

## Education

- 2013-18 (expected) **Ph.D.**, Pathology; Faculty of Medicine, Dalhousie University; Halifax, NS  
Supervisor: Dr Paola Marcato  
*Determining the role of retinoic acid signaling in breast cancer progression.*
- 2006-11 **B.Sc., Co-op Program**, Microbiology & Immunology; Faculty of Science,  
University of British Columbia; Vancouver, BC

## Research interests

My research focuses on understanding how cellular contexts can affect signaling and dictate the response of an individual cancer patient to therapy. I am particularly interested in **precision medicine for breast cancer patients**. My current projects are integrating molecular biology, “big data”, and translational patient xenografting techniques to develop a method for selecting patients who will benefit from an existing anti-cancer agent. Other facets of my work include:

- Examining molecular cross-talk between signaling pathways.
- Exploring epigenetic regulation of genes throughout mammary development.
- Optimizing models to mimic human cancers *in vitro* and *in vivo*.

## Academic employment

- 2014 **Contract research assistant**, Canadian Blood Services
- 2012 **Research assistant**, Department of Comparative Biology & Experimental Medicine, Faculty of Veterinary Medicine, University of Calgary
- 2010-11 **Undergraduate research assistant**, Department of Microbiology & Immunology, Faculty of Science, University of British Columbia
- 2010-11 **Undergraduate research assistant, co-op student**, Division of Geriatric Medicine, Faculty of Medicine, University of British Columbia
- 2009 **Co-op student**, Department of Biological Sciences, Faculty of Science, University of Calgary
- 2009 **Co-op student**, Viral Exanthemata, National Microbiology Laboratory, Public Health Agency of Canada

## Academic awards and honors

- 2016 **First place award – poster presentation**, Beatrice Hunter Cancer Research Institute
- 2016-18 **DeWolfe Graduate Studentship**, Dalhousie Medical Research Foundation
- 2016-17 **Girl Guides of Canada National Scholarship**
- 2016-17 **Girl Guides of Canada Nova Scotia Council Chief Commissioner’s Bursary**
- 2016-17 **Sir James Lougheed Award of Distinction**, Government of Alberta
- 2016 **Judges’ choice award – poster presentation**, Department of Pathology at Dalhousie University
- 2016 **Trainee travel award**, Canadian Cancer Society Research Institute  
*To attend the 2016 AACR Annual Meeting.*
- 2016 **CIHR travel award**, Institute of Cancer Research (Institute Community Support)  
*To attend the 2016 AACR-JCA Joint Conference on Breakthroughs in Cancer Research: From Biology to Therapeutics.*
- 2016 **Trainee travel award**, Beatrice Hunter Cancer Research Institute  
*To attend the 2016 AACR-JCA Joint Conference on Breakthroughs in Cancer Research: From Biology to Therapeutics.*
- 2015 **Colleen Elliott Award** for excellence in cancer research, Nova Scotia Health Research Foundation
- 2015-18 **CIHR Doctoral Research Award**, Drug Safety & Effectiveness

- 2015-17 **Scotia Scholars (PhD) award**, Nova Scotia Health Research Foundation
- 2015-17 **Izaak Walton Killam predoctoral scholarship**, Dalhousie University
- 2015-16 **President's award**, Dalhousie University
- 2015 **AACR Scholar-in-Training Award**, American Association for Cancer Research (USD)  
*To attend the 2015 Advances in Breast Cancer Research AACR conference.*
- 2015 **Best graduate student poster presentation**, Department of Pathology at Dalhousie University
- 2015 **Trainee travel award**, Terry Fox Research Institute  
*To attend the 2015 TFRI Annual Scientific Meeting*
- 2015 **Dr. Bernard Badley Music-in-Medicine Scholarship**, Dalhousie University.
- 2014 **Best MSc student oral presentation**, Integrated Health Research Training Partnership at Dalhousie University
- 2014 **Best graduate student oral presentation**, Department of Pathology at Dalhousie University
- 2014 **Trainee travel award**, Terry Fox Research Institute  
*To attend the 2014 TFRI Annual Scientific Meeting*
- 2014 **Trainee travel award**, Beatrice Hunter Cancer Research Institute  
*To attend the 2014 AACR Annual Meeting.*
- 2014-15 **Graduate fellowship award**, Beatrice Hunter Cancer Research Institute
- 2013 **Trainee travel award**, CIHR / Canadian Bioinformatics Workshop  
*To attend the Pathway and Network Analysis workshop offered by CBW.*

## Community involvement (ongoing commitments)

- 2016 Girl Guides of Canada – Guides du Canada, National Link Liaison
- 2015-16 World Association of Girl Guides and Girl Scouts, Youth Delegate  
*One of ten international delegates to the 60<sup>th</sup> Session of the United Nations Commission on the Status of Women (2016).*
- 2015 Girl Guides of Canada – Guides du Canada, District Commissioner
- 2015 Beatrice Hunter Cancer Research Institute, Social Media Coordinator
- 2014 Special Olympics Nova Scotia, swimming clerk-of-course and timing recorder
- 2014-15 Biosafety Training Committee, student representative
- 2014-16 Pathology Organization of Graduate Students, treasurer
- 2013 Dalhousie Tupper Concert Band, student musician
- 2013 Beatrice Hunter Cancer Research Institute, event volunteer & fundraiser
- 2013-15 Terry Fox Run (Halifax), community co-chair  
*Honored by [resolution no. 424](#) in the Nova Scotia Legislature (October 2014).*
- 2013-15 Saint Mary's University cheerleading team, assistant coach
- 2011 Calgary Youth Science Fair, member of the board & evaluations committee
- 2007 Girl Guides of Canada – Guides du Canada, unit leader
- 2006-11 University of British Columbia, Thunderbirds Cheerleading, varsity athlete, co-captain 2010-11
- 2006-08 UBC RECreation, magazine layout coordinator

## Mentoring activities

Regularly mentor junior students in the lab, including four honours students, two experiential learning students, four summer students, and one junior high science-fair student.

# Publications

## Peer-reviewed

1. **Coyle KM**, Boudreau JE, Marcato P. Genetic mutations and epigenetic modifications: Driving cancer and informing precision medicine. *Submitted*.
2. Alpaugh W, Goldsmith T, **Coyle KM**, Tang L, Klein C, Dobrinski I. UCH-L1 is important for spermatogonia fate decision in adult murine testes. *Submitted*.
3. Sultan M, **Coyle KM**, Vidovic D, Thomas ML, Gujar S, Marcato P. Hide-and-seek: The interplay between cancer stem cells and the immune system. *Accepted, Carcinogenesis*.
4. Thomas ML, De Antueno R, **Coyle KM**, Sultan M, Cruickshank BM, Giacomantonio MA, Giacomantonio CA, Duncan R, Marcato P. Citral reduces breast tumor growth by inhibiting the cancer stem cell marker ALDH1A3. *Molecular Oncology* **2016**; <http://dx.doi.org/10.1016/j.molonc.2016.08.004>.
5. **Coyle KM**, Murphy JP, Vidovic D, Vaghar-Kashani A, Dean CA, Sultan M, Celemts D, Wallace M, Thomas ML, Hundert A, Giacomantonio CA, Helyer L, Gujar SA, Lee PWK, Weaver ICG, Marcato P. Breast cancer subtype dictates DNA methylation and ALDH1A3-mediated expression of tumor suppressor RARRES1. *Oncotarget* **2016**; 7(28):44096-44112.
6. Clements DR, Sterea AM, Kim Y, Helson E, Dean CA, Nunokawa A, **Coyle KM**, Sharif T, Marcato P, Gujar SA, Lee PWK. Newly recruited CD11b<sup>+</sup>, GR-1<sup>+</sup>, Ly6C<sup>high</sup> myeloid cells augment tumor-associated immunosuppression immediately following the therapeutic administration of oncolytic reovirus. *Journal of Immunology* **2015**; 194(9):4397-4412.
7. Marcato P, Dean CA, Liu R-Z, **Coyle KM**, Bydoun M, Wallace M, Clements D, Turner C, Mathenge EG, Gujar SA, Giacomantonio CA, Mackey JR, Godbout R, Lee PWK. ALDH1A3 determines breast cancer growth rate via differential retinoic acid signaling. *Molecular Oncology* **2015**; 9(1):17-31.
8. Rodriguez-Sosa JR, Bondareva A, Tang L, Avelar GF, **Coyle KM**, Modelski M, Alpaugh W, Conley A, Wynne-Edwards K, França LR, Meyers S, Dobrinski I. Phthalate esters affect maturation and function of primate testis tissue ectopically grafted in mice. *Molecular Cellular Endocrinology* **2014**; 398(1-2):89-100. *IF = 4.24*
9. Mathenge EG, Dean CA, Clements D, Vaghar-Kashani A, Photopoulos S, **Coyle KM**, Giacomantonio M, Maleuth B, Nunokawa A, Jordan J, Gujar SA, Marcato P, Lee PWK, Giacomantonio CA. Core needle biopsy of breast cancer induces immunosuppressive changes, elevated circulating tumor cells and increased metastasis. *Neoplasia* **2014**; 16(11):950-960. *IF = 5.40*
10. Thomas ML, **Coyle KM**, Sultan M, Vaghar-Kashani A, Marcato P. Chemoresistance in cancer stem cells and strategies to overcome resistance. *Chemotherapy* **2014**; 3(1):125.
11. **Coyle KM**, Marcato P. Cancer Stem Cells: Clinical Relevance. *Canadian Journal of Pathology* **2013**; 5(4):141-149.
12. **Coyle KM**, Sultan M, Thomas ML, Vaghar-Kashani A, Marcato P. Retinoid signaling in cancer and its promise for therapy. *Journal of Carcinogenesis and Mutagenesis* **2013**; S7:006.
13. Behzad H, Huckriede AL, Haynes L, Gentleman B, **Coyle K**, Wilschut JC, Kollman TR, Reed SG, McElhaney JE. GLA-SE, a synthetic toll-like receptor 4 agonist, enhances T-cell responses to influenza vaccine in older adults. *Journal of Infectious Diseases* **2012**; 205:466-373.

## Book chapters

14. **Coyle KM**, Thomas ML, Sultan M, Marcato P. Chapter 18: Targeting Key Stemness-Related Pathways in Human Cancers. In Babashah S. *Cancer Stem Cells: Emerging Concepts and Future Perspectives in Translational Oncology*. Springer. 2015; 393-443.
15. Thomas ML, **Coyle KM**, Sultan M, Marcato P. Chapter 22: Cancer Stem Cells and Chemoresistance: Strategies to Overcome Therapeutic Resistance. In Babashah S. *Cancer Stem Cells: Emerging Concepts and Future Perspectives in Translational Oncology*. Springer. 2015; 477-518.

## Conference presentations

### Oral platform presentations

1. **Coyle KM**, Dean CA, Vidovic D, Thomas ML, Vaghar-Kashani A, Wong F, Wallace M, Giacomantonio CA, Helyer L,

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Marcato P. The role of the tumor suppressor, RARRES1, in triple-negative breast cancer. Beatrice Hunter Cancer Research Conference; Halifax, NS. **November 2014**.

2. **Coyle KM**, Liu RZ, Dean CA, Pan LZ, Ahn DG, Sultan M, Giacomantonio C, Mackey JR, Lee PW, Godbout R, Marcato P. SCN1A and GABRA3 are effectors in retinoic acid-mediated breast tumor growth and metastasis. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2014**. \*\* Received award for best oral presentation by an MSc student.
3. **Coyle KM**, Liu RZ, Dean CA, Pan LZ, Ahn DG, Sultan M, Giacomantonio C, Mackey JR, Lee PW, Godbout R, Marcato P. Total-genome knockdown screen identifies SCN1A and GABRA3 as effectors in retinoic acid-mediated breast tumor growth and metastasis. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2014**. \*\* Received award for best oral presentation by a graduate student.

#### ***Published abstracts (poster presentations)***

4. **Coyle KM**, Murphy P, Vidovic D, Dean CA, Thomas ML, Clements D, Sultan M, Vaghar-Kashani A, Giacomantonio CA, Helyer L, Weaver I, Gujar S, Lee PWK, Marcato P. ALDH1A3-inducible RARRES1 is a tumor suppressor in triple-negative breast cancer and is methylated in claudin-low breast cancers [abstract]. In: Proceedings of the 107<sup>th</sup> Annual Meeting of the American Association for Cancer Research; Apr 16-20, 2016; New Orleans, LA. Cancer Research **2016**; 76 (14 Supplement):A3661. \*\* Received Canadian Cancer Society travel award to attend this meeting.
5. Thomas ML, De Antenuo R, **Coyle KM**, Cruickshank B, Giacomantonio M, Duncan R, Giacomantonio CA, Marcato P. Citral reduces breast tumor growth by inhibiting cancer stem cell marker ALDH1A3 [abstract]. In: Proceedings of the 107<sup>th</sup> Annual Meeting of the American Association for Cancer Research; Apr 16-20, 2016; New Orleans, LA. Cancer Research **2016**; 76 (14 Supplement):A2506. *\*\*presenting author*
6. **Coyle KM**, Vidovic D, Dean CA, Thomas ML, Sultan M, Clements D, Vaghar-Kashani A, Wallace M, Weaver I, Giacomantonio CA, Helyer L, Marcato P. Expression of the tumor suppressor gene RARRES1 in the differentiation hierarchy of breast cancer is regulated by DNA methylation [abstract]. In: Proceedings of the AACR Special Conference on Advances in Breast Cancer Research; Oct 17-20, 2015; Bellevue, WA. Mol Cancer Res **2016**; 14 (2 Supplement): Abstract nr A18. \*\* Received AACR Scholar-in-Training Award to attend this meeting.
7. Thomas ML, **Coyle KM**, Cruickshank B, Giacomantonio M, Wallace M, Giacomantonio C, Marcato P. Citral redcues ALDH1A3 activity in breast cancer: Potential applications in targeting breast cancer stem cells [abstract]. In: Proceedings of the AACR Special Conference on Advances in Breast Cancer Research; Oct 17-20, 2015; Bellevue, WA. Mol Cancer Res **2016**; 14 (2 Supplement): Abstract nr B23.
8. Sultan M, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Marcato P. Identification of genes that predict response to paclitaxel in breast cancer using an in vivo genome-wide knockdown screen [abstract]. In: Proceedings of the AACR Special Conference on Advances in Breast Cancer Research; Oct 17-20, 2015; Bellevue, WA. Mol Cancer Res **2016**; 14 (2 Supplement): Abstract nr A18.
9. **Coyle KM**, Dean CA, Jo DB, Thomas M, Sultan M, Marcato P. Retinoic acid sensitizes triple-negative breast cancer cells to tamoxifen treatment [abstract]. In: Proceedings of the 37<sup>th</sup> Annual CRTC-AACR San Antonio Breas Cancer Symposium; Dec 9-13, 2014; San Antonio, TX. Cancer Research **2015**; 75 (9 Supplement): Abstract nr P1-12-14.
10. Thomas M, **Coyle KM**, Sultan M, Pan LZ, Ahn DG, Lee P, Giacomantonio C, Marcato P. Identifying hypermethylated tumor suppressor genes in breast cancer with an in vivo total genome knockdown screen [abstract]. In: Proceedings of the 37<sup>th</sup> Annual CRTC-AACR San Antonio Breas Cancer Symposium; Dec 9-13, 2014; San Antonio, TX. Cancer Research **2015**; 75 (9 Supplement): Abstract nr P1-06-02.
11. **Coyle KM**, Vaghar-Kashani A, Wong F, Dean C, Giacomantonio C, Marcato P. RARRES1 is a tumor suppressor in triple-negative breast cancer cell lines [abstract]. In: Proceedings of the 105<sup>th</sup> Annual Meeting of the American Association for Cancer Research; Apr 5-9, 2014; San Diego, CA. Cancer Research **2014**; 74 (19 Supplement):A578. \*\* Received BHCRI travel award to attend this meeting.
12. **Coyle KM**, Dean C, Pan LZ, Ahn DG, Sultan M, Salsman J, Dellaire G, Giacomantonio C, Lee PW, Marcato P. Identifying genes involved in retinoic-acid-mediated breast tumor progression by total-genome knockdown screen [abstract]. In: Proceedings of the 105<sup>th</sup> Annual Meeting of the American Association for Cancer Research; Apr 5-9, 2014; San Diego, CA. Cancer Research **2014**; 74 (19 Supplement):A3404.

13. Mathenge EG, Dean C, Clements D, Vaghar-Kashani A, Photopoulos S, **\*\*Coyle KM**, Malueth BA, Giacomantonio M, Nunokawa A, Jordan J, Gujar S, Marcato P, Lee P, Giacomantonio C. Biopsy induced metastasis: Role of SOX4/TGF- $\beta$  driven EMT and immunosuppressive microenvironment [abstract]. In: Proceedings of the 105<sup>th</sup> Annual Meeting of the American Association for Cancer Research; Apr 5-9, 2014; San Diego, CA. *Cancer Research* **2014**; 74 (19 Supplement):A1665. *\*\*presenting author*
14. Robbins H, Dores C, **Coyle K**, Dobrinski I. Germ cells and testicular somatic cells have different sensitivity to cryopreservation [abstract]. In: Proceedings of the Annual Conference of the International Embryo Transfer Society; Jan 19-22; Hannover, Germany. *Reproduction, Fertility and Development* **2013**; 25(1):184.

### **Poster presentations**

15. **Coyle KM**, Dean CA, Vidovic D, Weaver ICG, Giacomantonio CA, Helyer L, Marcato P. Retinoic acid: an effective therapy for basal-like breast cancer. Abstract submitted, AACR Annual Meeting; Washington, DC. **April 2017**.
16. Fernando W, Maclean E, **Coyle KM**, Marcato P, Hoskin DW, Rupasinghe HPV. Phloridzin docosahexaenoate (PZ-DHA) inhibits breast cancer cell invasion and angiogenesis. Abstract submitted, AACR Annual Meeting; Washington, DC. **April 2017**.
17. **Coyle KM**, Dean CA, Vidovic D, Weaver ICG, Giacomantonio CA, Helyer L, Marcato P. Triple-negative breast cancer subtypes and DNA methylation profiles predict response to retinoic acid treatment. BHCRI/TFRI Cancer Research Conference; Halifax, NS. **November 2016**. \*\* Received first-place award for this poster presentation.
18. Fernando W, **Coyle KM**, Marcato P, Hoskin DW, Rupasinghe HPV. A potential anticancer candidate, PZ-DHA, suppresses breast cancer cell proliferation and angiogenesis *in vitro* and tumor metastasis *in vivo*. BHCRI Cancer Research Conference; Halifax, NS. **November 2016**.
19. Vidovic D, Cruickshank BM, **Coyle KM**, Huynh TT, Thomas ML, Sultan M, Duncan R, Marcato P. A novel retinoic acid-regulated lncRNA controls breast cancer cell growth. BHCRI/TFRI Cancer Research Conference; Halifax, NS. **November 2016**.
20. Sultan M, Paine AS, **Coyle KM**, Thomas ML, Vidovic D, Huynh TT, Gujar S, Marcato P. Downregulation of antigen presentation genes in breast cancer stem cells aids in their evasion of immune destruction. BHCRI/TFRI Cancer Research Conference; Halifax, NS. **November 2016**.
21. Thomas ML, Cruickshank B, Walker C, **Coyle KM**, Sultan M, Giacomantonio CA, Marcato P. Novel hypermethylated tumor suppressor genes as indicators of decitabine sensitivity in breast cancer. BHCRI/TFRI Cancer Research Conference; Halifax, NS. **November 2016**.
22. Sultan M, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Marcato P. In vivo RNAi screen identifies genetic biomarkers involved in breast cancer response to paclitaxel. Terry Fox Research Institute Annual Scientific Meeting; Vancouver, BC. **May 2016**.
23. Sultan M, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Marcato P. In vivo RNAi screen identifies genetic biomarkers involved in breast cancer response to paclitaxel. PREP Research Day; Halifax, NS. **May 2016**.
24. Thomas ML, De Antenuo R, **Coyle KM**, Cruickshank B, Giacomantonio M, Duncan R, Giacomantonio CA, Marcato P. Citral reduces breast tumor growth by inhibiting the cancer stem cell marker ALDH1A3. PREP Research Day; Halifax, NS. **May 2016**.
25. **Coyle KM**, Giacomantonio C, Helyer L, Marcato P. Triple-negative breast cancer subtypes and DNA methylation profiles predict response to retinoic acid treatment. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2016**. \*\* Received judge's choice award for this poster presentation.
26. Vidovic D, **Coyle KM**, Huynh TT, Marcato P. Examining the role of retinoic acid-regulated lncRNA in breast cancer. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2016**.
27. Thomas ML, De Antenuo R, **Coyle KM**, Cruickshank B, Giacomantonio M, Duncan R, Giacomantonio CA, Marcato P. Citral reduces breast tumor growth by inhibiting the cancer stem cell marker ALDH1A3. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2016**.
28. Sultan M, Huynh TT, Lamoreaux E, Thomas ML, **Coyle KM**, Giacomantonio CA, Langille MG, Marcato P. An in vivo genome-wide RNAi screen identifies paclitaxel response mediators in breast cancer. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2016**.

29. Anthes LE, Salsman J, Bentley V, Murphy P, **Coyle KM**, Lee P, Fawcett J, Marcato P, Dellaire G. From diabetes to cancer: Characterizing the mechanisms of metformin action in breast cancers. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2016**.
30. Vidovic D, **Coyle KM**, Huynh TT, Marcato P. Investigating the potential role of long non-coding RNA in breast cancer. Science Atlantic Biology Conference 2016; Halifax, NS. **March 2016**.
31. **Coyle KM**, Murphy P, Vidovic D, Dean CA, Thomas ML, Clements D, Sultan M, Vaghar-Kashani A, Giacomantonio CA, Helyer L, Weaver I, Gujar S, Lee PWK, Marcato P. Characterizing expression and function of the tumor suppressor gene RARRES1 in the differentiation hierarchy of breast cancer. Tenth AACR-JCA Joint Conference on Breakthroughs in Cancer Research: From Biology to Therapeutics, Maui, HI. **February 2016**. \*\* Received CIHR Institute for Cancer Research and BHCRI travel awards to attend this meeting.
32. Walker CR, Thomas ML, **Coyle KM**, Marcato P. Using decitabine to increase expression of hypermethylated tumor suppressor genes in breast cancer. Department of Biology Cameron Conference; Halifax, NS. **February 2016**.
33. Sultan M, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Marcato P. In vivo RNAi screen identifies genetic biomarkers involved in breast cancer response to paclitaxel. 5<sup>th</sup> Munich Biomarker Conference, Munich, Germany. **December 2015**.
34. **Coyle KM**, Dean CA, Vidovic D, Thomas ML, Clements D, Vaghar-Kashani A, Wallace M, Giacomantonio CA, Helyer L, Marcato P. Expression and functional profiling of a putative tumor suppressor gene, RARRES1, in breast cancer. Canadian Cancer Research Conference; Montreal, PQ. **November 2015**.
35. Thomas ML, **Coyle KM**, Wallace M, Giacomantonio CA, Marcato P. Citral reduces ALDH1A3 activity in breast cancer: potential applications in targeting breast cancer stem cells. Canadian Cancer Research Conference; Montreal, PQ. **November 2015**.
36. Sultan M, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Marcato P. Identification of several potential mediators of paclitaxel resistance in breast cancer using a total genome knockdown screen. Canadian Cancer Research Conference; Montreal, PQ. **November 2015**.
37. **Coyle KM**, Dean CA, Vidovic D, Thomas ML, Clements D, Vaghar-Kashani A, Wong F, Wallace M, Giacomantonio CA, Helyer L, Marcato P. Unravelling the regulation of the RARRES1 tumor suppressor in triple-negative breast cancer. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2015**.
38. \*Holloway R, **Coyle KM**, Miller V, Bydoun M, Marcato P, Waisman D. Mechanisms of retinoic acid-induced degradation of the plasminogen receptor S100A10 in cancer cells. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2015**. \*presenting authors
39. Thomas ML, **Coyle KM**, Wallace M, Giacomantonio CA, Marcato P. Using potential ALDH1A3 inhibitors as a breast cancer therapy: targeting breast cancer stem cells. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2015**.
40. Sultan M, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Marcato P. Identification of DIS3L, BCL6, APAF1, TOR1A and DNAJA4 as potential mediators of paclitaxel resistance in triple-negative breast cancer. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2015**.
41. **Coyle KM**, Dean CA, Vidovic D, Thomas ML, Vaghar-Kashani A, Wong F, Wallace M, Giacomantonio CA, Helyer L, Marcato P. Finding the molecular switch: RARRES1 in triple-negative breast cancer. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2015**. \*\* Received award for best poster presentation by a graduate student.
42. **Coyle KM**, Clattenburg S, Liu R-Z, Dean CA, Sultan M, Giacomantonio CA, Helyer L, Mackey JR, Godbout R, Marcato P. Retinoic acid signaling has opposing effects in triple-negative breast cancers of differing molecular subtypes. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2015**.
43. Thomas ML, **Coyle KM**, Wallace M, Giacomantonio CA, Marcato P. Using potential ALDH1A3 inhibitors as a breast cancer therapy: targeting breast cancer stem cells. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2015**.
44. Sultan M, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Marcato P. Identification of DIS3L, BCL6, APAF1, TOR1A and DNAJA4 as potential mediators of paclitaxel resistance in triple-negative breast cancer. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2015**.

45. **Coyle KM**, Clattenburg S, Liu R-Z, Dean CA, Sultan M, Giacomantonio CA, Helyer L, Mackey JR, Godbout R, Marcato P. In vivo genomic screening identifies novel effectors of retinoic acid therapy in triple-negative breast cancer. Terry Fox Research Institute Annual Scientific Meeting. **May 2015**. \*\* Received a TFRI travel award to attend this meeting.
46. Thomas ML, **Coyle KM**, Wallace M, Giacomantonio M, Giacomantonio CA, Marcato P. Using ALDH1A3 inhibitors to target breast cancer stem cells. Terry Fox Research Institute Annual Scientific Meeting. **May 2015**.
47. Sultan M, Thomas ML, **Coyle KM**, Huynh TT, Giacomantonio CA, Marcato P. Identification of genes involved in breast cancer response to paclitaxel using a total genome knockdown screen. Terry Fox Research Institute Annual Scientific Meeting. **May 2015**.
48. **Coyle KM**, Clattenburg S, Giacomantonio CA, Marcato P. Genes relevant for the success of retinoic-acid-based treatment in triple-negative breast cancer. Beatrice Hunter Cancer Research Conference; Halifax, NS. **November 2014**.
49. Thomas ML, **Coyle KM**, Wallace M, Giacomantonio MA, Marcato P, Giacomantonio CA. Using ALDH1A3 inhibitors to target breast cancer stem cells. Beatrice Hunter Cancer Research Conference; Halifax, NS. **November 2014**.
50. Salsman J, Bentley V, **Coyle KM**, Lewis S, Marcato P, Jones R, Dellaire G. Characterization of the mechanisms of action and resistance to metformin in breast cancer. Beatrice Hunter Cancer Research Conference; Halifax, NS. **November 2014**.
51. Sultan M, Thomas ML, **Coyle KM**, Giacomantonio MA, Giacomantonio CA, Marcato P. An *in vivo* total genome knockdown screen identifies genes involved in breast cancer sensitivity and resistance to paclitaxel. Beatrice Hunter Cancer Research Conference; Halifax, NS. **November 2014**.
52. Clements D, Gujar S, Lammie A, Helson E, Nunokawa A, Sterea A, **Coyle KM**, Marcato P, Lee PW. Augmentation of tumor-associated immunosuppression by oncolytic reovirus. Beatrice Hunter Cancer Research Conference; Halifax, NS. **November 2014**.
53. Thomas ML, **Coyle KM**, Sultan M, Pan LZ, Ahn DG, Lee PW, Giacomantonio CA, Marcato P. Identifying key hypermethylated tumor suppressor genes in breast cancer using a total-genome knockdown screen. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2014**.
54. **Coyle KM**, Dean C, Pan LZ, Ahn DG, Sultan M, Giacomantonio C, Lee PW, Marcato P. Exploring retinoic acid-mediated breast tumor progression with an *in vivo* total-genome knockdown screen. Terry Fox Research Institute Annual Scientific Meeting; Montreal, PQ. **May 2014**. \*\* Received a TFRI travel award to attend this meeting.
55. Clements D, Gujar S, Lammie A, Helson E, Nunokawa A, Sterea A, **Coyle KM**, Marcato P, Lee PW. During the early phase of oncotherapy, reovirus-driven CD11B<sup>+</sup>, GR-1<sup>+</sup>, Ly6C<sup>high</sup> MDSCs augment tumour-associated immunosuppression. Terry Fox Research Institute Annual Scientific Meeting; Montreal, PQ. **May 2014**.
56. **Coyle KM**, Vaghar-Kashani A, Dean CA, Thomas ML, Wong F, Wallace M, Giacomantonio CA, Marcato P. RARRES1 is a tumor suppressor in triple-negative breast cancer. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2014**.
57. Thomas ML, **Coyle KM**, Sultan M, Pan LZ, Ahn DG, Lee PW, Giacomantonio CA, Marcato P. A total-genome knockdown screen identifies methylated tumor suppressor genes in breast cancer. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2014**.
58. Sultan M, Thomas ML, **Coyle KM**, Pan LZ, Ahn DG, Lee PW, Giacomantonio CA, Marcato P. Identification of genes involved in breast cancer sensitivity and resistance to paclitaxel using a total-genome knockdown screen. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2014**.
59. Clements D, Gujar S, Lammie A, Helson E, Nunokawa A, Sterea A, **Coyle KM**, Marcato P, Lee PW. Myeloid-derived suppressor cells dictate the efficacy of reovirus anti-cancer therapy. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2014**.
60. **Coyle KM**, Dean C, Pan LZ, Ahn DG, Sultan M, Salsman J, Dellaire G, Lee PW, Marcato P. Total-genome-knockdown screen identifies genes involved in retinoic-acid-mediated breast tumor progression. Canadian Cancer Research Conference; Toronto, ON. **November 2013**.
61. Marcato P, Dean C, Liu R-Z, Bydoun M, **Coyle KM**, Wallace M, Clements D, Turner C, Mathenge E, Gujar S,

Giacomantonio C, Mackey J, Godbout R, Lee P. Cancer stem cell marker ALDH1A3 determines breast cancer tumor growth and metastasis via differential retinoic acid signaling. Platform presentation, Canadian Cancer Research Conference; Toronto, ON. **November 2013**.

62. **Coyle KM**, Dean C, Pan LZ, Ahn DG, Salsman J, Dellaire G, Lee PW, Marcato P. Using a total-genome knockdown to explore retinoic-acid based signaling in breast cancer progression. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2013**.
63. **Coyle KM**, Dean C, Pan LZ, Ahn DG, Salsman J, Dellaire G, Lee PW, Marcato P. Identification of retinoic-acid-inducible genes via total genome knockdown. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2013**.
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