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** Ottawa Hospital Research Institute The Ottawa Hospital, General Campus 501 Smyth Road, Box 201-B Centre for Practice Changing Research L1294 Ottawa, ON K1H 8L6 Phone: 613-737-8899 Ext 10672 Email: shawken@ohri.ca

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

Steven Hawken

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
2	August 2022

Reston, Virginia, USA

RECOGNITIONS

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

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

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

INTERNAL RESEARCH FUNDING

TEACHING:

May 12 th , 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
<u>Graduate Courses</u>	
Jan 2016-present	EPI5143 Epidemiological Research Using Large Databases University of Ottawa
6	August 20

- 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

<u>Completed</u>:

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
7	August 2022

Curriculum Vitae	Steven Hawken
	(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	Brieanne 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
8	August 2022

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

Steven Hawken

July 17, 2018	Sarwat Khan MSc, Microbiology and Immunology
Sept 28, 2017	Faranak Vahid-Ansari PhD, Neuroscience

Thesis Proposal Examiner

August 20, 2020Patrick DuongPhD, 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)
	and describe sexual and gender-based violence (SOBV)
	NPA: Doug Manuel

External Grant Reviews

December 2021	Peer Reviewer, PSI Foundation - Health Research Operating Grant
October 2021	Peer Reviewer, Ontario Early Researcher Award – Life Science
11	August 2022

Curriculum Vitae	Steven Hawken
	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
12	August 2022

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

Curriculum Vitae	Steven Hawken
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.*

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 (accepted). *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.
- Bota, B., Ward, V., Lamoureux, M., Santander, E., Ducharme, R., Hawken, S., Potter, B. K., August 2022

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. <u>https://doi.org/10.7189/jogh.12.03027</u>

- 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. <u>https://doi.org/10.1371/journal.pone.0269323</u>
- 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. <u>https://doi.org/10.3389/fcvm.2022.850674</u>
- Murphy, M., Ducharme, R., Hawken, S., Corsi, D. J., Petrcich, 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. <u>https://doi.org/10.1001/jamanetworkopen.2022.14273</u>
- 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. <u>https://doi.org/10.1055/a-1792-7720</u>
- 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
- 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
- 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.
- 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.
- 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.
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Technical Reports

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<u>Peer-reviewed Abstracts</u>

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