#### **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Adamo, Kristi Bree

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Full Professor

**EDUCATION/TRAINING** 

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Guelph, CAN	BSc	06/1996	Human Biology/Human Kinetics
University of Guelph, CAN	MSc	06/1998	Human Health & Nutritional Sciences
University of Ottawa, CAN	PhD	01/2006	Cellular and Molecular Medicine (Physiology)

#### A. Personal Statement

My Prevention in the Early Years research program, grounded in the Developmental Origins of Health and Disease (DOHaD), is unique in its examination of healthy active maternal behaviours such as physical activity, and intrauterine exposures as they relate to the promotion of optimum health. This distinctive research program, utilizing both population health and molecular approaches, is devoted to the critical period of human growth and development, targeting the vital organ of pregnancy, the placenta. I have built a diverse interdisciplinary research program allowing me to hold research grants from each of the Canadian Tri-Council agencies (CIHR, NSERC, SSHRC). My key contributions over the last several years into 3 categories; those related to 1) exercise, the intrauterine environment placenta biology, 2) contributors to gestational weight gain management, and 3) guideline development and public health.

# **Ongoing Research Support**

Canadian Institutes of Health Research: Project Grant

2024 - 2029

Decoding the dynamic interplay of gestational physical activity, microbiome, and metabolome in maternal-fetal wellbeing

Natural Sciences and Engineering Research Council: Discovery Grant

2023 - 2028

Characterization of placenta dynamics and response to various metabolic exposures

Canadian Institutes of Health Research: Bridge Funding

2023 - 2024

Scope and safety of vaping during pregnancy – generating and disseminating knowledge to inform clinical practice and pregnant individuals

Canadian Institutes of Health Research: Project Grant

2021 - 2024

SmartMoms Canada: An evaluation of a mobile app intervention to support a healthy pregnancy

## B. Positions, Scientific Appointments, and Honors (5 last years)

2022 -Full Professor, School of Human Kinetics, Faculty of Health Sciences, uOttawa Cross-Appointment, Faculty of Medicine, Department of Obstetrics and Gynecology 2023 -2015 - 2022Associate Professor, School of Human Kinetics, Faculty of Health Sciences, uOttawa Affiliate Scientist, Healthy Active Living and Obesity Research Group, CHEO Research 2015 -Institute

2013 -Associate Professor, Dept. of Pediatrics, Faculty of Medicine, uOttawa

## Other Experience and Professional Memberships

2023	Chair; CSEP Board of Directors
2022-2023	Chair-elect; CSEP Board of Directors
2020-2023	Obesity Canada's Reproductive Years: Preconception, Prenatal and Postpartum Family Health committee
2016-2019	CSEP/SOGC Guideline Consensus Panel: Canadian Guideline for Physical Activity Throughout Pregnancy
Ongoing	DOHaD Canada

Society or Obstetricians and Gynaecologists of Canada

American College of Sports Medicine

Obesity Canada

#### **Recent Honors**

2017	CSEP Mentorship Award:
2017	Recognition: Women Leaders of Canadian Society for Exercise Physiology (CSEP): A 50th
	anniversary celebration of major and significant contributions
2015	CSEP Young Investigator Award
2015	Obesity Canada's Faculty Supervisor Award
2014	W. Garfield Weston Foundation Award in Obesity and Reproductive Health
2013	W. Garfield Weston Foundation Award in Obesity and Reproductive Health
2012	CHEO Research Institute Award of Excellence for Outstanding Researcher
2012 - 2017	Canadian Institutes of Health Research (CIHR) - Institute of Human Development, Child and Youth
	Health - New Investigator Award
2011	Canadian Paediatric Society; Dr. Noni MacDonald Award

### C. Contributions to Science (related to the topic)

- 1. **Adamo KB**, Goudreau AD, Corson AE, MacDonald ML, O'Rourke N, Tzaneva V. Physically active pregnancies: Insights from the placenta. *Physiol Rep.* 2024 Jun;12(11):e16104. doi: 10.14814/phy2.16104. PMID: 38872466
- 2. Corson AE, Macdonald M., Tzaneva V., Edwards CM, & **Adamo KB**. Breaking boundaries: A chronology with future directions of women in exercise physiology research, centred on pregnancy. *Advanced Exercise and Health Science*. 2024 Jun; 1(2); 67-75. https://doi.org/10.1016/j.aehs.2024.04.001
- 3. da Silva ACR, Yadegari A, Tzaneva V, Vasanthan T, Laketic K, Shearer J, Bainbridge SA, Harris C, **Adamo KB**. Metabolomics to Understand Alterations Induced by Physical Activity during Pregnancy. *Metabolites*. 2023 Nov 29:13(12):1178. doi: 10.3390/metabol3121178. PMID: 38132860
- 4. Goudreau AD, Everest C, Tanara L, Tzaneva V, **Adamo KB**. Characterization of Hofbauer cell polarization and VEGF localization in human term placenta from active and inactive pregnant individuals. *Physiol Rep.* 2023 Jun;11(11):e15741. doi: 10.14814/phy2.15741. **PMID**: 37269190
- 5. Mohammad S, Bhattacharjee J, Tzaneva T, Hutchinson KA, Shaikh M, Burger D, **Adamo KB**. The influence of exercise-associated small extracellular vesicles on trophoblast biology *in vitro*. *Biomedicines*. 2023 Mar 11;11(3):857. doi: 10.3390/biomedicines11030857. **PMID:** 36979835
- 6. Everest C, da Silva DF, Puranda J, Souza SCS, Goudreau AD, Nagpal TS, Edwards CM, Gupta R, **Adamo KB.** Physical activity and weight gain throughout pregnancy are associated with umbilical cord markers. *J Obstet Gynaecol Can.* 2022 Dec;44(12):1262-1270. doi: 10.1016/j.jogc.2022.09.012. Epub 2022 Oct 8 PMID: 36216221
- 7. Mohammad S, Bhattacharjee J, Vasanthan T, Harris CS, Bainbridge SA, **Adamo KB.** Metabolomics in understanding placental biology: Where are we now? *Tissue Cell.* 2021 Dec;73:101663. doi: 10.1016/j.tice.2021.101663. Epub 2021 Oct 6. PMID: 34653888
- 8. Bhattacharjee J, Mohammad S, **Adamo KB**. Does exercise during pregnancy impact organs or structures of maternal-fetal interface? *Tissue Cell*. 2021 Oct;72:101543. doi: 10.1016/j.tice.2021.101543. Epub 2021 Apr 16. PMID: 33940567
- 9. Shearer J, Klein MS, Vogel HJ, Mohammad S, Bainbridge S, **Adamo KB.** Maternal and Cord Blood Metabolite Associations with Gestational Weight Gain and Pregnancy Health Outcomes. *J Proteome Res.* 2021 Mar 5;20(3):1630-1638. doi: 10.1021/acs.jproteome.0c00854. Epub 2021 Feb 2. PMID: 33529033