

Krysta Mila Coyle

Simon Fraser University
Molecular Biology & Biochemistry
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Education

- 2018-20 **Certificate in Non-profit Management**; Mount Royal University; Calgary, AB
- 2013-18 **PhD**, Pathology; Faculty of Medicine, Dalhousie University; Halifax, NS
Supervisor: Dr Paola Marcato
Profiling retinoid signaling in triple-negative breast cancer: Towards precision applications.
- 2006-11 **BSc, Co-op Program**, Microbiology & Immunology; Faculty of Science, University of British Columbia; Vancouver, BC

Academic employment

- 2018-present **Postdoctoral fellow**, Department of Molecular Biology and Biochemistry, Faculty of Science, Simon Fraser University
Supervisor: Dr Ryan Morin
- 2018 **Postdoctoral fellow**, Department of Pathology, Faculty of Medicine, Dalhousie University
Supervisor: Dr Paola Marcato
- 2012 **Research assistant**, Department of Comparative Biology & Experimental Medicine, Faculty of Veterinary Medicine, University of Calgary
- 2010-11 **Research assistant**, Division of Geriatric Medicine, Faculty of Medicine, University of British Columbia
- 2010 **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

Consulting and contract employment

- 2020-present **Transcriptomics design, analysis, interpretation & communication**
LM BioStat Consulting Inc. for Allakos Inc.
- 2020-21 **Technical editing, graphic & document design**
Sahasrabudhe & Associates for IE Canada
- 2014 **Technical literature analysis for systematic review**, Canadian Blood Services

Research funding

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|---------|--|-------|----|--------|
| 2021-22 | American Society of Hematology Research Restart Award: Preclinical evidence for HNRNPH1 isoform modulation PI: KM Coyle | (USD) | \$ | 50,000 |
| 2021-22 | Lymphoma Canada Characterizing alternative splicing in mantle cell lymphoma PI: KM Coyle | | \$ | 25,000 |

Selected awards and honors

- 2021 **Athena Pathways scholarship** for women in AI
- 2019-22 **CIHR Postdoctoral Fellowship**
- 2017 **Sovereign's Medal for Volunteers**, The Governor General of Canada

- 2016-17 **Persons Case Scholarship**, Government of Alberta
- 2016-18 **DeWolfe Graduate Studentship**, Dalhousie Medical Research Foundation
- 2016-17 **Sir James Lougheed Award of Distinction**, Government of Alberta
- 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 (honorary)
- 2015-18 **Izaak Walton Killam predoctoral scholarship**, Dalhousie University (honorary)
- 2015-16 **President's award**, Dalhousie University
- 2015 **AACR Scholar-in-Training Award**, American Association for Cancer Research
- 2014-15 **Graduate fellowship award**, Beatrice Hunter Cancer Research Institute
- 2013-17 **Various travel awards**, CIHR, Terry Fox Research Institute, Beatrice Hunter Cancer Research Institute

Academic service

- 2021, 2022 *Postdoctoral fellow reviewer*, CIHR Doctoral Research Awards - A
- 2020, 2021 *Reviewer*, National Science Centre Poland
- 2020-present *Committee member*, *Research Oversight Committee*; GenomeBC.
Towards clinical implementation of pharmacogenomics to improve the treatment of people with depression in BC.
- 2019-2021 *Board member & co-chair*, *trainee committee*, Canadian Society for Molecular Biosciences
- 2018-present *Ad hoc reviewer*, Scientific Reports, Blood Advances, J Nutr Biochem; J Lipid Res; Cancers; Biomolecules; J Cancer ImmunoTherapy; Genes
- 2018-19 *Trainee committee member*, Canadian Society for Molecular Biosciences
- 2017-18 *Scientific officer*, Nova Scotia Health Research Foundation
Health Policy, Health Services, and Health Outcomes Establishment or Discovery Grants (2018), Knowledge Sharing Support Awards (2017, 2018), and Catalyst Awards (2017).
- 2017 *Graduate student representative*, Training Committee, Beatrice Hunter Cancer Research Institute
- 2015-18 *Social media coordinator*, Communications Committee, Beatrice Hunter Cancer Research Institute
- 2014-16 *Treasurer*, Pathology Organization of Graduate Students, Dalhousie University
- 2014-15 *Student representative*, Biosafety Training Committee, Dalhousie University

Scientific outreach

- 2019-20 *Gairdner Foundation*, *Canadian Society for Molecular Biosciences*, *Michael Smith Laboratories at UBC*
Contracted to prepare resources communicating the research of Gairdner award winners to high school students and the general public.
2019: [DNA Replication: Not Your Office Photocopier](#)
2020: [Of Patterns and Cancer in Mice and Flies](#)
- 2018 *Science Slam Vancouver*
Presented to an adult audience on the intersection of identity and precision medicine.
- 2018 *Soapbox Science speaker*
Interacted with community members to discuss cancer, genomics, and precision medicine.
- 2013-18 *Beatrice Hunter Cancer Research Institute*
Regularly presented to donors to communicate the value of scientific research.
- 2013-present *Girl Guides of Canada*
Design, prepare, and facilitate interactive meetings and workshops for girls aged 5-17 on a variety of scientific topics. Some examples include:
Virtual workshops 2020-21: 200+ girls from across BC virtually explored topics including microbiology, neuroscience, forensics, and the scientific process.

International Women's Day 2020: 250+ girls explored genetics with a custom cat genetics activity.
Regularly invited to career nights held by local groups to discuss working as a scientist.
2011-18 *Calgary Youth Science Fair*, member of evaluations and bylaw, procedures, policy review committees

Community service

2020-21 *Women's Advisory Committee, City of Vancouver*, committee member
Advised the municipal government on issues affecting women and girls; proposed anti-oppression training for all incoming city councilors.

2017-20 *Girl Guides of Canada*, Director of the Board
Elected steward of a national organization serving 90 000+ members; accountable for its viability. Championed a new mission and vision for the 21st century; refocused volunteers on girl-centered programming; established and evaluated multi-year strategic plans.
Invited to the 62nd Session of the United Nations Commission on the Status of Women as an NGO advisor to the Canadian government delegation.

2017-18 *Advisory Council, Nova Scotia Status of Women*, council member
Advised the provincial government on issues affecting women and girls; consulted on sexual violence strategies and equity on provincial boards and councils, observer to Community Hearing for the National Inquiry into Missing and Murdered Indigenous Women and Girls. Represented the Status of Women office and council at local and provincial community events.

2014-18 *Special Olympics Nova Scotia*, swimming clerk-of-course and timing recorder

2013-15 *Terry Fox Run (Halifax)*, community co-chair
Honored by [resolution no. 424](#) in the Nova Scotia Legislature (October 2014).
Raised over \$30,000 annually for the Terry Fox Foundation.

2007-present *Girl Guides of Canada*, various positions
Represented national and global Girl Guide organizations at Women Deliver (2019) and the 60th Session of the United Nations Commission on the Status of Women (2016).
Led the development of a leadership development program for young women, aged 18-30.
Managed human resources, finances, risk management, and recognition for 100+ regional volunteers.
As a Unit Guider, facilitated engaging and exciting opportunities for girls of all ages to test their limits, explore their interests, and create a better world.

Media appearances

2020 *Girls are losing out on future job opportunities by closing doors to STEM early.*
March 3 **CTV Winnipeg**, Maralee Caruso
February 25 **CBC Radio: On the Coast**, Jason D'Souza

2019 *Girls with strong in-person connections have a greater sense of belonging.*
October 11 **Global Vancouver Morning News**, Sonia Sunger
The gendered wage gap affects girls in summer and casual jobs.
May 1 **CBC Radio Calgary**, Meegan Reed
CFax Radio Victoria, Mark Brennae

2018 *Girls experience sexism at a young age and this influences their perceptions of their future.*
October 25 **CBC Radio: Trail's End**, Lawrence Nayally
CBC Radio: On the Coast, Gloria Macarenko
CBC Radio: All Points West, Robyn Burns
CBC Radio: Homestretch, Doug Dirks
CBC Radio: Radio West, Sarah Penton
CBC Radio: Breakaway, Saroja Coelho
CBC Radio: Radio Active, Adrienne Pan

Teaching activities

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| 2021 | Guest lecture | Simon Fraser University, 4 th year course in gene expression Lecture topic: Splicing as a mechanism of gene regulation |
| 2021 | Guest lecture | Quest University, 3 rd year course in cancer biology Lecture topic: Alternative splicing in cancer |
| 2020 | Guest lecture | Simon Fraser University, 4 th year course in cancer genomics Lecture topic: Alternative splicing in cancer |
| 2019 | Guest lecture | Simon Fraser University, 4 th year course in cancer genomics Lecture topic: Tumor heterogeneity |

Mentoring activities

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| 2020-21 | Jack (Tiana) Hillman | Molecular Biology & Biochemistry undergraduate research student 2020-21 |
| 2019-21 | Quratulain Qureshi | Molecular Biology & Biochemistry honours student 2019-20 (co-supervisor), NSERC USRA student 2020 (co-supervisor), research assistant 2021 (co-supervisor), Molecular Biology & Biochemistry MSc student 2021-present (project supervisor) |
| 2016-17 | Selena Maxwell | Microbiology & Immunology honours student 2016-17 (co-supervisor) |
| 2015-16 | Rebeccah Raphael | junior high science fair student 2015-16 (lab supervisor) |
| 2014-16 | Dejan Vidovic | undergraduate summer student 2014 & 2015 (lab supervisor), experiential learning student 2015 (lab supervisor), Microbiology & Immunology honours student 2015-16 (co-supervisor) |
| 2014-15 | Shelby Clattenburg | undergraduate summer student 2014 (lab supervisor), experiential learning student 2014 (lab supervisor), Microbiology & Immunology honours student 2014-15 (co-supervisor) |
| 2014 | Mike Giacomantonio | undergraduate summer student 2014 (lab supervisor) |
| 2013-14 | Diana Jo | Microbiology & Immunology honours student 2013-14 (co-supervisor) |
| 2013 | Mohammad Sultan | undergraduate summer student 2013 (lab supervisor) |

Professional development

Equity, diversity, and inclusion

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| 2021 | IDEAS Summit, <i>Actua Canada</i> |
| 2020 | Alliance Building in the Academy, <i>Simon Fraser University</i> |
| 2020 | Unconscious Bias in Peer Review, <i>CIHR</i> |
| 2020 | Indigenous Canada, <i>University of Alberta via Coursera</i> |
| 2019 | Identity & Bias Awareness, <i>Girl Guides of Canada</i> |
| 2018 | Bias Awareness, <i>Annemarie Shrouder</i> |
| 2017 | Gender-based analysis (GBA+), <i>Status of Women Canada</i> |
| 2017 | Breaking Down the Binary, <i>Jenna Tenn-Yuk</i> |

Teaching skills development

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| 2020 | Universal Design for Learning: Multiple Modes of Engagement and Assessment in the Remote Learning Environment, <i>Simon Fraser University</i> |
| 2018 | Effective Teaching: Beyond "Diversity" and "Inclusion", <i>Simon Fraser University</i> |
| 2014 | Instructional methods in health professions education, <i>University of Michigan via Coursera</i> |
| 2014 | Engaging and effective lecturing, <i>Dalhousie University</i> |
| 2014 | Exploring your own creativity to improve students' engagement in the laboratory, <i>Dalhousie University</i> |
| 2014 | Teaching in the sciences: facilitating and managing labs and tutorials, <i>Dalhousie University</i> |

Publications

Manuscripts submitted / under review

1. **Coyle KM***, **Hillman T***, Cheung M, Grande BM, Bushell KR, Arthur SE, Alcaide M, Thomas N, Dreval K, Shoker J, Wong S, Campbell K, Morin RD[†]. Shared and distinct genetic features in human and canine B-cell lymphomas. *Revision requested*. ***These authors contributed equally**. **†Co-corresponding authors**. Available at: <https://www.biorxiv.org/content/10.1101/2021.10.14.464277v1.abstract>
2. Nohara L, Ellis S, Munro L, Saranchova I, Pfeifer C, **Coyle KM**, Dreier C, O'Keefe-Morrice J, Shim D, Ahn P, Eyford D, de Voogd N, Williams D, Cheng P, Anderson R, Jefferies, WA. A curcuminoid contained in traditional medicines and dietary supplements overcomes immune escape of metastatic cancers. *Submitted*.

Peer-reviewed (mentored students)

3. Lacroix E, Yoo B, Vlachos S, **Coyle KM**, Chandhok S, Morin RD, Harden N, Audas TE. Evolutionary conservation of systemic and reversible amyloid aggregation. *Journal of Cell Science* **2021**; 134(22): jcs258907.
4. Alpaugh WF, Voigt AL, Dardari R, Su L, Al-khatib I, Shin W, Goldsmith TM, **Coyle KM**, Tang LA, Shutt T, Klein C, Biernaskie J, Dobrinski I. Loss of ubiquitin carboxy-terminal hydrolase L1 impairs long-term differentiation competence and metabolic regulation in murine spermatogonial stem cells. *Cells* **2021**; 10(9): 2265.
5. Sultan M, Nearing J, Brown J, Huynh T, Cruickshank B, Lamoureux E, Vidovic D, Dahn M, Fernando W, **Coyle KM**, Giacomantonio C, Langille M, Marcato P. An in vivo genome-wide shRNA screen identifies BCL6 as a targetable paclitaxel resistance mediator in breast cancer. *Molecular Oncology* **2021**; 15(8): 2046-2064.
6. Gebremeskel S, Schanin J, **Coyle KM**, Butuci M, Luu T, Brock EC, Xu A, Wong A, Leung J, Korver W, Morin RD, Schleimer RP, Bochner BS, Youngblood BA. Mast cell and eosinophil activation are associated with COVID-19 and TLR-mediated viral inflammation: implications for an anti-Siglec-8 antibody. *Frontiers in Immunology* **2021**;12:650331.
7. Dahn ML, Dean CA, **Jo DB**, **Coyle KM**, Marcato P. Human-specific GAPDH RT-qPCR is an accurate and sensitive method of xenograft metastasis quantification. *Molecular Therapy - Methods & Clinical Development* **2021**; 20: 398-408.
8. Pararajalingam P*, **Coyle KM***, Arthur SE, Thomas N, Alcaide M, Meissner B, Boyle M, **Qureshi Q**, Grande BM, Rushton C, Slack G, Mungall AJ, Tam CS, Agarwal R, Dawson SJ, Lenz G, Balasubramanian S, Gascoyne RD, Steidl C, Connors J, Villa D, Audas TE, Marra MA, Johnson N, Scott DW, Morin RD. Coding and non-coding drivers of mantle cell lymphoma identified through exome and genome sequencing. *Blood* **2020**; 136(5): 572-584. ***These authors contributed equally**. *Featured in commentary*: Weigert O. The different flavors and splices of MCL. *Blood* 2020; 136(5): 526-527. *Featured in news article for Oncology Times*: Froelich W. Examining Gene Mutations in Mantle Cell Lymphoma Patients. *Oncology Times* 2020; 42(19): 34.
9. Rushton CK, Arthur SE, Alcaide M, Cheung M, Jiang A, **Coyle KM**, Thomas N, Hilton L, Michaud N, Daigle S, Davidson J, Bushell K, Yu S, Jain M, Shepherd L, Kuruvilla J, Crump M, Mann K, Assouline S, Cleary KLS, Connors JM, Craig MS, Scott DW, Johnson NA, Morin RD. Genetic and evolutionary patterns of treatment resistance in relapsed B-cell lymphoma. *Blood Advances* **2020**; 4(13):2886-2898.
10. Dahn ML, Cruickshank BM, Jackson A, Dean C, Holloway R, Hall S, **Coyle KM**, Waisman DM, Goralski K, Giacomantonio CA, Marcato P. Decitabine response in breast cancer requires efficient drug processing, induction of genes mediating cell cycle arrest and apoptosis, and is not limited by multidrug resistance. *Molecular Cancer Therapeutics* **2020**; 19(5):1110-1122.
11. Vidovic D, Huynh TT, Konda P, Dean CA, Cruickshank B, Sultan M, **Coyle KM**, Gujar SA, Marcato P. ALDH1A3-regulated long non-coding RNA NRAD1 is a potential novel target for triple-negative breast tumors and cancer stem cells. *Cell Death and Differentiation* **2020**; 27(1):363-378.
12. Fernando W, **Coyle KM**, Marcato P, Rupasinghe HPV, Hoskin D. Phloridzin docosahexaenoate, a novel fatty acid ester of a plant polyphenol, inhibits mammary carcinoma cell metastasis. *Cancer Letters* **2019**; 465:68-81
13. **Coyle KM**, Dean C, Thomas ML, **Vidovic D**, Giacomantonio C, Helyer L, Marcato P. DNA methylation is a predictive biomarker for all-trans retinoic acid therapy in triple-negative breast cancer. *Cancers* **2018**; 10(11):387.
14. Sultan M, Paine AS, Vidovic D, Huynh TT, **Coyle KM**, Thomas ML, Dean CA, Clements D, Kim Y, Lee K, Gujar SA, Weaver IC, Marcato P. Epigenetic silencing of TAP genes in Aldefluor+ breast cancer stem cells contributes

to their enhanced immune evasion. *Stem Cells*. **2018**; 36(5):641-654.

15. **Coyle KM**, Maxwell S, Thomas ML, Marcato P. Profiling of the transcriptional response to all-trans retinoic acid in breast cancer cells reveals RARE-independent mechanisms of gene expression. *Scientific Reports*. **2017**; 7(1):16684.
16. **Coyle KM**, Boudreau JE, Marcato P. Genetic mutations and epigenetic modifications: Driving cancer and informing precision medicine. *BioMed Research International*. **2017**; 2017: 9620870.
17. 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. *Carcinogenesis*. **2017**; 38(2):107-118.
18. 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**; 10(9):1485-1496.
19. **Coyle KM**, Murphy JP, Vidovic D, Vaghar-Kashani A, Dean CA, Sultan M, Clements 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.
20. 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⁺, GR-1⁺, Ly6C^{high} myeloid cells augment tumor-associated immunosuppression immediately following the therapeutic administration of oncolytic reovirus. *Journal of Immunology* **2015**; 194(9):4397-4412.
21. 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.
22. 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.
23. 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.
24. 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.
25. **Coyle KM**, Marcato P. Cancer Stem Cells: Clinical Relevance. *Canadian Journal of Pathology* **2013**; 5(4):141-149.
26. **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.
27. 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

28. Fernando W, **Coyle KM**, Marcato P. Breast cancer xenograft murine models. In Christian SL. *Cancer Cell Biology: Methods and Protocols*. Springer. *Accepted*.
29. **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.
30. 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.

Invited presentations

1. **Coyle KM.** Alternative splicing as a mechanism of gene regulation in B cell lymphomas. Departments of Anatomy & Cell Biology and Biochemistry, Western University. **September 2021.**
2. **Coyle KM.** Mutations in splicing factors drive aberrant gene expression in non-Hodgkin lymphomas. Splicing 2021. **July 2021.**
3. **Coyle KM.** Alternative splicing as a mechanism of gene regulation in B cell lymphomas. Saskatchewan Cancer Agency. **May 2021.**
4. **Coyle KM.** Scientific writing for lay audiences. Beatrice Hunter Cancer Research Workshop. **May 2021.**
5. **Coyle KM.** Alternative splicing as a mechanism of gene regulation in B cell lymphomas. Department of Biochemistry, Memorial University of Newfoundland. **March 2021.**

Conference presentations

Oral presentations

1. **Coyle KM,** Qureshi Q, Pararajalingam P, Thomas N, Audas TE, Morin RD. Perturbations in HNRNPH1 splicing and abundance affect global splicing and proliferation in mantle cell lymphoma. ASH Annual Meeting; *online due to COVID-19.* **December 2020.**
2. **Coyle KM,** Qureshi Q, Pararajalingam P, Thomas N, Audas TE, Morin RD. Regulation of HNRNPH1 via alternative splicing is disrupted by non-coding mutations in mantle cell lymphoma. ASH Advances in Malignant Lymphoma; *online due to COVID-19.* **August 2020.**
3. **Coyle KM,** Dean CA, Vidovic D, Weaver I, Giacomantonio CA, Helyer L, Marcato P. Precision use of retinoic acid for treatment of triple-negative breast cancer. PREP Research Day; Halifax, NS. **May 2017.**
4. **Coyle KM,** Dean CA, Vidovic D, Thomas ML, Vaghar-Kashani A, Wong F, Wallace M, Giacomantonio CA, Helyer L, Marcato P. The role of the tumor suppressor, RARRES1, in triple-negative breast cancer. Beatrice Hunter Cancer Research Conference; Halifax, NS. **November 2014.**
5. **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.
6. **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

7. Thomas N, Hilton LK, Michaud N, Bushell K, Rys R, Jain M, Shepherd L, Marra, MA, Kuruvilla J, Crump M, Mann K, Assouline S, Steidl C, Cragg MS, Scott DW, Johnson N, Morin RD, Rushton CK, Arthur SE, Alcaide M, Cheung M, Jiang A, **Coyle KM,** Cleary KLS. Detecting and quantifying mutations associated with treatment resistance in aggressive lymphomas using ctDNA [abstract]. In: Proceedings of the AACR Virtual Meeting: Advances in Malignant Lymphoma. AACR; Blood Cancer Discov **2020**;1(3_Suppl):IA42.
8. **Coyle KM,** Pararajalingam P, Arthur SE, Thomas N, Alcaide M, Meissner B, Boyle M, Grande BM, Rushton C, Tooman L, Slack GW, Mungall AJ, Gascoyne RD, Steidl C, Connors JM, Villa D, Marra MA, Johnson NA, Scott DW, Morin RD. Mutations affecting RNA binding proteins are a novel feature of mantle cell lymphoma. In: Proceedings of the 61st ASH Annual Meeting; Orlando, FL. Blood **2019**; 134 (Supplement_1): 1478.
9. **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]. In: Proceedings of the 108th Annual Meeting of the American Association for Cancer Research; April 1-5, 2017; Washington, DC. Cancer Research **2017**; 77 (13 Supplement):A3604.
10. Fernando W, Maclean E, **Coyle KM,** Marcato P, Hoskin DW, Rupasinghe HPV. Phloridzin docosahexaenoate (PZ-DHA) inhibits breast cancer cell invasion and angiogenesis [abstract]. In: Proceedings of the 108th Annual Meeting of the American Association for Cancer Research; April 1-5, 2017; Washington, DC. Cancer Research **2017**; 77 (13 Supplement):A910

11. **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 107th Annual Meeting of the American Association for Cancer Research; Apr 16-20, 2016; New Orleans, LA. *Cancer Research* **2016**; 76 (14 Supplement):A3661.
12. 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 107th 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*
13. **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 for this abstract.
14. Thomas ML, **Coyle KM**, Cruickshank B, Giacomantonio M, Wallace M, Giacomantonio C, Marcato P. Citral reduces 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.
15. 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.
16. **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 37th Annual CRTC-AACR San Antonio Breast Cancer Symposium; Dec 9-13, 2014; San Antonio, TX. *Cancer Research* **2015**; 75 (9 Supplement): Abstract nr P1-12-14.
17. 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 37th Annual CRTC-AACR San Antonio Breast Cancer Symposium; Dec 9-13, 2014; San Antonio, TX. *Cancer Research* **2015**; 75 (9 Supplement): Abstract nr P1-06-02.
18. **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 105th Annual Meeting of the American Association for Cancer Research; Apr 5-9, 2014; San Diego, CA. *Cancer Research* **2014**; 74 (19 Supplement):A578.
19. **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 105th Annual Meeting of the American Association for Cancer Research; Apr 5-9, 2014; San Diego, CA. *Cancer Research* **2014**; 74 (19 Supplement):A3404.
20. 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- β driven EMT and immunosuppressive microenvironment [abstract]. In: Proceedings of the 105th 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*
21. 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.

Additional conference presentations

22. Hillman T, Cheung M, Grande BM, Bushell KR, Arthur SE, Alcaide M, Thomas N, Dreval K, Shoker J, Wong S, Campbell K, Morin RD, **Coyle KM**. Shared and distinct genetic features in human and canine B-cell lymphomas. ASH 2021 Annual Meeting. **December 2021**.

23. Pararajalingam P, Hilton L, **Coyle KM**, Dreval K, Meissner B, Melnick A, Marra MA, Scott DW, Morin RD. Complex structural variation associated with enhancer hijacking and loss of tumor suppressors in mantle cell lymphoma. ASH 2021 Annual Meeting. **December 2021**.
24. Dreval K, Grande BM, Winata H, Wong J, Sethi L, Rushton CK, Pararajalingam P, Arthur SE, Chong L, Collinge B, **Coyle KM**, Cruz M, Hung S, Soudi S, Thomas N, Steidl C, Scott DW, Morin RD, Hilton LK. An open-source toolkit that powers the genome-wide analysis of mature B-cell lymphomas (GAMBL) project. ASH 2021 Annual Meeting. **December 2021**.
25. Hilton LK, Dreval K, Soudi S, Ben-Neriah S, Cruz M, Collinge B, **Coyle KM**, Grande BM, Duns G, Rushton CK, Boyle M, Meissner B, Farinha P, Slack GW, Mungall AJ, Marra MA, Connors JM, Steidl C, Scott DW, Morin RD. Whole genome sequencing identifies a genetically distinct subgroup of follicular lymphoma with low rates of somatic hypermutation and a reduced propensity for histologic transformation. ASH 2021 Annual Meeting. **December 2021**.
26. Fernando W, Cruickshank BM, Morales F, Dahn ML, Power Coombs MR, Dean CA, Walker O, **Coyle KM**, Marcato P. ALDH1A3 plays a central role in the metabolic and epithelial-mesenchymal transition of breast cancer stem cells. Canadian Cancer Research Conference. **November 2021**.
27. Gebremeskel S, Butuci M, Wong A, McEwen LM, **Coyle KM**, Drake R, Holman A, Brock EC, Schanin J, Leung J, Rasmussen HS, Singh B, Kamboj AP, Peterson K, Youngblood BA. Mast Cells are Locally Activated and Express Functional MRGPRX2 in Biopsies from Symptomatic Eosinophilic Gastritis and Duodenitis Patients. European Academy of Allergy and Clinical Immunology Congress. **July 2021**.
28. Gebremeskel S, Butuci M, Wong A, McEwen LM, **Coyle KM**, Drake R, Holman A, Brock EC, Schanin J, Leung J, Rasmussen HS, Singh B, Kamboj AP, Peterson K, Youngblood BA. Activated mast cells and eosinophils are associated with increased inflammatory mediators in mucosal biopsies from patients with chronic gastrointestinal symptoms. Digestive Disease Week. **May 2021**.
29. Lacroix E, Yoo B, Chandhok S, **Coyle KM**, Morin RD, Vlachos S, Harden N, Audas TE. Evolutionary Conservation of Systemic and Reversible Amyloid Aggregation. SFU Molecular Biology & Biochemistry Colloquium; *online due to COVID-19*. **May 2021**.
30. **Coyle KM**, Qureshi Q, Pararajalingam P, Thomas N, Audas TE, Morin RD. Regulation of HNRNPH1 via alternative splicing is disrupted by non-coding mutations in mantle cell lymphoma. RNA Annual Meeting; *online due to COVID-19*. **May 2020**.
31. Dahn ML, Walsh H, Challa M, Morales F, **Coyle KM**, Sultan M, Weaver ICG, Giacomantonio CA, Marcato P. Genome-wide knockdown screen and metabolomic analyses identify folate-dependent and folate-independent responses to DNA de-methylating therapy in breast cancer. EMBO|EMBL Symposium, Metabolism Meets Epigenetics; Heidelberg, Germany. **November 2019**.
32. **Coyle KM**, Pararajalingam P, Thomas N, Audas T, Morin R. Evaluating the effects of HNRNPH1 mutation on splicing and expression in mantle cell lymphoma. SFU Molecular Biology & Biochemistry Colloquium; Burnaby, BC. **April 2019**.
33. **Coyle KM**, Pararajalingam P, Thomas N, Audas T, Morin R. Evaluating the effects of HNRNPH1 mutation on splicing and expression in mantle cell lymphoma. SFU Postdoctoral Research Day; Burnaby, BC. **March 2019**.
34. **Coyle KM**, Dean CA, Giacomantonio CA, Helyer L, Marcato P. Targeting triple-negative breast cancers with retinoic acid. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2018**. ** Received award for best poster presentation by a graduate student.
35. Fernando W, MacLean E, **Coyle KM**, Marcato P, Goralski KB, Rupasinghe HPV, Hoskin DW. Determination of antimetastatic, antiangiogenic activities and pharmacokinetic parameters of phloridizin docosahexaenoate (PZ-DHA) using *in vitro* and *in vivo* triple-negative breast cancer models. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2018**.
36. Sultan M, Cruickshank BM, Huynh TT, Lamoureux E, Vidovic D, Thomas ML, **Coyle KM**, Giacomantonio CA, Langille MG, Marcato P. An *in vivo* genome-wide RNAi screen identifies novel mediators of paclitaxel sensitivity in breast cancer. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2018**.
37. Thomas ML, Cruickshank BC, Dean C, Jackson AJ, **Coyle KM**, Marcato P. Decitabine incorporated: finding predictors of breast cancer response to an epigenetic drug. Dalhousie University Department of Pathology

Research Day; Halifax, NS. **May 2018**.

38. Vidovic D, Huynh TT, Dean CA, Sultan M, Cruickshank BM, **Coyle KM**, Marcato P. Discovery of a novel cancer stem-cell enriched lncRNA target in triple-negative breast cancer. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2018**.
39. **Coyle KM**, Dean CA, Vidovic D, Weaver ICG, Giacomantonio CA, Helyer L, Marcato P. DNA methylation predicts response of triple-negative breast cancer to all-trans retinoic acid treatment. Canadian Cancer Research Conference; Vancouver, BC. **November 2017**. ** Received CIHR travel award to attend this meeting.
40. Thomas ML, Cruickshank B, Coyle KM, Sultan M, Giacomantonio CA, Marcato P. A genome-wide screen identifies targetable hypermethylated tumor suppressor genes in breast cancer. Canadian Cancer Research Conference; Vancouver, BC. **November 2017**.
41. Vidovic D, Huynh TT, Dean CA, Sultan M, **Coyle KM**, Marcato P. Identification of a functional breast cancer stem cell-associated long non-coding RNA. Canadian Cancer Research Conference; Vancouver, BC. **November 2017**.
42. **Coyle KM**, Dean CA, Vidovic D, Weaver ICG, Giacomantonio CA, Helyer L, Marcato P. DNA methylation predicts response of triple-negative breast cancer to all-trans retinoic acid treatment. AACR Advances in Breast Cancer Research; Hollywood, CA. **October 2017**.
43. **Coyle KM**, Dean CA, Vidovic D, Weaver ICG, Giacomantonio CA, Helyer L, Marcato P. Using retinoic acid to treat triple-negative breast cancer. EACR-AACR-SIC 2017 Special Conference; Florence, Italy. **June 2017**. ** Received BHCRI travel award to attend this meeting.
44. 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. EACR-AACR-SIC 2017 Special Conference; Florence, Italy. **June 2017**.
45. 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. EACR-AACR-SIC 2017 Special Conference; Florence, Italy. **June 2017**.
46. Anthes LE, Salsman J, Bentley V, Murphy P, **Coyle KM**, Lee P, Fawcett J, Marcato P, Dellaire G. From diabetes to cancer: Characterizing metformin treatment sensitivity and response biomarkers in breast cancer. PREP Research Day; Halifax, NS. **May 2017**.
47. Sultan M, Lamoreux E, Paine AS, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Langille MG, Marcato P. An in vivo genome-wide RNAi screen identifies two novel mediators of paclitaxel sensitivity in breast cancer. PREP Research Day; Halifax, NS. **May 2017**.
48. Thomas ML, Cruickshank BM, Walker CR, **Coyle KM**, Sultan M, Giacomantonio CA, Marcato P. Novel hypermethylated tumor suppressor genes as indicators of decitabine sensitivity in breast cancer. PREP Research Day; Halifax, NS. **May 2017**.
49. Vidovic D, Huynh TT, Dean CA, **Coyle KM**, Cruickshank BM, Sultan M, Marcato P. Discovery of RAINR, a functional breast cancer stem cell-regulated long non-coding RNA. PREP Research Day; Halifax, NS. **May 2017**.
50. **Coyle KM**, Dean CA, Vidovic D, Weaver I, Giacomantonio CA, Helyer L, Marcato P. Precision use of retinoic acid for triple-negative breast cancer. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2017**.
51. Sultan M, Paine AS, **Coyle KM**, Thomas ML, Vidovic D, Huynh TT, Marcato P. Downregulation of antigen presentation genes in Aldefluor-positive cancer stem cells aids in their evasion of immune destruction. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2017**.
52. Thomas ML, Cruickshank BM, Walker CR, **Coyle KM**, Sultan M, Giacomantonio CA, Marcato P. Novel hypermethylated tumor suppressor genes as indicators of decitabine sensitivity in breast cancer. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2017**.
53. Vidovic D, Huynh TT, Dean CA, **Coyle KM**, Cruickshank BM, Sultan M, Marcato P. Discovery of RAINR, a functional breast cancer stem-cell regulated long non-coding RNA. Dalhousie University Department of Pathology Research Day; Halifax, NS. **May 2017**.
54. Anthes LE, Salsman J, Bentley V, Murphy P, **Coyle KM**, Lee P, Fawcett J, Marcato P, Dellaire G. From diabetes to

cancer: Characterizing metformin treatment sensitivity and response biomarkers in breast cancer. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2017**.

55. Sultan M, Lamoreux E, Paine AS, Huynh TT, Thomas ML, **Coyle KM**, Giacomantonio CA, Langille MG, Marcato P. In vivo genome-wide RNAi screen identifies UGP2 and CD82 as novel indicators of paclitaxel sensitivity in breast cancer. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2017**.
56. **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.
57. 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**.
58. 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**.
59. 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**.
60. 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**.
61. 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**.
62. 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**.
63. 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**.
64. **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.
65. Vidovic D, **Coyle KM**, Huynh TT, Marcato P. Examining the role of retinoic acid-regulated lncRNA in breast cancer. Dalhousie Department of Pathology Research Day; Halifax, NS. **May 2016**.
66. 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 Department of Pathology Research Day; Halifax, NS. **May 2016**.
67. 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 Department of Pathology Research Day; Halifax, NS. **May 2016**.
68. 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 Department of Pathology Research Day; Halifax, NS. **May 2016**.
69. 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**.
70. **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.

71. 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.**
72. 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. 5th Munich Biomarker Conference, Munich, Germany. **December 2015.**
73. **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.**
74. 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.**
75. 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.**
76. **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.**
77. *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
78. 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.**
79. 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.**
80. **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 Department of Pathology Research Day; Halifax, NS. **May 2015.** ** Received award for best poster presentation by a graduate student.
81. **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 Department of Pathology Research Day; Halifax, NS. **May 2015.**
82. 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 Department of Pathology Research Day; Halifax, NS. **May 2015.**
83. 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 Department of Pathology Research Day; Halifax, NS. **May 2015.**
84. **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; St. John's, NL. **May 2015.** ** Received a TFRI travel award to attend this meeting.
85. 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; St. John's, NL. **May 2015.**
86. 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; St. John's, NL. **May 2015.**

87. **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.**
88. 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.**
89. 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.**
90. 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.**
91. 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.**
92. 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.**
93. **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.
94. 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⁺, GR-1⁺, Ly6C^{high} MDSCs augment tumour-associated immunosuppression. Terry Fox Research Institute Annual Scientific Meeting; Montreal, PQ. **May 2014.**
95. **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 Department of Pathology Research Day; Halifax, NS. **May 2014.**
96. 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 Department of Pathology Research Day; Halifax, NS. **May 2014.**
97. 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 Department of Pathology Research Day; Halifax, NS. **May 2014.**
98. 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 Department of Pathology Research Day; Halifax, NS. **May 2014.**
99. **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.**
100. 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.**
101. **Coyle KM**, Dean C, Pan LZ, Ahn DG, Salsman J, Dellaire G, Lee PW, Marcato P. Using a total-genome knockdown screen to explore retinoic-acid based signaling in breast cancer progression. Integrated Health Research Training Partnership Research Day; Halifax, NS. **May 2013.**
102. **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 Department of Pathology Research Day; Halifax,

NS. **May 2013.**

103. Rodriguez-Sosa JR, Bondareva A, Avelar G, **Coyle K**, Alpaugh W, Conley A, Meyers S, Franca LF, Dobrinski I. Altered maturation and function of primate testis xenografts after chronic exposure of recipient mice to dibutyl phthalate. Alberta Children's Hospital Research Institute Symposium; Calgary, AB. **April 2013.**
104. Alpaugh W, **Coyle K**, Dobrinski I. Elucidating the role of UCH-L1 in spermatogenesis. Alberta Children's Hospital Research Institute Symposium; Calgary, AB. **April 2013.**
105. Alpaugh W, **Coyle K**, Dobrinski I. Elucidating the role of UCH-L1 in spermatogenesis. XXIInd North American Testis Workshop; San Antonio, TX. **April 2013.**
106. Rodriguez-Sosa JR, Bondareva A, Avelar G, **Coyle K**, Alpaugh W, Conley A, Meyers S, Franca LF, Dobrinski I. Altered gene expression and lack of maturation in primate testis xenografts after chronic exposure of recipient mice to phthalate esters. Genes, Gene Families and Isozymes. **December 2012.**
107. **Coyle KM**, Behzad H, McElhaney JE. Addition of a TLR4 ligand increases the *in vitro* cell-mediated immune response to influenza vaccination. Vancouver Coastal Health Research Institute Summer Student Research Forum; Vancouver, BC. **August 2010.**