao J, Wilson KR, **Hawken S**, O'Brien ER, So DY; Cardiovascular percutaneous trial Investigators. Clinical outcomes among patients with extreme obesity undergoing elective coronary revascularization: Evaluation of major complications in contemporary practice. *Int J Cardiol*. 2015 May 1; 186:266-72.
65. Awh CC, Lane AM, **Hawken S**, Zanke B, Kim IK. Author reply: To PMID 23972322. *Ophthalmology*. *Ophthalmology*. 2015 Jan;122(1):162-9. doi: 10.1016/j.ophtha.2014.07.049
66. Wilson K, **Hawken S**, Ducharme R, Potter BK, Little J, Thebaud B, Chakraborty P. Metabolomics of prematurity: analysis of patterns of amino acids, enzymes, and endocrine markers by categories of gestational age. *Pediatric research*. 2014;75(2):367-73.
67. Wilson K, Ducharme R, Ward B, **Hawken S**. Increased emergency room visits or hospital admissions in females after 12-month MMR vaccination, but no difference after vaccinations given at a younger age. *Vaccine*. 2014;32(10):1153-9.
68. van Walraven C, Wong J, Forster AJ, **Hawken S**. Predicting post-discharge death or readmission: deterioration of model performance in population having multiple admissions per

- patient. *Journal of evaluation in clinical practice*. 2013;19(6):1012-8.
69. Awh CC, Lane AM, **Hawken S**, Zanke B, Kim IK. CFH and ARMS2 genetic polymorphisms predict response to antioxidants and zinc in patients with age-related macular degeneration. *Ophthalmology*. 2013;120(11):2317-23.
70. Hibbert B, Simard T, Ramirez FD, Pourdjabbar A, Raizman JE, Maze R, Wilson KR, **Hawken S**, O'Brien ER. The effect of statins on circulating endothelial progenitor cells in humans: a systematic review. *Journal of cardiovascular pharmacology*. 2013;62(5):491-6.
71. Seibert TA, Hibbert B, Chen YX, Rayner K, Simard T, Hu T, Cuerrier CM, Zhao X, de Belleruche J, Chow BJ, **Hawken S**, Wilson KR, O'Brien ER. Serum heat shock protein 27 levels represent a potential therapeutic target for atherosclerosis: observations from a human cohort and treatment of female mice. *Journal of the American College of Cardiology*. 2013;62(16):1446-54.
72. Ducharme R, Benchimol EI, Deeks SL, **Hawken S**, Fergusson DA, Wilson K. Validation of diagnostic codes for intussusception and quantification of childhood intussusception incidence in Ontario, Canada: a population-based study. *The Journal of pediatrics*. 2013;163(4):1073-9.e3.
73. Kwong JC, Vasa PP, Campitelli MA, **Hawken S**, Wilson K, Rosella LC, Stukel TA, Crowcroft NS, McGeer AJ, Zinman L, Deeks SL. Risk of Guillain-Barre syndrome after seasonal influenza vaccination and influenza health-care encounters: a self-controlled study. *The Lancet infectious diseases*. 2013;13(9):769-76.
74. Shehata N, Forster A, Li L, Rothwell DM, Mazer CD, Naglie G, Fowler R, Tu JV, Rubens FD, **Hawken S**, Wilson K. Does anemia impact hospital readmissions after coronary artery bypass surgery? *Transfusion*. 2013;53(8):1688-97.
75. Simard T, Hibbert B, Pourdjabbar A, Ramirez FD, Wilson KR, **Hawken S**, O'Brien ER. Percutaneous coronary intervention with or without on-site coronary artery bypass surgery: a systematic review and meta-analysis. *International journal of cardiology*. 2013;167(1):197-204.
76. Benchimol EI, **Hawken S**, Kwong JC, Wilson K. Safety and utilization of influenza immunization in children with inflammatory bowel disease. *Pediatrics*. 2013;131(6): e1811-20.
77. Wilson K, Ducharme R, **Hawken S**. Association between socioeconomic status and adverse events following immunization at 2, 4, 6 and 12 months. *Human vaccines & immunotherapeutics*. 2013;9(5):1153-7.
78. **Hawken S**, Kwong JC, Deeks SL, Crowcroft NS, Ducharme R, Manuel DG, Wilson K. Association between birth order and emergency room visits and acute hospital admissions following pediatric vaccination: a self-controlled study. *PloS one*. 2013;8(12): e81070.

79. Wilson K, **Hawken S**. Drug safety studies and measures of effect using the self-controlled case series design. *Pharmacoepidemiology and drug safety*. 2013;22(1):108-10.
80. **Hawken S**, Manuel DG, Deeks SL, Kwong JC, Crowcroft NS, Wilson K. Underestimating the safety benefits of a new vaccine: the impact of acellular pertussis vaccine versus whole-cell pertussis vaccine on health services utilization. *American journal of epidemiology*. 2012;176(11):1035-42.
81. **Hawken S**, Wilson KR. The self-controlled case series method for evaluating safety of vaccines. *The Medical journal of Australia*. 2012;197(10):578-9.
82. Chambers LW, Wilson K, **Hawken S**, Puxty J, Crowe L, Lam PP, Farmanova-Haynes E, McNeil SA, McCarthy AE. Impact of the Ottawa Influenza Decision Aid on healthcare personnel's influenza immunization decision: a randomized trial. *The Journal of hospital infection*. 2012;82(3):194-202.
83. Ramirez FD, Hibbert B, Simard T, Pourdjabbar A, Wilson KR, Hibbert R, Kazmi M, **Hawken S**, Ruel M, Labinaz M, O'Brien ER. Natural history and management of aortocoronary saphenous vein graft aneurysms: a systematic review of published cases. *Circulation*. 2012;126(18):2248-56.
84. van Walraven C, Wong J, **Hawken S**, Forster AJ. Comparing methods to calculate hospital-specific rates of early death or urgent readmission. *CMAJ: Canadian Medical Association journal*. 2012;184(15): E810-7.
85. Theodoratou E, Montazeri Z, **Hawken S**, Allum GC, Gong J, Tait V, Kirac I, Tazari M, Farrington SM, Demarsh A, Zgaga L, Landry D, Benson HE, Read SH, Rudan I, Tenesa A, Dunlop MG, Campbell H, Little J. Systematic meta-analyses and field synopsis of genetic association studies in colorectal cancer. *Journal of the National Cancer Institute*. 2012;104(19):1433-57.
86. Wilson K, **Hawken S**, Kwong JC, Deeks SL, Crowcroft NS, Manuel D. Vaccine and Immunization Surveillance in Ontario (VISION) - using linked health administrative databases to monitor vaccine safety. *Vaccine*. 2012;30(43):6115-20.
87. Hibbert B, Simard T, Wilson KR, **Hawken S**, Wells GA, Ramirez FD, Le May MR, So DY, Glover CA, Froeschl M, Marquis JF, Labinaz M, Dick A, O'Brien ER. Transradial versus transfemoral artery approach for coronary angiography and percutaneous coronary intervention in the extremely obese. *JACC Cardiovascular interventions*. 2012;5(8):819-26.
88. Wilson K, **Hawken S**, Holdt Henningsen K, Kwong JC, Deeks SL, Crowcroft NS, Law B, Manuel DG. On-time vaccination coverage in premature infants in Ontario, 2002-2009. *Canadian journal of public health*. 2012;103(5): e359-62.
89. Robichaud P, **Hawken S**, Beard L, Morra D, Tomlinson G, Wilson K, Keelan J. Vaccine-

- critical videos on YouTube and their impact on medical students' attitudes about seasonal influenza immunization: a pre- and post- study. *Vaccine*. 2012;30(25):3763-70.
90. Wilson K, **Hawken S**. Incidence of adverse events in premature children following 2-month vaccination. *Human Vaccines & immunotherapeutics*. 2012;8(5):592-5.
91. Wilson K, **Hawken S**, Kwong JC, Deeks SL, Manuel DG, Henningsen KH, Crowcroft NS. Impact of birth weight at term on rates of emergency room visits and hospital admissions following vaccination at 2 months of age. *Vaccine*. 2011;29(46):8267-74.
92. Dennis J, **Hawken S**, Krewski D, Birkett N, Gheorghe M, Frei J, McKeown-Eyssen G, Little J. Bias in the case-only design applied to studies of gene-environment and gene-gene interaction: a systematic review and meta-analysis. *International journal of epidemiology*. 2011;40(5):1329-4.
93. Forster AJ, Worthington JR, **Hawken S**, Bourke M, Rubens F, Shojania K, van Walraven C. Using prospective clinical surveillance to identify adverse events in hospital. *BMJ quality & safety*. 2011;20(9):756-63.
94. Wilson K, **Hawken S**, Potter BK, Chakraborty P, Kwong J, Crowcroft N, Rothwell D, Manuel D. Patterns of emergency room visits, admissions and death following recommended pediatric vaccinations - a population based study of 969,519 vaccination events. *Vaccine*. 2011;29(21):3746-52.
95. Wilson K, **Hawken S**, Kwong JC, Deeks S, Crowcroft NS, Van Walraven C, Potter BK, Chakraborty P, Keelan J, Pluscauskas M, Manuel D. Adverse events following 12 and 18 month vaccinations: a population-based, self-controlled case series analysis. *PloS one*. 2011;6(12):e27897.
96. **Hawken SJ**, Greenwood CM, Hudson TJ, Kustra R, McLaughlin J, Yang Q, Zanke BW, Little J. The utility and predictive value of combinations of low penetrance genes for screening and risk prediction of colorectal cancer. *Human genetics*. 2010;128(1):89-101.
97. Zanke B, **Hawken S**, Carter R, Chow D. A genetic approach to stratification of risk for age-related macular degeneration. *Canadian journal of ophthalmology*. 2010;45(1):22-7.
98. Little J, **Hawken S**. On track? Using the Human Genome Epidemiology Roadmap. *Public health genomics*. 2010;13(4):256-66.
99. McQueen MJ, **Hawken S**, Wang X, Ounpuu S, Sniderman A, Probstfield J, Steyn K, Sanderson JE, Hasani M, Volkova E, Kazmi K, Yusuf S. Lipids, lipoproteins, and apolipoproteins as risk markers of myocardial infarction in 52 countries (the INTERHEART study): a case-control study. *Lancet*. 2008;372(9634):224-33.
100. Warfarin Antiplatelet Vascular Evaluation Trial Investigators., Anand S, Yusuf S, Xie C, Pogue J, Eikelboom J, Budaj A, Sussex B, Liu L, Guzman R, Cina C, Crowell R, Keltai M,

- Gosselin G. Oral anticoagulant and antiplatelet therapy and peripheral arterial disease. *N Engl J Med*. 2007 Jul 19;357(3):217-27 (acknowledged).
101. Keltai M, Tonelli M, Mann JF, Sitkei E, Lewis BS, **Hawken S**, Mehta SR, Yusuf S. Renal function and outcomes in acute coronary syndrome: impact of clopidogrel. *European journal of cardiovascular prevention and rehabilitation: official journal of the European Society of Cardiology, Working Groups on Epidemiology & Prevention and Cardiac Rehabilitation and Exercise Physiology*. 2007;14(2):312-8.
102. Teo KK, Ounpuu S, **Hawken S**, Pandey MR, Valentin V, Hunt D, Diaz R, Rashed W, Freeman R, Jiang L, Zhang X, Yusuf S. Tobacco use and risk of myocardial infarction in 52 countries in the INTERHEART study: a case-control study. *Lancet*. 2006;368(9536):647-58.
103. Yusuf S, **Hawken S**, Ounpuu S, Bautista L, Franzosi MG, Commerford P, Lang CC, Rumboldt Z, Onen CL, Lisheng L, Tanomsup S, Wangai P, Jr., Razak F, Sharma AM, Anand SS. Obesity and the risk of myocardial infarction in 27,000 participants from 52 countries: a case-control study. *Lancet*. 2005;366(9497):1640-9.
104. Steyn K, Sliwa K, **Hawken S**, Commerford P, Onen C, Damasceno A, Ounpuu S, Yusuf S. Risk factors associated with myocardial infarction in Africa: the INTERHEART Africa study. *Circulation*. 2005;112(23):3554-61.
105. Yusuf S, **Hawken S**, Ounpuu S, Dans T, Avezum A, Lanas F, McQueen M, Budaj A, Pais P, Varigos J, Lisheng L. Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. *Lancet*. 2004;364(9438):937-52.
106. Rosengren A, **Hawken S**, Ounpuu S, Sliwa K, Zubaid M, Almahmeed WA, Blackett KN, Sitthi-amorn C, Sato H, Yusuf S. Association of psychosocial risk factors with risk of acute myocardial infarction in 11119 cases and 13648 controls from 52 countries (the INTERHEART study): case-control study. *Lancet*. 2004;364(9438):953-62.

Technical Reports

1. Ducharme R, **Hawken S**, Deeks S.L, Wilson K. Immunization in Children with Rare Genetic Disorders: Vaccine Coverage and Risk of Adverse Events Following Immunization in Children with MCADD and Hemoglobinopathies. Report Prepared for Public Health Ontario. March 2013.
2. Ducharme R, Deeks SL, **Hawken S**, Benchimol EI, Fergusson D and Wilson K. Rotavirus Vaccines and Intussusception: Algorithm for Case Identification and Baseline Incidence of Intussusception. Report Prepared for Public Health Ontario. September 2012.

Peer-reviewed Abstracts

1. Kendall C, Hart S, Fitzgerald M, Hsu A, Rayner K, Smith B, Kitagawa K, Myran D, Kiran T, Ducharme R, Shoemaker E, **Hawken S**, et al. Social factors affecting risk of SARS-CoV2 infection and experience of Long COVID among the Ontario population. 50th NAPCRG Annual Meeting. Phoenix, AZ, USA. November 18-22, 2022.
2. **Hawken S**, Ducharme R, Murphy MS, Wilson LA, Walker M, Chakraborty P, Wilson K. Postnatal gestational age estimation using newborn screening metabolites: external model validation in infants born in Matlab, Bangladesh and Lusaka, Zambia. Canadian National Perinatal Research Meeting. Banff, Alberta, Canada. Feb 12-15, 2020.
3. Olibris B, Hawken S, Davies M, Attaran A, Walker M, Phillips K, Ducharme R. Risk of Placental Complications in Medically Assisted Singleton Pregnancies: A Whole of Population Study in Ontario. Canadian National Perinatal Research Meeting. Banff, Alberta, Canada. Feb 12-15, 2020.
4. Yau J, **Hawken S**, Fell DB, Potter B, Lacaze T, Walker M, Chakraborty P, Wilson K. Association of newborn screening analytes with type of delivery among term births. Canadian National Perinatal Research Meeting. Banff, Alberta, Canada. Feb 14-17, 2018.
5. Walsh LK, **Hawken S**, Wilson K, Fell DB. The influence of prenatal exposure to 2009 pandemic H1N1 influenza vaccination during pregnancy on the development of infectious disease during early childhood. Canadian National Perinatal Research Meeting. Banff, Alberta, Canada. Feb 14-17, 2018.
6. **Hawken S**, Murphy MSQ. Postnatal Gestational Age Estimation Using Newborn cord blood versus newborn heelprick blood. 2018 Keystone Symposia Conference: Maternal-Fetal Crosstalk: Harmony vs. Conflict. Washington DC. 4-8 October, 2018 (accepted abstract).
7. Bjerre LM, Halil R, Catley C, Ramsay^T, Cahir C, Ryan C, Farrell B, Thavorn K, Ducharme R, Smith G, **Hawken S**, Gillespie U, Manuel D. Identifying Potentially Inappropriate Prescribing (PIP) in whole populations: Coding of the STOPP/START and Beers criteria for use with large, routinely collected population datasets. International Conference on Pharmacoepidemiology. Montreal, PQ. 26-30 August 2017.
8. Bjerre LM, Halil R, Catley C, Ramsay^T, Cahir C, Ryan C, Farrell B, Thavorn K, Ducharme R, Smith G, **Hawken S**, Gillespie U, Manuel D. Assessing the association between potentially inappropriate prescriptions and patient outcomes at the population level: Application of the STOPP/START and Beers criteria for use with large, routinely collected population datasets. International Conference on Pharmacoepidemiology. Montreal, PQ. 26-30 August 2017.
9. **Hawken S**, Murphy MSQ, Atkinson KM, Potter BK, Sprague A, Walker M, Chakraborty P. Postnatal gestational age estimation using newborn fetal hemoglobin levels. Canadian National Perinatal Research Conference 2017. Montebello, PQ. 14-17 February 2017.

10. **Hawken S**, Murphy MSQ, Atkinson KM, Potter BK, Sprague A, Walker M, Chakraborty P. Postnatal gestational age estimation using newborn fetal hemoglobin levels. BORN 2017 Conference. Toronto, ON. 24-25 April 2017.
11. Murphy MSQ & **Hawken S**. Harnessing metabolic markers from newborn blood samples for precision medicine: accurate gestational age prediction and beyond. Newborn Screening Reference Centre. Manila, The Philippines. 1 Dec 2016. (Invited Talk)
12. **Hawken S**, Murphy MSQ, Atkinson KM, Potter BK, Sprague A, Walker M, Chakraborty P. Postnatal gestational age estimation using newborn fetal hemoglobin levels. Bill & Melinda Gates Foundation Grand Challenges Meeting. London, UK. 24-26 October 2016. (Poster)
13. Sood MM, Murphy MSQ, Wong CA, Atkinson KM, **Hawken S**, Burns KD, Potter BK, Chakraborty P, Wilson K. Predictive value of metabolic biomarkers at birth for the development of chronic kidney disease or kidney failure in early childhood. Canadian Newborn & Child Screening Symposium. Ottawa, Ontario. 21-22 Apr 2016. (Poster - Award)
14. **Hawken S**, Ducharme R, Murphy MSQ, Atkinson KM, Potter BK, Chakraborty P, Wilson K. Validation in ethnic subgroups of a gestational age prediction algorithm developed using routinely collected newborn screening metabolic profiles in Ontario. Canadian Newborn & Child Screening Symposium. Ottawa, Ontario. 21-22 Apr 2016. (Poster - Award)
15. Fell D, **Hawken S**, Ducharme R, Sprague A, Wilson K, Guttman A, Chong N, Walker M. The power of database linkage: a new source of longitudinal maternal-child data is BORN. BORN Ontario Conference, Ottawa, ON. Feb 2015.
16. **Hawken S**, Ducharme R, Kwong J, Campitelli M, Deeks S, Crowcroft N, McGeer A, Coyle D, Wilson K. The Impact of Influenza Vaccination and Influenza illness on an individual's risk of acquiring Guillain-Barré Syndrome: An evidence-based simulation study. Canadian Immunization Conference, Ottawa, ON. Dec 2-4, 2014.
17. **Hawken S**, Ducharme R, Potter E, Benchimol E, Little J, Westeinde J, Wilson K. Seasonal Variation in Rates of Emergency Room Visits and Acute Admissions Following Routine Infant Vaccinations in Ontario. Canadian Immunization Conference, Ottawa, ON. Dec 2-4, 2014.
18. Ducharme R, Fell D, **Hawken S**, Wilson K, Sprague A, Wen SW, Smith G, Moore C, McGeer A, Walker M. Infant respiratory outcomes associated with prenatal exposure to maternal H1N1 influenza vaccination. Canadian Immunization Conference, Ottawa, ON. Dec 2-4, 2014.
19. **Hawken S**. Seasonal Variation in Rates of ER visits and Admissions Following Routine Infant Vaccinations in Ontario. Ottawa Hospital Research Institute Research Day, Ottawa, ON, November 13, 2014.

20. Fell DB, Ducharme R, **Hawken S**, Sprague AE, Wilson K, Wen SW, Smith G, Moore C, McGeer A, Walker MC. Infant respiratory outcomes associated with prenatal exposure to maternal H1N1 influenza vaccination. Canadian National Perinatal Research Meeting, Banff, AB, February 12-15, 2014.
21. Fell DB, Ducharme R, **Hawken S**, Sprague AE, Wilson K, Wen SW, Smith G, Moore C, McGeer A, Walker MC. Infant respiratory outcomes associated with prenatal exposure to maternal H1N1 influenza vaccination. Canadian National Perinatal Research Meeting, Banff, AB, February 12-15, 2014.
22. **Hawken S.**, Ducharme R., Wilson, K. Risk of Guillain-Barré Syndrome following Influenza Illness or Vaccination: An Evidence-Based Simulation Study. Ottawa Hospital Research Institute (OHRI) Research Day, Ottawa, ON, November 14, 2013.
23. Ducharme R., **Hawken S.**, Ward B., Wilson K. Increased emergency room visits or hospital admissions in females after 12-month MMR vaccination, but no difference after vaccinations given at a younger age. Ottawa Hospital Research Institute (OHRI) Research Day, Ottawa, ON, November 14, 2013.
24. Ducharme R., **Hawken S.**, Manuel D.G., Deeks S.L., Kwong J.C., Crowcroft N.S., Wilson K. Vaccine and Immunization Surveillance in Ontario (VISION) – Using linked health administrative databases to monitor vaccine safety. 10th Canadian Immunization Conference, Vancouver, BC, December 3-5, 2012.
25. **Hawken S.**, Ducharme R., Manuel D.G., Deeks S.L., Kwong J.C., Crowcroft N.S., Wilson K. The impact of a child’s birth-order on relative incidence of ER visits and admissions following routine pediatric vaccination in Ontario, Canada. 10th Canadian Immunization Conference, Vancouver, BC, December 3-5, 2012.
26. **Hawken S.**, Ducharme R., Kwong J.C., Wilson K., Benchimol E. Adverse events following influenza immunization in children with Inflammatory Bowel Disease: a population-based study. 10th Canadian Immunization Conference, Vancouver, BC, December 3-5, 2012.
27. **Hawken S.**, Ducharme R., Manuel D.G., Deeks S.L., Kwong J.C., Crowcroft N.S., Wilson K. The impact of the transition from whole-cell to acellular pertussis vaccine on health services utilization in Ontario, Canada. 10th Canadian Immunization Conference, Vancouver, BC, December 3-5, 2012.
28. Ducharme R., Benchimol E., Fergusson D., **Hawken S.** and Wilson K. Estimating the Incidence of Intussusception in Ontario Using Health Administrative Data. Ottawa Hospital Research Institute (OHRI) Research Day, Ottawa, ON, November 15, 2012.
29. **Hawken S**, Oake N, Rothwell D, van Walraven C, Forster A. Evaluating the Hospital Standardized Mortality Ratio. Statistics Canada/Canadian Institute for Health Information Data Users Conference. Ottawa, ON. September 20-21, 2010.

30. **Hawken S**, Little J. Potential clinical validity of germline genomic profiling for colorectal cancer screening and risk prediction. American Society of Human Genetics (59th annual meeting). Honolulu, HI. October 20-24, 2009.
31. Wilson B, Hasanaj Q, Little J, **Hawken S**. Using family history in primary care for predicting risk of common, complex diseases in individual patients. American Society of Human Genetics (59th annual meeting). Honolulu, HI. October 20-24, 2009.
32. **Hawken S**, Little J. Potential Utility of Germline Genetic Profiling in Colorectal Cancer Screening: A Simulation Study. American Society of Human Genetics (58th annual meeting). Philadelphia, PA. November 11-15, 2008.
33. Little J, **Hawken S**. Evaluation of germline genomic profiling for colorectal cancer screening and risk prediction in data from the Assessment of Risk from for Colorectal Tumours in Canada (ARCTIC) study. American Society of Human Genetics (58th annual meeting). Philadelphia, PA. November 11-15, 2008.
34. **Hawken S**, Little J. Evaluation of Germline Genomic Profiling in population-based cancer screening. Genomics of Common Diseases (2nd annual meeting). The Broad Institute of MIT and Harvard. September 6-9, 2008.
35. Chapman A, Pelletier C, **Hawken S**. Data and Information Quality at the Canadian Institute for Health Information. MIT International Conference on Information Quality. November 10-12, 2006, Boston, Massachusetts.
36. Richards R, Chapman A, **Hawken S**. Re-abstraction Study of Discharges from Ontario Case Costing Hospitals. MIT International Conference on Information Quality. November 10-12, 2006, Boston, Massachusetts.
37. **Hawken S**, Ounpuu S, Pogue J, Yusuf S. Approaches to analysis of a matched case-control study with missing exposure and covariate data, and incomplete matching: Insights from the Interheart Study. 25th Annual Meeting of the Society for Clinical Trials, May 23-26 2004, New Orleans, Louisiana. *Clinical Trials* 1:1(Suppl): 240.
38. Keltai M, Tonelli M, Mann JF, Lewis B, **Hawken S**, Mehta S, Lakkis N, Yusuf S. Renal Function Predicts Outcomes in Acute Coronary Syndromes: Insights from the CURE Trial. Congress of the American College of Cardiology, March 7-10 2004, New Orleans, Louisiana. *Journal of the American College of Cardiology* 43:5 (Suppl 1): A278.
39. Yusuf S, Flather M, Cronin L, Zhu J, Pais P, Liu L, **Hawken S**, Hunt D, Avezum A, Parkhomenko A, Budaj A, and Keltai M. Variations in clinical practice patterns and 6-month outcomes in 12,580 patients with non-ST Elevation Acute Coronary Syndromes (ACS) from 13 countries and 5 continents. 14th World Congress of Cardiology, Sydney, May 5-9, 2002. *Journal of the American College of Cardiology* 39(9 Suppl B): 442B.

40. Anand S, Cina C, Harrison L, Djuric Paulin A, Doobay B, Evans G, Tittley J, Montague P, **Hawken S**, Yusuf S. Improving the medical management of peripheral arterial disease patients--a high-risk and under-treated group. 54th Annual Meeting of the Canadian Cardiovascular Society, October 21-24, 2001, Halifax, Nova Scotia. Canadian Journal of Cardiology, 17, Suppl. C, 206C.
41. Ounpuu S, **Hawken S**, Yusuf S, for the INTER-HEART Investigators. INTER-HEART: an international standardized case-control study of risk factors for acute myocardial infarction in 52 countries. CDC Prevention Conference on Heart Disease and Stroke, August 22-24, 2001, Atlanta, Georgia. Preventive Medicine, 33(2 part 2): S30.
42. Cronin L, Zhu J, Pais P, **Hawken S**, Parkhomenko A, Hunt D, Budaj A, Liu L, Yusuf S. (2001). Variations in practice patterns and clinical outcomes in 12,512 patients with non-ST elevation acute coronary syndromes (ACS) recruited in 13 countries and 5 continents. 74th Scientific Sessions of the American Heart Association, November 12-14, 2001, Anaheim, California. Circulation, 104:17, Suppl. II, II-626.