

# MICHAEL DE LISIO, PhD.

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Assistant Professor  
School of Human Kinetics  
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University of Ottawa  
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## **SUMMARY OF IMPACT**

- >\$7.0 million in independent research funding from NSERC, CFI, American Institute for Cancer Research, NIH
- Recipient of "Ontario Early Researcher Award"
- H-index of 19, i10-index of 36
- 49 peer-reviewed publications
- Trained 6 graduate/postgraduate trainees and 38 undergraduates

## **EDUCATION**

- 2012      **Doctor of Philosophy**  
Department of Kinesiology  
McMaster University, Hamilton, Canada
- 2006      **Bachelor of Science, Honours**  
Queen's University, Kingston, Canada

## **PROFESSIONAL EXPERIENCE**

- 2019-      **Assistant Professor**  
School of Human Kinetics, Faculty of Health Sciences  
University of Ottawa, Ottawa, ON
- 2019-      **Cross-Appointed Member**  
Department of Cellular and Molecular Medicine, Faculty of Medicine  
University of Ottawa, Ottawa, ON
- 2016-2019      **Assistant Professor**  
School of Human Kinetics, Faculty of Health Sciences  
Member, Brain and Mind Research Institute  
Member, Centre on Neuromuscular Disease

Member, Regenerative Medicine Program  
University of Ottawa, Ottawa, ON

- 2013-2016 **Assistant Professor**  
Department of Kinesiology and Community Health  
Graduate Faculty, Division of Nutritional Sciences  
Member, Cancer Community at Illinois  
Affiliate, Carle R. Woese Institute of Genomic Biology  
*Regenerative Biology and Tissue Engineering Theme* (2016-present)  
University of Illinois at Urbana-Champaign, Urbana, IL
- 2012-2013 **Postdoctoral Research Associate**  
Beckman Institute for Advanced Science and Technology  
University of Illinois at Urbana-Champaign, Urbana, IL
- 2011-2012 **Visiting Scholar**  
Beckman Institute for Advanced Science and Technology  
University of Illinois at Urbana-Champaign, Urbana, IL
- 2005 **Undergraduate Research Assistant**  
Human Mobility Research Centre  
Kingston General Hospital, Kingston, Canada

## **AWARDS AND HONOURS**

- 2018-2023 **Ontario Early Researcher Award**, \$150,000
- 2013-2016 **Teachers Ranked as Excellent**, University of Illinois  
(KIN 451: SP'13, FA'13, FA'14\*, FA'15 KIN 494: SP'14, KIN 352: FA'14\*, FA'15, KIN450: SP'16)  
\*Rated as Outstanding
- 2013 **Beckman Institute Postdoctoral Fellowship**, University of Illinois, \$104,000 USD (*declined*).
- 2012 **Graduate Student Award Winner**, Canadian Society for Exercise Physiology Conference
- 2009-2012 **CIHR Banting and Best Canada Graduate Scholarship**, \$105,000
- 2009 **Heimbecker Scholarship**, McMaster University
- 2008-2009 **Raymond Moore Scholarship**, Ontario Graduate Scholarship for Science and Technology, \$15,000
- 2008 **Iovate Graduate Student Award Finalist**, Ontario Exercise Physiology Conference
- 2008 **Graduate Student Association Millennium Award**, McMaster University

## **RESEARCH**

- trainees underlined, \*corresponding author

## **BOOK CHAPTERS**

1. Boppart MD, **De Lisio M**, Witkowski S. (2015). *Exercise and Stem Cells*. In: Bouchard C, Ed. *Molecular and Cellular Regulation of Adaptation to Exercise*. (2015).
2. Parise G and **De Lisio M**. Mitochondrial theory of aging in human age-related sarcopenia. (2010). *Interdiscip Top Gerontol*, 37:142-56. PMID: 20703060.

## **PEER REVIEWED JOURNAL ARTICLES**

1. D'Souza D, Roubos S, Larkin J, Lloyd J, Emmons R, Chen H, and **De Lisio M\***. The late effects of radiation therapy on skeletal muscle morphology and progenitor cell content are influenced by diet-induced obesity and exercise training in male mice. (2019). *Scientific Reports*: 9(1):6691. PMID: 31040340.
2. Emmons R, Ngu M, Xu G, Hernandez-Saavedra D, Chen H, and **De Lisio M\***. Effects of obesity and exercise on bone marrow progenitor cells following radiation. (2019). *Medicine & Science in Sports & Exercise*: 51(6):1126-1136. PMID: 30640286.
3. Emmons R, Xu G, Hernandez-Saavedra D, Kriska A, Pan YX, Chen H, **De Lisio M\***. Effects of obesity and exercise on colon cancer induction and hematopoiesis in mice. (2019). *American Journal of Physiology – Endocrinology and Metabolism*: 316(2):E210-E220. PMID: 30512990.
4. Allan D and **De Lisio M**. Reversing pathological remodeling of the bone marrow microenvironment in acute myeloid leukemia. (2018). *Stem Cell Investigation*: 5:29. PMID: 30363703.
5. Niemiro GM, Skinner SK, Walk AM, Edwards CG, **De Lisio M**, Holscher HD, Burd NA, and Khan NA. Oral glucose tolerance is associated with neuro-electric indices of attention among adults with overweight and obesity. (2018). *Obesity (Silver Spring)* 26(10): 1550-1557. PMID: 30204939.
6. Edwards T, Barfield JP, Niemiro GM, Beals JW, Broad EM, Motl RW, **De Lisio M**, Burd NA, and Pilutti LA. Physiological responses during a 25-km time trial in elite wheelchair racing athletes. (2018). *Spinal Cord Series and Cases*; 4:77. PMID: 30131876.

7. Niemiro GM, Allen JM, Mailing LJ, Khan NA, Holscher HD, Woods JA, and **De Lisio M\***. Effects of endurance exercise training on inflammatory circulating progenitor cell content in lean and obese adults. (2018). *The Journal of Physiology*; 596(14):2811-2822. PMID: 29923191
8. Huntsman HD, Rendeiro C, Merritt JR, Pincu Y, Cobert A, **De Lisio M**, Kolyvas E, Dvorteskiy S, Dobrucki IT, Kemkemer R, Jensen T, Dobrucki LW, Rhodes JS, and Boppart MD. The impact of mechanically stimulated muscle-derived stromal cells on aged skeletal muscle. (2018). *Experimental Gerontology*; 103:35-46. PMID: 29269268
9. Niemiro GM, Edwards T, Barfield JP, Beals JW, Broad EM, Motl RW, Burd NA, Pilutti LA, and **De Lisio M\***. Circulating progenitor cell response to exercise in wheelchair racing athletes. (2018). *Medicine, Science, Sport, and Exercise*; 50(1):88-97. PMID: 28806276
10. Beals JW, Mackenzie RWA, van Vliet S, Skinner SK, Pagni BA, Niemiro GM, Ulanov AV, Li Z, Dilger AC, Paluska SA, **De Lisio M**, and Burd NA. Protein-rich food ingestion stimulates mitochondrial protein synthesis in sedentary young adults of different BMIs. (2017). *Journal of Clinical Endocrinology and Metabolism*; 102(9):3415-3424. PMID: 28911136
11. **De Lisio M\*** and Farup J. The role of satellite cells in activity-induced adaptations: breathing new life into the debate. (2017). *The Journal of Physiology*; 595(19):6225-6226. PMID: 28802006
12. Chorghade S, Seimetz J, Emmons R, Yang J, Bresson S, **De Lisio M**, Parise G, Conrad N, and Kalsotra A. Poly(A) tail length regulates PABPC1 expression and tunes translation during heart development and cardiac hypertrophy. (2017). *eLife*; doi.10.7554/eLife.24139. PMID: 28653618
13. Bower AJ, Mahmassani Z, Zhao Y, Chaney EJ, Marjanovic M, Lee MK, Graf BW, **De Lisio M**, Kong H, Boppart MD, and Boppart SA. In vivo assessment of engineered skin cell delivery with multimodal optical microscopy. (2017). *Tissue Engineering Part C*; 23(7):434-442. PMID: 28605991
14. Burd NA, and **De Lisio M**. Skeletal muscle remodeling: interconnections between stem cells and protein turnover. (2017). *Exercise and Sport Science Reviews*; 45(3):187-191. PMID: 28419002
15. Emmons R, Niemiro GM, and **De Lisio M\***. Hematopoiesis with obesity and exercise: role of the bone marrow niche. (2017). *Exercise Immunology Reviews*; 23:82-95. PMID: 28224968

16. Niemiro GM, Parel J, Beals J, van Vliet S, Paluska SA, Moore DR, Burd NA, and **De Lisio M\***. Kinetics of circulating progenitor cell mobilization during submaximal exercise. (2017). *Journal of Applied Physiology*; 122(3):675-682. PMID: 28082336
17. Beals JW, Sukiennik RA, Nallabelli J, Emmons RS, van Vliet S, Young JR, Ulanov AV, Zhong L, Paluska SA, **De Lisio M**, and Burd N. Anabolic sensitivity of postprandial muscle protein synthesis to the ingestion of a protein-dense meal is reduced with greater adiposity in young adults. (2016). *American Journal of Clinical Nutrition*; 104(4):1014-1022. PMID: 27604771
18. Pincu Y, Huntsman HD, Zou K, **De Lisio M**, Mahmassani ZS, Munroe MR, Garg K, Jensen T, and Boppart MD. Diet-induced obesity regulates adipose-resident stromal cell quantity and extracellular matrix gene expression. (2016). *Stem Cell Research*, (1):181-90. PMID: 27399175.
19. Niemiro GM, Raine LB, Khan NA, Emmons R, Little J, Kramer AF, Hillman CH, and **De Lisio M\***. Circulating progenitor cells are positively associated with cognitive function among overweight/obese children. (2016). *Brain Behavior Immunity*, 57:47-52. PMID: 27132057.
20. Emmons R, Niemiro GM, and **De Lisio M\***. Exercise as an adjuvant therapy for hematopoietic stem cell mobilization. (2016). *Stem Cells International*, 2016:7131359. PMID: 27123008.
21. Safdar A, Khrapko K, Flynn JM, Saleem A, **De Lisio M**, Johnston AP, Kratysberg Y, Samjoo IA, Kitaoka Y, Ogborn DI, Little JP, Raha S, Parise G, Akhtar M, Hettinga BP, Rowe GC, Arany Z, Prolla TA, and Tarnopolsky MA. Exercise-induced mitochondrial p53 repairs mtDNA mutations in mutator mice. (2016). *Skeletal Muscle*, 6:7. PMID: 26834962.
22. Emmons R, Niemiro G, Owolabi O, and **De Lisio M\***. Acute exercise mobilizes hematopoietic stem and progenitor cells and alters the mesenchymal stromal cell secretome. (2016). *J. Appl. Physiol*, 120(6):624-32. PMID: 26744505.
23. Farup J, **De Lisio M**, Rahbek SK, Vendelbo MH, Boppart MD, and Vissing K. Stem cell content in human skeletal muscle is influenced by resistance exercise contraction mode, but not protein supplementation. (2015). *J. Appl. Physiol*. 119(10):1053-63. PMID: 26404620.
24. **De Lisio M**, Farup J, Sukiennik RA, Clevenger N, Nallabelli J, Nelson B, Ryan K, Rahbek SK, de Paoli F, Vissing K, and Boppart MD. The acute response of pericytes to muscle-damaging eccentric contraction and protein supplementation in human skeletal muscle. (2015). *J. Appl. Physiol*. 11(8)900-7. PMID: 26205545.

25. Zou K, Huntsman HD, Valero MC, Adams J, Skelton J, **De Lisio M**, Jensen T and Boppart MD. Mesenchymal stem cells augment the adaptive response to eccentric exercise. (2015). *Med Sci Sports Exerc*, 47(2):315-25. PMID: 24905768
26. Graf BW, Chaney EJ, Marjanovic M, Adie SG, **De Lisio M**, Valero MC, Boppart MD and Boppart SA. Long-term time-lapse multimodal intravital imaging of regeneration and bone marrow-derived cell dynamics in skin. (2013). *Technology*, 1(1):8-19. PMID: 25089085.
27. Zou K<sup>#</sup>, **De Lisio M**<sup>#</sup>, Huntsman HD, Pincu Y, Mahmassani Z, Miller M, Olatunbosun D, Jensen T, Boppart MD. Laminin-111 improves skeletal muscle stem cell quantity and function following eccentric exercise. (2014). *Stem Cells Transl Med*. (9):1013-22. PMID: 25015639. <sup>#</sup>These authors contributed equally to this work.
28. **De Lisio M**, Jensen T, Sukiennik RA, Huntsman HD and Boppart MD. Substrate and strain alter the muscle-derived mesenchymal stem cell secretome to promote myogenesis. (2014). *Stem Cell Research & Therapy*, 5(3):74. PMID: 24906706
29. Graf BW, Bower AJ, Chaney EJ, Marjanovic M, Adie SG, **De Lisio M**, Valero MC, Boppart MD, Boppart SA. In vivo multimodal microscopy for detecting bone marrow-derived cell contribution to skin regeneration. (2014). *J Biophotonics*, 7(1-2):96-102. PMID: 23401460
30. Boppart MD, **De Lisio M**, Zou K and Huntsman HD. Defining a role for mesenchymal stem cells in muscle repair following exercise. (2013). *Frontiers in Physiology*, 4:310. PMID: 24204344.
31. Graf BW, Chaney EJ, Marjanovic M, **De Lisio M**, Valero MC, Boppart MD and Boppart SA. In vivo imaging of immune cell dynamics in skin in response to zinc-oxide nanoparticle exposure. (2013). *Biomedical Optics Express*, 4(10):1817-28. PMID: 24156046.
32. **De Lisio M** and Parise G. Exercise and hematopoietic stem and progenitor cells: protection, quantity and function. (2013). *Exerc Sport Sci Rev*, 41(2):116-22. PMID: 23364348.
33. Huntsman HD, Zachwieja N, Zou K, Ripchick P, Valero MC, **De Lisio M** and Boppart MD. Mesenchymal stem cells contribute to vascular growth in skeletal muscle in response to eccentric exercise. (2013). *Am J Physiol Heart Circ Physiol*, 304(1):H72-81. PMID: 23280781.
34. **De Lisio M**, Baker JM and Parise G. Exercise promotes bone marrow cell survival and recipient reconstitution post-bone marrow transplantation which is associated with increased survival. (2012). *Exp Hematol*. 41(2): 143-54. PMID: 23063724.

35. **De Lisio M** and Parise G. Characterization of the effects of exercise training on hematopoietic stem cell quantity and function. (2012). *J Appl Physiol*. 113(10):1576-84. PMID: 23019311.
36. Phan N, **De Lisio M**, Parise G and Boreham DR. Biological effects and adaptive response from single and repeated computed tomography scans in C57Bl/6 mice. (2012). *Radiation Res*, 177(2):164-75. PMID: 22059980.
37. Baker JM, **De Lisio M** and Parise G. Endurance exercise training promotes medullary hematopoiesis. (2011). *FASEB J*, 25(12):4348-57. PMID: 21868472. Featured in Scientific American Podcast.
38. Johnston APW, Bellamy LM, **De Lisio M** and Parise G. Captopril treatment induces hyperplasia but inhibits myonuclear accretion following severe myotrauma. (2011). *Am J Physiol Regul Integr Comp Physiol*, 301(2):R363-9. PMID: 21632844.
39. Toth KG, McKay BR, **De Lisio M**, Little JP, Tarnopolsky MA and Parise G. IL-6 induced STAT3 signalling is associated with the proliferation of human muscle satellite cells following acute muscle damage. (2011). *PLOS ONE*, 6(3):e17392. PMID: 21408055.
40. **De Lisio M**, Phan N, Boreham DR and Parise G. Exercise-induced protection of bone marrow cells following exposure to radiation. (2011). *Appl Physiol Nutr Metab*, 36(1):80-7. PMID: 21326381. Featured in CSEP Knowledge Translation Newsletter.
41. **De Lisio M**, Kaczor JJ, Phan N, Tarnopolsky MA, Boreham DR and Parise G. Exercise training enhances the skeletal muscle response to radiation-induced oxidative stress. (2011). *Muscle Nerve*, 43(1):58-64. PMID: 21171096.
42. Johnston AP, Baker J, Bellamy LM, McKay BR, **De Lisio M** and Parise G. Regulation of muscle satellite cell activation and chemotaxis by angiotensin II. (2010). *PLOS ONE*, 21; 5(12):e15212. PMID: 21203566.
43. Johnston AP, Baker J, **De Lisio M** and Parise G. Skeletal muscle myoblasts possess a stretch-responsive local angiotensin signalling system. (2010). *J Renin Angiotensin Aldosterone Syst*, 12(2):75-84. PMID: 20921089.
44. Bellamy LM, Johnston AP, **De Lisio M** and Parise G. Skeletal muscle-endothelial cell cross talk through angiotensin II. (2010). *Am J Physiol Cell Physiol*, 299(6):C1402-8. PMID: 20861465.
45. West DW, Kujibida GW, Moore DR, Atherton P, Burd NA, Padzik JP, **De Lisio M**, Tang JE, Parise G, Rennie MJ, Baker SK and Phillips SM. Resistance exercise-induced increases in putative anabolic hormones do not enhance muscle protein synthesis or intracellular signalling in young men. (2009). *J Physiol*, 587(Pt21):5239-47. PMID: 19736298.

46. McKay BR, **De Lisio M**, Johnston AP, O'Reilly CE, Phillips SM, Tarnopolsky MA and Parise G. Association of interleukin-6 signalling with the muscle stem cell response following muscle-lengthening contractions in humans. (2009). *PLOS ONE*, 4(6):e6027. PMID: 19554087.
47. Johnston AP, **De Lisio M** and Parise G. Resistance training, sarcopenia, and the mitochondrial theory of aging. (2008). *Appl Physiol Nutr Metab*, 33(1):191-9. PMID: 18347672.

## Abstracts

1. Farber E, Ngu M, Akohene-Mensa P, Bojic D, and **De Lisio M\***. (2019). The role of exercise and obesity on incidence and survival in a mouse model of radiation-induced cancer. *Canadian Society for Exercise Physiology Annual Meeting, Kelowna, BC*.
2. Collao N, D'Souza D, Larkin J, Lloyd J, and **De Lisio M\***. (2019). Disruption of muscle stem cell niche after acute radiation exposure during muscle development. *Canadian Cancer Research Conference, Ottawa, ON*.
3. Farber E, Ngu M, Akohene-Mensa P, Bojic D, and **De Lisio M\***. (2019). The role of exercise and obesity on secondary, radiation-induced cancer and survival in mice. *Canadian Cancer Research Conference, Ottawa, ON*.
4. Collao N, D'Souza D, Larkin J, Lloyd J, and **De Lisio M\***. (2019). Effects of acute radiation exposure on muscle stem cell niche during muscle development. *Ottawa Neuromuscular Disease Conference, Ottawa, ON*.
5. Farber E, Ngu M, Lloyd J, Bojic D, and **De Lisio M\***. (2019). Obesity and exercise differentially influence longevity and healthspan in a mouse model of radiation-induced cancer. *Bone Marrow Adipose Society Annual Meeting, Odense, Denmark*.
6. Collao N, D'Souza D, Larkin J, Lloyd J, and **De Lisio M\***. (2019). Disruption of muscle stem cell niche after acute radiation exposure during muscle development. *European College of Sports Sciences Congress, Prague, Czech Republic*.
7. Larkin J, D'Souza, D, Lloyd J, Collao N, and **De Lisio M\***. (2019). Effects of high dose radiation on juvenile skeletal muscle development and satellite cell dynamics. *Muscle Health Research Day, York University, Toronto, ON*.
8. Lloyd J, D'Souza D, Larkin J, Colla N, and **De Lisio M\***. (2019). Effect of localized radiation exposure on skeletal muscle inflammation and fibro/adipogenic progenitors in juvenile mice. *Muscle Health Research Day, York University, Toronto, ON*.



9. D'Souza D, Larkin J, Lloyd J, and **De Lisio M\***. (2019). Muscle-specific response of radiation in developing skeletal muscle. *Advances in Skeletal Muscle Biology in Health and Disease, Gainesville, FL*.
10. Ngu M, Akohene-Mensah P, and **De Lisio M\***. (2019). The influence of diet-induced obesity and exercise on bone marrow extracellular vesicles in an irradiated mouse model. *Ontario Exercise Physiology Conference, Barrie, ON*.
11. Lloyd J, D'Souza D, Larkin J, and **De Lisio M\***. (2019). Effect of localized radiation exposure on skeletal muscle inflammation and fibro/adipogenic progenitors in juvenile mice. *Ontario Exercise Physiology Conference, Barrie, ON*.
12. Farber E, Ngu M, Akohene-Mensah P, and **De Lisio M\***. (2019). The role of exercise and obesity in radiation-induced leukemia and survival in mice. *Ontario Exercise Physiology Conference, Barrie, ON*.
13. Collao N, D'Souza D, Larkin J, Lloyd J, and **De Lisio M\***. (2019). The effects of high dose radiation on juvenile mouse muscle development and satellite cell population dynamics. *Ontario Exercise Physiology Conference, Barrie, ON*.
14. Roubos S, Emmons R, D'Souza D, Nallabelli J, Hernandez-Saavedra D, Kriska A, Xu G, Pan YX, Chen H, **De Lisio M\***. (2018). The influence of exercise during weight loss on muscle remodeling during colon cancer induction in mice. *Canadian Society of Exercise Physiologists Annual Meeting, Niagara Falls, ON*.
15. D'Souza D, Larkin J, Lloyd J, and **De Lisio M\***. (2018). The effects of high dose radiation on juvenile mouse muscle development and progenitor cell populations. *4<sup>th</sup> Cancer Cachexia Conference, Philadelphia, PA*.
16. Xu G, Emmons R, Hernandez-Saavedra, Sharma D, **De Lisio M**, Pan YX, and Chen H. (2018). High fat diet blunts canonical Wnt signaling pathway from the effect of radiation on colon epithelial in mice. *The Federation of American Societies for Experimental Biology Meeting, San Diego, USA*.
17. D'Souza DM, Emmons R, Hernandez-Saavedra D, Roubos S, Larkin J, Lloyd J, Chen H, and **De Lisio M\***. (2018). Effect of diet and exercise on skeletal muscle morphology following radiation therapy. *American College of Sports Medicine Conference, Minneapolis, MN*.
18. Ngu M, Emmons R, Hernandez-Saavedra D, Chen H, and **De Lisio M\***. (2018). Effects of obesity and exercise on bone marrow and leukemia cells following radiation. *American College of Sports Medicine Conference, Minneapolis, MN*.
19. Niemiro GM, Walk AM, Edwards CG, Bailey MA, Skinner SK, **De Lisio M**, Burd NA, Holscher HD, and Khan NA. (2018). C-reactive protein moderates the relationship

between adiposity and behavioral and neuroelectric indices of attention. *American College of Sports Medicine Conference, Minneapolis, MN.*

20. Mailings LJ, Allen JM, Niemiro G, Cohrs J, Holscher H, **De Lisio M**, and Woods JA. (2018). Six weeks of aerobic exercise improves markers of insulin sensitivity and metabolic endotoxemia: correlations with the gut microbiota. *American College of Sports Medicine Conference, Minneapolis, MN.*
21. Mailing LJ, Allen JM, Niemiro G, Cohrs J, Holscher H, **De Lisio M**, and Woods JA. (2017). Effects of a six week aerobic exercise intervention on the composition of oral and skin microbiota: a pilot study. *The Federation of American Societies for Experimental Biology Meeting, Chicago, USA.*
22. Xu G, Emmons R, Hernandez-Saavedra D, Kriska A, **De Lisio M**, Pan YX, and Chen H. (2017). Regulation of gene expression of Wnt signaling pathway by dietary high fat and effects on colon epithelia in mice. *The Federation of American Societies for Experimental Biology Meeting, Chicago, USA.*
23. Niemiro GM, Allen JM, Mailing LJ, Holscher HD, Woods JA, and **De Lisio M\***. (2017). Characterizing circulating hematopoietic stem/progenitor cell populations in lean and obese adults after short-term exercise training. *Metabolism in Action – lifetime influence of genes and environment, Copenhagen, Denmark.*
24. Roubos S, Nallabelli J, Niemiro GM, Emmons R, Korp N, and **De Lisio M\***. (2017). Role of amino acid transporters during in vitro myogenesis. *Muscle Health Awareness Day, York University, Toronto, ON.*
25. **De Lisio M\***, Niemiro GM, Edwards T, Barfield JP, Beals JW, Broad E, Motl RW, Newsome L, Burd NA, and Pilutti LA. (2017). Progenitor cell mobilization following a half-marathon in elite wheelchair athletes. *American College of Sports Medicine Conference, Denver, CO.*
26. Barfield JP, Edwards T, Beals JW, Niemiro GM, Broad E, Motl RW, **De Lisio M**, Newsome L, Burd NA, and Pilutti LA. (2017). Physiological responses to a stimulated half-marathon road-race in elite level wheelchair racing athletes. *American College of Sports Medicine Conference, Denver, CO.*
27. Mailing LJ, Allen JM, Niemiro GM, Cohrs J, Holscher H, **De Lisio M**, and Woods JA. (2017). Effects of aerobic exercise on fecal microbial-derived metabolites in lean and obese men and women. *American College of Sports Medicine Conference, Denver, CO.*
28. Emmons R, Saavedera D, Park Z, Chen H, and **De Lisio M\***. (2017). The effects of high fat diet-induced obesity and exercise training on hematopoietic stem and progenitor cells following sub-lethal radiation. *The Federation of American Societies for Experimental Biology Meeting, Chicago, IL.*

29. Niemiro GM, Allen JM, Mailing LJ, Holscher HD, Woods JA, and **De Lisio M\***. (2017). Circulating progenitor cell quantity and colony-forming capacity in lean and obese adults. *The Federation of American Societies for Experimental Biology Meeting, Chicago, IL.*
30. Skinner SK, Beals JW, van Vliet S, Niemiro GM, Dilger AC, **De Lisio M**, Paluska SA, and Burd NA. (2017). Elevated muscle inflammatory response after protein-dense food ingestion in obese adults. *The Federation of American Societies for Experimental Biology Meeting, Chicago, IL.*
31. Emmons R, Kriska A, Chen H, and **De Lisio M\***. (2016). Exercise training reverses the accumulation of marrow adipose tissue and pro-inflammatory cytokines following diet-induced obesity. *APS Integrative Physiology of Exercise Conference, Phoenix, AZ.*
32. Emmons R, Kriska A, Nallabelli J, Chen H, and **De Lisio M\***. (2016). Exercise training rescues hematopoietic stem and progenitor cell content and reduces senescence following high-fat diet. *American College of Sports Medicine Conference, Boston MA.*
33. Niemiro G, Parel J, Beals J, van Vliet S, Moore DR, Burd NA, and **De Lisio M\***. (2016). Time course of progenitor cell mobilization during exercise in endurance trained men. *American College of Sports Medicine Conference, Boston MA.*
34. van Vliet S, Emmons RS, Parel JT, Beals JW, van Loon LJC, Paluska SA, **De Lisio M**, and Burd NA. (2016). mTOR activation occurs independent of changes in skeletal muscle LAT1 protein content after protein ingestion in young men. *American College of Sports Medicine Conference, Boston MA.*
35. Sun Y, Pence BD, Garg K, Dvoretzky SV, Niemiro GM, Allen JM, **De Lisio M**, Boppart MD, and Woods JA. (2016). Acute eccentric exercise does not improve primary antibody responses to ovalbumin vaccination in mice. *American College of Sports Medicine Conference, Boston MA.*
36. Kriska A, Emmons R, Jung P, Xu G, **De Lisio M**, Pan YX, Chen H. (2016). Treadmill exercise decreases lymph associated aberrant crypt foci in the large intestine of obese mice. *The Federation of American Societies for Experimental Biology Meeting, San Diego, CA.*
37. **De Lisio M\***, Emmons R, Niemiro G, and Owolabi O. (2016). Acute exercise mobilizes hematopoietic stem and progenitor cells and alters the mesenchymal stromal cell secretome. *NIH Aging Hematopoiesis Workshop, Bethesda, MD.*

38. **De Lisio M\***, Nallabelli J, Niemiro G, Emmons R, and Korp N. (2016). Differential expression of amino acid transporters during in vitro myogenesis. *Advances in skeletal muscle biology in health and disease, University of Florida, Gainesville, FL.*
39. Emmons R, Niemiro G, and **De Lisio M\***. (2015). Acute exercise stimulates bone marrow stem/progenitor mobilization and proliferation. *Canadian Society for Exercise Physiology Conference, Hamilton, ON.*
40. Niemiro G, Raine L, Khan N, Emmons R, Little J, Kramer AF, Hillman C, and **De Lisio M\***. (2015). The relationship between circulating progenitor cells and cognitive function in overweight/obese children. *Canadian Society for Exercise Physiology Conference, Hamilton, ON.*
41. Parel J, van Vliet S, Emmons R, Beals JW, van Loon LJC, Paluska SA, **De Lisio M**, and Burd NA. (2015). Protein ingestion does not modulate skeletal muscle LAT1 protein content throughout the postprandial period in healthy young men. *Canadian Society for Exercise Physiology Conference, Hamilton, ON.*
42. Emmons R, Chorghade S, Parise G, Kalsotra A and **De Lisio M\***. (2015). Exercise training enhances PABPC1 content in cardiac tissue but overexpression does not affect acute performance. *American College of Sports Medicine Meeting, San Diego, CA.*
43. Niemiro G, Raine L, Emmons R, Little J, Hillman C and **De Lisio M\***. (2015). Hematopoietic progenitor cells and inflammatory monocytes increase in circulation in overweight children. *American College of Sports Medicine Meeting, San Diego, CA.*
44. Owolabi T, Emmons R, Niemiro G and **De Lisio M\***. (2015). Hematopoietic stem/progenitor cell mobilization and skeletal muscle chemo-attraction following acute exercise. *NIH STEP-UP Research Symposium, Bethesda, MD.*
45. Nallabelli J, Niemiro G, Korp N and **De Lisio M\***. (2015). The importance of L-Type Amino Acid Transporter 1 on Myoblasts. *Poster presented at Kinesiology and Community Health Honors and Awards Ceremony, University of Illinois.*
46. **De Lisio M**, Farup J, Sukiennik RA, Clevenger N, Nallabelli J, Nelson B, Ryan K, Rahbek SK, Vissing K. and Boppart MD. (2014). The acute response of pericytes to eccentric contraction and protein supplementation in human skeletal muscle. *American College of Sports Medicine Integrated Physiology of Exercise Meeting, Miami, FL.*
47. Pincu, Y, Huntsman HD, Zou K, **De Lisio M**, Mahmassani ZS, Jensen T, and Boppart MD. (2014). Evaluation of adipose- and muscle-resident mesenchymal stem cell adipogenic potential following high fat diet and exercise. *American College of Sports Medicine Integrative Physiology of Exercise, Miami, FL.*

48. Zou K, **De Lisio M**, Miller MA, Olatunbosun D, Samuel E, and Boppart MD. (2014). Laminin-111 improves skeletal muscle repair following eccentric exercise-induced damage. *American College of Sports Medicine Meeting, Orlando, FL.*
49. **De Lisio M**, Jensen T, Sukiennik RA, Huntsman HD, and Boppart MD. (2014). Substrate and stretch regulate muscle-resident mesenchymal stem cells to promote myoblast proliferation. *The Federation of American Societies for Experimental Biology Meeting, San Diego, CA.*
50. Huntsman HD, **De Lisio M**, Kolyvas E, Merritt J, Bhattacharya T, Jensen T, Rhodes JS, and Boppart MD. (2014). Simultaneous reversal of age-related declines in muscle health and cognition with transplantation of preconditioned mesenchymal stem cells. *The Journal of the Federation of American Societies for Experimental Biology, San Diego, CA.*
51. Pincu Y, Huntsman HD, Zou K, **De Lisio M**, Mahmassani ZS, and Boppart MD. (2014). Evaluation of mesenchymal stem cell contribution to adipose health in the context of high fat diet and exercise. *The Journal of the Federation of American Societies for Experimental Biology, San Diego, CA.*
52. Bower AJ, Zhao Y, Mahmassani Z, Chaney EJ, Marjanovic M, Lee M, Graf BW, **De Lisio M**, Kong H, Boppart MD, and Boppart SA. (2014). Integrated optical coherence and multiphoton microscopy for in vivo assessment of engineered skin substitutes. *Paper 8948-96, SPIE Photonics West, San Francisco, CA.*
53. **De Lisio M**, and Parise G. (2014). Exercise training enhances recipient survival with no benefit to long-term engraftment following bone marrow transplantation. *Poster presented at Cancer Community of Illinois Research Day, University of Illinois.*
54. Zou K, **De Lisio M**, and Boppart MD. (2014). Laminin-111 improves skeletal muscle repair following eccentric exercise-induced damage. *Research & Creative Achievement Week, East Carolina University.*
55. Pincu Y, Huntsman HD, Zou K, **De Lisio M**, Mahmassani Z, and Boppart MD. (2013). High fat diet and exercise alter gene transcription of mesenchymal stem cells derived from muscle and adipose. *The 6<sup>th</sup> D-Cure Annual Symposium – New Frontiers in Diabetes Research, Israel.*
56. Huntsman HD, **De Lisio M**, Kolyvas EA, Merritt J, Bhattacharya T, Rhodes J, and Boppart MD. (2013). Simultaneous reversal of age-related declines in muscle health and function with transplantation of preconditioned mesenchymal stem cells. *Pathobiology of Aging and Age-Related Diseases, San Antonio, TX.*

57. Zou K, Huntsman HD, Mahmassani Z, **De Lisio M**, and Boppart MD. (2013). Muscle-derived mesenchymal stem cells secrete paracrine factors that are important for regeneration and growth. *Med. Sci. Sports Exer.* 45(5S) (Suppl 1):275-278.
58. **De Lisio M** and Parise G. Characterization of the effects of exercise training on hematopoietic stem cell quantity and function. (2012). *Canadian Society of Exercise Physiologists Conference, Regina, Canada. Graduate Student Award Competition Winner.*
59. **De Lisio M** and Parise G. (2012). Exercise training enhances recipient survival with no benefit to long-term engraftment following bone marrow transplantation. *American College of Sports Medicine Meeting, San Francisco, USA.*
60. **De Lisio M** and Parise G. (2011). Exercise training enhances recipient survival with no benefit to long-term engraftment following bone marrow transplantation. *The Joint UIUC-UIUC Workshop on Regenerative Biology and Tissue Engineering, University of Illinois at Urbana-Champaign, Urbana, IL.*
61. Johnston A, Baker J, Bellamy L, **De Lisio M** and Parise G. (2010). Angiotensin II signaling regulates skeletal muscle growth and myoblast chemotaxis. *FASEB J*, 2010 24:824.4. *The Federation of American Societies for Experimental Biology Meeting, Anaheim, USA.*
62. Toth KG, McKay BR, **De Lisio M**, Tarnopolsky MA and Parise G. (2010). Satellite cell specific p-STAT3 signaling in human muscle following acute muscle damage. *FASEB J*, 24:1b31. *The Federation of American Societies for Experimental Biology Meeting, Anaheim, USA.*
63. Baker J, **De Lisio M** and Parise G. (2010). Endurance exercise training increases medullary and extramedullary hematopoiesis. *FASEB J*, 24:618.18. *The Federation of American Societies for Experimental Biology Meeting, Anaheim, USA.*
64. **De Lisio M**, Baker J and Parise G. (2010). The potential of exercise training as a therapeutic strategy for bone marrow transplant. *Ontario Exercise Physiology Conference, Barrie, Canada.*
65. **De Lisio M**, Kujibida G, West D, Padzick J, Buick J, Parise G, Baker SK and Phillips S. (2009). No impact of acute resistance exercise-induced elevation of growth hormone on JAK/STAT signaling or mixed muscle protein synthesis in young men. *Appl. Physiol. Nutr. Metab.* 34:1125. *The 14<sup>th</sup> International Conference Biochemistry of Exercise, Guelph, Canada.*
66. **De Lisio M**, Phan N, Kaczor JJ, Tarnopolsky MA, Boreham DR and Parise G. (2009). Exercise training and low dose radiation protect skeletal muscle from high dose radiation. *FASEB J*, 23:600.6. *The Federation of American Societies for Experimental Biology Meeting, New Orleans, USA.*

67. Johnston APW, **De Lisio M**, Bellamy L and Parise G. (2009). Angiotensin II is necessary for skeletal muscle regeneration following cardiotoxin-induced injury. *FASEB J*, 23:601.6. *The Federation of American Societies for Experimental Biology Meeting, New Orleans, USA.*
68. McKay BR, **De Lisio M**, Johnston APW, Phillips SM, Tarnopolsky MA and Parise G. (2009). Interleukin-6 signaling mediates human muscle satellite cell proliferation following acute muscle damage. *FASEB J*, 23:601.7. *The Federation of American Societies for Experimental Biology Meeting, New Orleans, USA.*
69. **De Lisio M**, Phan N, Kaczor JJ, Tarnopolsky MA, Boreham DR and Parise G. (2009). Exercise training enhances the ability of skeletal muscle to respond to radiation-induced oxidative stress. *Ontario Exercise Physiology Conference, Barrie, Canada.*
70. **De Lisio M**, Phan N, Boreham DR and Parise G. (2008). Progressive exercise training protects bone marrow stem cells from radiation-induced damage. *FASEB J*, 22:758.7. *The Federation of American Societies for Experimental Biology Meeting, San Diego, USA.*
71. Phan N, **De Lisio M**, Parise G and Boreham DR. (2008). Adaptive Response with oxidative stress from CT scans and exercise in mice. *FASEB J*, 22:758.8. *The Federation of American Societies for Experimental Biology Meeting, San Diego, USA.*
72. Phan N, **De Lisio M**, Parise G and Boreham DR. (2008). CT scans and exercise induce an adaptive response in mice. *The 54<sup>th</sup> Annual Meeting of the Radiation Research Society, Boston, USA.*
73. **De Lisio M**, Phan N, Boreham DR and Parise G. (2008). Exercise training induced protection against radiation in stem and progenitor cells. *Ontario Exercise Physiology Conference, Barrie, Canada. Iovate Graduate Student Award Competition Finalist.*
74. Phan N, **De Lisio M**, Parise G, and Boreham DR. (2008). Adaptive response with oxidative stress from CT scans and exercise in mice. *Low Dose Radiation Research Investigators Workshop. Washington, USA.*

### **Invited Presentations**

1. De Lisio, M. (2019). Relieving the burn: mechanisms of radiation-induced tissue damage and exercise as a mitigating strategy. *Canadian Society for Exercise Physiology Annual Meeting, Kelowna, BC.*

2. De Lisio, M. (2019). Exercise-induced regulation of skeletal muscle cellular dynamics in chronic disease. *Institute NeuroMyogenie-Centre on Neuromuscular Disease Workshop, Lyon, France.*
3. De Lisio, M. (2019). Stem cell-niche interactions in health and disease. *Ottawa Biomaterials Networking Forum, Ottawa, ON.*
4. De Lisio, M. (2019). Exercising the stem cell niche. *Cellular and Molecular Medicine Departmental Seminar, Ottawa, ON.*
5. De Lisio, M. (2018). Exercising the stem cell niche to mitigate the late effects of radiation therapy. *Canadian Society of Exercise Physiology Annual Meeting, Niagara Falls, ON.*
6. De Lisio, M. (2018). Exercise as an Adjuvant Therapy for Hematopoietic Stem Cell Transplant. *Canadian Blood and Marrow Transplant Group Annual Conference, Ottawa, ON.*
7. De Lisio, M. (2018). Cellular systems in skeletal muscle across the cancer continuum. *American College of Sports Medicine Meeting, Minneapolis, MN.*
8. De Lisio, M. (2018). Systemic effects of myeloid lineage skewing in obesity. *Amira Klip Lab Seminar, SickKids Research Institute, Toronto, ON.*
9. De Lisio, M. (2017). Exercising the stem cell niche. *Faculty of Applied Health Sciences Graduate Seminar, Brock University, St. Catharines, ON.*
10. De Lisio, M. (2017). Exercise as an adjuvant therapy for HSCT. *Hematological Oncology Clinical Rounds, The Ottawa Hospital, Ottawa, ON.*
11. De Lisio, M. (2017). Characterizing circulating hematopoietic stem/progenitor cell populations in lean and obese adults after short-term exercise training. *NovoNordisk Foundation, Metabolism in Action Meeting, Copenhagen, DK.*
12. De Lisio, M. (2017). Exercise-induced alterations in cellular systems: from bone marrow to skeletal muscle. *Muscle Health Awareness Day, York University, Toronto, ON.*
13. De Lisio, M. (2016). Investigating the role of muscle stem cells in cancer cachexia. *Research Update, Carle Cancer Center, Urbana, IL.*
14. De Lisio, M. (2016). Hematopoietic stem cell regulation in exercise and obesity. *American College of Sports Medicine Meeting, Boston, MA.*
15. De Lisio, M. (2015). Exercise and mesenchymal stromal cells: optimizing the stem cell niche. *Canadian Society of Exercise Physiologists, Hamilton, ON.*



16. De Lisio, M. (2013). Exercise and the stem cell microenvironment: implications in muscle and bone marrow. *Nutritional Sciences Seminar, University of Illinois at Urbana-Champaign, Urbana, IL.*
17. De Lisio, M. (2013). Exercise and hematopoietic stem cells. *Research Update, Carle Cancer Center, Urbana, IL.*
18. De Lisio, M. (2011). The effects of exercise training on hematopoietic stem cells and their niche: implications for bone marrow transplantation. *Graduate Seminar, University of Illinois at Urbana-Champaign, Urbana, IL.*
19. De Lisio, M. (2010). The potential of exercise training as a therapeutic strategy for bone marrow transplant. *Roswell Park Cancer Institute, Buffalo, NY.*
20. De Lisio, M. (2008). Exercise training: the latest radioprotectant. *Boreham Lab Meeting, McMaster University, Hamilton, ON.*
21. De Lisio, M. (2007). Exercise, radiation, and the adaptive response. *Department of Kinesiology Graduate Seminar, McMaster University, Hamilton, ON.*

## **FUNDING**

### **Current:**

1. Dairy Research Institute  
*"Dairy food consumption and its effects on inflammation and the post-prandial regulation of muscle protein synthesis"*  
Role: Co-I (Burd, PI)    Amount: \$306,862 USD (total)    Dates: 2019-2021
2. National Institutes of Health, NICHD  
*"Sympathetic nervous system mediates the acute effects of exercise on brain and cognition in children"*  
Role: Co-I (Hillman, PI) Amount: \$2,727,490 USD (total) Date: 2018-2023
3. Canadian Foundation for Innovation  
*"NeuroHealth and Rehabilitation Research Centre (NHR2C)".*  
Role: Co-PI (Pilutti, Lead PI) Amount: \$832,273 Dates: 2018-2022.
4. American Institute of Cancer Research Investigator-Initiated Grant  
*"The effects of obesity and exercise on radiation-induced leukemia".*  
Role: PI Amount: \$164,544 USD Dates: 2018-2019.
5. NSERC Discovery Grant.  
*"Mechanisms responsible for exercise-induced bone marrow remodeling".*

Role: PI Amount: \$150,000 Dates: 2017-2021.

9. National Multiple Sclerosis Society.  
*“Lifestyle physical activity intervention for improving cardiorespiratory fitness and vascular comorbidity risk in multiple sclerosis”.*  
Role: Co-I (Pilutti, PI) Amount: \$363,276 USD (total) Dates: 2016-2018
10. R01HL126845, National Heart, Lung and Blood Institute, NIH.  
*“Post-transcriptional mechanisms of gene regulation in cardiac cell growth and development”.*  
Role: Collaborator (Kalsotra, PI) Amount: \$1,936,340 (total) Dates: 2015-2020.

### **Completed**

1. National Cattlemen’s Beef Association.  
*“The influence of regular beef consumption and protein density of the diet on training induced gains in muscle strength and performance in healthy adults”.*  
Role: Co-I (Burd, PI) Amount: \$232,627 (total) Dates: 2016-2018.
2. University of Ottawa, New Investigator Seed Funding.  
*“The contribution of fibro/adipogenic progenitors to decreased muscle quality in obesity”.*  
Role: PI Amount: \$10,000 Dates: 2017-2018.
3. NovoNordisk Foundation.  
*“Travel Grant to support attendance at Metabolism in Action – lifetime influence of genes and environment conference”.*  
Role: PI Amount: Full cost of travel, accommodations, and meals (estimated \$3000) Dates: 2017.
4. American College of Sports Medicine Foundation Grant.  
*“Remodeling the hematopoietic stem cell niche with exercise”.*  
Role: PI Amount: \$10,000 (total) Dates: 2016-2017.
5. Office of the Vice Chancellor of Research, University of Illinois.  
*“Characterization of the epigenome and secretome in high-fat diet induced obese mice undergoing optimized exercise”.*  
Role: Co-PI (Chen, Co-PI) Amount: \$29,932 (total) Dates: 2016-2017.
6. National Pork Board.  
*“Effect of pork ingestion on postprandial mitochondrial protein synthesis and inflammation in skeletal muscle of healthy weight, overweight, and obese adults”.*  
Role: Co-I Amount: \$43,000 (total) Dates: 2016-2017.
7. Division of Nutritional Science Vision 20/20 Program, University of Illinois.

*“The effects of probiotics and prebiotics on behavioral and biological markers of cognition and stress”.*

Role: Co-I      Amount: \$20,000 (total)      Dates: 2015-2017.

8. Division of Nutritional Science Vision 20/20 Program, University of Illinois  
*“The effects of overweight/obesity and acute dietary protein ingestion on muscle stem cell function”.* Role: PI      Amount: \$22,500 (total)      Dates: 2014-2016.
9. National Pork Board.  
*“Postprandial muscle protein synthetic responses after high quality pork consumption in lean and obese adults”.*  
Role: Co-I (Burd, PI)      Amount: \$136,000 (total)      Dates: 2014-2016.
10. Sun Health Technologies.  
*“Phototherapy and Vitamin D”.*  
Role: Co-I (Motl, PI)      Amount: \$63,023 (total)      Dates: 2015-2016.
11. Office of the Vice Chancellor of Research, University of Illinois.  
*“Exercise mediated regulation of the hematopoietic stem cell niche”.*  
Role: PI      Amount: \$30,000 (total)      Dates: 2014-2015.
12. Center on Health, Aging and Disability, University of Illinois.  
*“Cognitive impairments in obese children through hematopoietic stem cell dysfunction”.*  
Role: PI      Amount: \$20,000 (total)      Dates: 2013-2015.
13. The Mayo Clinic/University of Illinois Strategic Alliance for Technology-Based Healthcare, Mayo Clinic 2013 Individualizing Medicine Conference.  
Role: Co-I      Amount: \$2,000 (total)      Dates: 2013.

## **TRAINEE SUPERVISION**

### **Current** (alphabetical order)

**Paul Akohene-Mensah**, Human Kinetics (University of Ottawa), 01/2018 – present.  
MSc: Expected 2019

**Nicolas Collao**, Human Kinetics (University of Ottawa), 01/2019 – present.  
PhD: Expected 2022

**Eadan Farber**, Human Kinetics (University of Ottawa), 09/2018 – present.  
MSc: Expected 2020

**Mathew Ngu**, Human Kinetics (University of Ottawa), 09/2017 – present.  
MSc: Expected 2019

**James Vanhie**, Human Kinetics (University of Ottawa), 09/2019 – present.  
PhD: Expected 2023

### **Previous** (chronological order)

#### **Post-Doctoral**

**Dr. Donna D'Souza**, Human Kinetics (University of Ottawa), 09/2017 – 12/2018.  
Project: *The effects of radiation on skeletal muscle stem/progenitor cell dynamics*  
Position after leaving lab: Clinical Research Associate, Abbott Point of Care.

#### **Doctoral**

**Dr. Russell Emmons**, Kinesiology and Community Health (University of Illinois),  
08/2013 – 04/2017.  
PhD: *The influence of exercise training on the bone marrow microenvironment in obesity and cancer*  
Position after leaving lab: Postdoctoral Research Associate, Northwestern University

**Dr. Grace Niemiro**, Kinesiology and Community Health (University of Illinois), 01/2015  
– 09/2017.  
PhD: *Lifestyle and exercise effects on circulating progenitor cells in children and adults*  
Position after leaving lab: Postdoctoral Research Associate, University of Arizona

#### **Master's**

**Sophia Roubos**, Human Kinetics (University of Ottawa), 09/2016 – 09/2018.  
MSc: *The influence of exercise during weight loss on muscle remodeling during colon cancer induction in mice*  
Position after leaving lab: Research Assistant, CHEO Research Institute

### **AWARDS WON BY TRAINEES**

#### **James Vanhie**

2019-2023 Graduate Scholarship, University of Ottawa

#### **Nicolas Collao**

2019-2022 BASES Scholarship, Chile

#### **Eadan Farber**

2018-2020 Graduate Scholarship, University of Ottawa  
2019 CSEP Student Travel Award

#### **Dr. Donna D'Souza**

2017-2018 uOttawa/CHEO Research Institute Postdoctoral Fellowship (\$90,000)

**Sophia Roubos**

- 2018 Best Poster: Master's Student, Muscle Health Awareness Day, York University  
2016-2018 Graduate Scholarship, University of Ottawa

**Dr. Grace Niemi**

- 2018 T.K. Cureton Physical Fitness Research Award", Department of Kinesiology and Community Health, University of Illinois  
2016-2017 Egg Nutrition Center Young Investigator Award (\$19,800 USD)

**Dr. Russell Emmons**

- 2016-2017 American College of Sports Medicine Foundation Student Fellowship (\$4,999 USD)

**GRADUATE STUDENT COMMITTEE MEMBERSHIP****MSc Thesis Advisory Committee**

1. Andrew D'Souza, Human Kinetics, University of Ottawa (2018-2019)
2. Brian Kehoe, Human Kinetics, University of Ottawa (2018 – present)
3. Jonathan Rankin, Human Kinetics, University of Ottawa (2017 – 2019)
4. Pegah Akbari, Human Kinetics, University of Ottawa (2017 – 2019)
5. Tianna Beharriell, Human Kinetics, University of Ottawa (2017 – 2019)

**MSc Thesis Examiner**

1. Svyatoslav Dvoretzkiy, Kinesiology and Community Health, University of Illinois (2016)
2. Andra Whitney, Kinesiology and Community Health, University of Illinois (2016)

**MSc Thesis Chair**

1. Kevin Moncion, Human Kinetics, University of Ottawa (2018)
2. Elizabeth Legace, Human Kinetics, University of Ottawa (2018)
3. Angelica Blais, Human Kinetics, University of Ottawa (2018)
4. Olivia Zadzman, Human Kinetics, University of Ottawa (2016)

**PhD Thesis Advisory Committee**

1. Shuhiba Mohammad, Human Kinetics, University of Ottawa (2019 – present)
2. Thomas Edwards, Human Kinetics, University of Ottawa (2018 – present)
3. Lauren Raine, Kinesiology and Community Health, University of Illinois (2016)
4. Adam Kriska, Food Science and Human Nutrition, *University of Illinois* (2015-2016)

**PhD Comprehensive Exam Committee Examiner**

1. Robert Meade, Human Kinetics, University of Ottawa (2018)
2. Zeinab El Amine, Human Kinetics, University of Ottawa (2018)

3. Lauren Raine, Kinesiology and Community Health, University of Illinois (2016)
4. Joshua Nederveen, Kinesiology, McMaster (2015)

### **PhD Thesis Examiner**

1. Sofhia Ramos, Kinesiology and Health Sciences, York University (2019)
2. Brittany Baechler, Kinesiology, University of Waterloo (2019)
3. Martin Poirier, Human Kinetics, University of Ottawa (2018)
4. Hans Tinglestad, Human Kinetics, University of Ottawa (2018)
5. Brandon Kistler, Kinesiology and Community Health (2015)

### **PhD Thesis Chair**

1. Catrine Demers, Rehabilitation, University of Ottawa (2019)

## **UNDERGRADUATE STUDENT SUPERVISION:**

### **Current**

1. Giana Bodnariuc, Human Kinetics (University of Ottawa), 2019 – present
  - Honour's thesis student
2. Philip Dumas, Biomedical Sciences (University of Ottawa), 2018 – present.
  - Honour's thesis student
3. Claudia Natola, Biomedical Sciences (University of Ottawa), 2019 – present
  - Honour's thesis student
4. Dejan Bojic, Biomedical Sciences (University of Ottawa) 2019 - present
5. Rahat Sheikh, Human Kinetics (University of Ottawa), 2019 – present
6. Wooseok (Brian) Kim, Human Kinetics (University of Ottawa) 2019 – present

### **Supervised Honour's Thesis**

1. Erik Jacques, Human Kinetics (University of Ottawa), 2018-2019
  - Honour's thesis student (co-supervisor)
  - Position after leaving the lab: MSc Student, University of Toronto
2. Jensine Agenmonmen, Interdisciplinary School of Health Sciences (University of Ottawa), 2017-2018
  - Honour's thesis student
  - Position after leaving the lab: Medical Student, University of Limerick, Ireland
3. Jillian Larkin, Human Kinetics (University of Ottawa), 2017-2019.
  - Award: UROP, 2017
  - Honour's thesis student
  - Position after leaving the lab: MSc Student, University of Toronto
4. Jessica Lloyd, Biomedical Sciences (University of Ottawa), 2017-2019.
  - Award: UROP, 2017
  - Honour's Thesis Student
  - Position after leaving the lab: Royal College of Surgeons, Ireland
5. Naika Louis, Biotechnology (La Cité College), 2016-2017.
  - Honour's Thesis: *The importance of L-type amino acid transporter 1 in myoblasts*

6. Maxime Barrette, Human Kinetics (University of Ottawa), 2016-2017.
  - Honour's Thesis: *The expression of the L-type amino acid transporters on muscle satellite cells throughout myogenesis*
7. Adwait Nitin Sadwilkar, Molecular and Cellular Biology (University of Illinois), 2013 - 2016.
  - Award: MCB Summer Undergraduate Research Fellowship, \$2500, 05/2014-08/2014.
  - Senior Thesis: *The effect of obesity on satellite cell and fibro/adipogenic progenitor quantity and function*
  - Position after leaving lab: Research Technician, Indiana University
8. Julian Nallabelli, Molecular and Cellular Biology and Food Science and Human Nutrition (*University of Illinois*), 2013 – 2015.
  - Award: MCB Summer Undergraduate Research Fellowship, \$2500, 05/2014-08/2014.
  - Senior Thesis: *The importance of the L-Type Amino Acid Transporter 1 on Myoblasts*. Awarded with High Distinction
  - Position after leaving lab: Lab Technician, De Lisio Lab (*University of Illinois*)

**Past Undergraduate Researchers** (includes summer students, volunteers, course credit)

1. Rianna Lang, Biomedical Sciences (University of Guelph), 2019
2. Iris Du, Biomedical Sciences (McGill University), 2018.
3. Chloe Smith, Life Sciences (Queen's University), 2018-2019.
4. Malika Dargan, Undeclared (Carleton College, MN), 2017.
5. Kyla Agtarap, Biomedical Sciences (University of Ottawa), 2017.
  - Award: UROP, 2017
6. Joshua Haebe, Biomedical Sciences (University of Ottawa), 2017.
7. Celine Butcher, Human Kinetics (University of Ottawa), 2016-2017.
8. Ty Perry, Human Kinetics (University of Ottawa), 2016-2017.
9. Jacqueline Lee, Human Kinetics (University of Ottawa), 2016-2017.
  - Position after leaving lab: MSc Student, CHEO Research Institute
10. Michael Frintner, Molecular and Cellular Biology (*University of Illinois*), 2015 – 2017.
11. Shaunak Pal, Kinesiology and Community Health (*University of Illinois*), 2015 – 2017.
12. Lauren Feld, Molecular and Cellular Biology (*University of Illinois*), 2016 – 2017.
13. Jeeth Joseph, Molecular and Cellular Biology (*University of Illinois*), 2016 – 2017.
14. Thomas Topallia, Molecular and Cellular Biology (*University of Illinois*), 2016 – 2017.
15. Amanda Rhee, Molecular and Cellular Biology (*University of Illinois*), 2016 – 2017.
16. Zachary Parks, Kinesiology and Community Health (*University of Illinois*), 2016 – 2017.
17. Michael Gleason, Molecular and Cellular Biology (*University of Illinois*), 2016 – 2017.
18. Brett Nelson, Molecular and Cellular Biology (*University of Illinois*), 2013 - 2016.
19. Eric De Guevara, Molecular and Cellular Biology (*University of Illinois*), 2013 - 2015.
20. Braden Muhlstadt, Kinesiology and Community Health (*University of Illinois*), 2013 – 2015.

21. Abigail Freeman, Kinesiology and Community Health (*University of Illinois*), 2014 – 2016.
22. Analine Delgado, Kinesiology and Community Health (*University of Illinois*), 2014 – present.
23. Zak Woods, Kinesiology and Community Health (*University of Illinois*), 2015 – present.
  - Position after leaving lab: Research Technician, Northwestern University
24. Brent Olson, Kinesiology and Community Health (*University of Illinois*), 2014 – present.
25. Jessica Wrobel, Molecular and Cellular Biology (*University of Illinois*), 2015 – 2016.
26. Tomide Owolabi, Kinesiology and Community Health (*University of Illinois*), 2015 – present.
  - Award: American Physiological Society Short-Term Research Experience for Underrepresented Persons (STEP-UP) Fellowship
27. Madeline Lallanilla, Kinesiology and Community Health (*University of Illinois*), 2016 – present.
28. Ellen Rohan, Kinesiology and Community Health (*University of Illinois*), 2016 – present
29. Nicole Korp, Bioengineering (*University of Illinois*), 2015 – 2016.
  - Position after leaving lab: Undergraduate, Bioengineering (*University of Illinois*)
30. Grace Niemi, Molecular and Cellular Biology (*University of Illinois*), 2013 - present.
  - Position after leaving lab: Doctoral Student, Exercise and Stem Cell Physiology Lab (*University of Illinois*)
31. Richard Sukiennik, Kinesiology and Community Health (*University of Illinois*), 2013 - 2014.
  - Position after leaving lab: Research Assistant, Nutrition and Exercise Performance Lab (*University of Illinois*)
32. Nicole Clevenger, Molecular and Cellular Biology (*University of Illinois*), 2013 - 2014.
  - Position after leaving lab: Medical Student (*University of Illinois*)

## **TEACHING**

### **2019-2020**

- APA6303 – Quantitative research methods in sport, physical activity and health (Fall 2019, 3 credits, lecture)  
Role: Course coordinator and lecturer.
- APA4313 – Exercise and disease prevention (Fall 2019, 3 credits, lecture)  
Role: Course coordinator and lecturer.
- APA4125 – Molecular exercise physiology (Winter 2020, 3 credits, lecture)  
Role: Course creator, coordinator, and lecturer.

### **2018-2019**



- APA6303 – Quantitative research methods in sport, physical activity and health (Fall 2018, 3 credits, lecture)  
Role: Course coordinator and lecturer.
- APA4313 – Exercise and disease prevention (Fall 2018, 3 credits, lecture)  
Role: Course coordinator and lecturer.
- APA4125 – Molecular exercise physiology (Winter 2019, 3 credits, lecture)  
Role: Course creator, coordinator, and lecturer.
- APA4900 – Directed Studies in Human Kinetics (Winter 2019, 3 credits, research)  
Role: Supervisor
- CMM8340 – Neuromuscular function and dysfunction (Winter 2019, 3 credits, lecture/discussion)  
Role: Guest Lecture: *“Exercise and its role in maintaining the satellite cell niche”*
- HSS5903 – Master’s Seminar (Winter 2019, 1.5 credits, lecture/discussion)  
Role: Guest Lecturer *“Exercise and the stem cell niche”*
- HSS4342 – Research Approaches in Health Biosciences (Winter 2019, 3 credits, lecture/discussion)  
Role: Guest Lecturer *“Research approaches in molecular exercise physiology”*

### **2017-2018**

- APA6924 – Seminar: Interdisciplinary community-based research (Winter 2018, 1.5 credits, lecture)  
Role: Course coordinator and lecturer.
- APA6303 – Quantitative research methods in sport, physical activity and health (Fall 2017, 3 credits, lecture)  
Role: Course coordinator and lecturer.
- APA4313 – Exercise and disease prevention (Fall 2017, 3 credits, lecture)  
Role: Course coordinator and lecturer.
- HSS3332 – Technology and Health (Winter 2018, 3 credits, lecture)  
Role: Guest Lecturer *“Tissue-Related Technologies”*
- APA6901 – Selected topics in sport, physical activity and health: physiological studies (Fall 2017, 3 credits, lecture)  
Role: Guest Lecturer *“Exercise and Stem Cells”*

- APA6923 – Seminar: Interdisciplinary community-based research (Fall 2016, 1.5 credits, lecture)  
Role: Panel Guest “Interdisciplinary Research”

### **2016-2017**

- APA6924 – Seminar: Interdisciplinary community-based research (Winter 2018, 1.5 credits, lecture)  
Role: Course coordinator and lecturer.
- APA4313 – Exercise and disease prevention (Fall 2017, 3 credits, lecture)  
Role: Course coordinator and lecturer.
- APA6923 – Seminar: Interdisciplinary community-based research (Fall 2016, 1.5 credits, lecture)  
Role: Panel Guest “Interdisciplinary Research”

### **2015-2016**

- \*KIN450 – Biochemistry of exercise (Winter 2016, 3-4 credits, lecture)  
Role: Course coordinator and lecturer.
- \*KIN352 – Bioenergetics of human movement (Fall 2015, 3 credits, lecture and lab)  
Role: Course coordinator and lecturer.
- \*KIN451 – Skeletal muscle physiology (Fall 2015, 3-4 credits, lecture)  
Role: Course coordinator and lecturer.

### **2014-2015**

- \*KIN352 – Bioenergetics of human movement (Fall 2014, 3 credits, lecture and lab)  
Role: Course coordinator and lecturer.
- \*†KIN451 – Skeletal muscle physiology (Fall 2014, 3-4 credits, lecture)  
Role: Course coordinator and lecturer.
- KIN565 – Teaching in the Professoriate (Fall 2014, 4 credits, lecture)  
Role: Faculty Mentor to Z. Mahmassani and J. Allen.

### **2013-2014**

- \*KIN494 – Special topics: Exercise and chronic disease (Winter 2014, 3-4 credits, lecture)  
Role: Course coordinator and lecturer.
- \*KIN451 – Skeletal muscle physiology (Fall 2013, 3-4 credits, lecture)  
Role: Course coordinator and lecturer.

- KIN565 – Teaching in the Professoriate (Fall 2014, 4 credits, lecture)  
Role: Faculty Mentor to R. Emmons.

### **2012-2013**

- \*KIN451 – Skeletal muscle physiology (Winter 2013, 3-4 credits, lecture)  
Role: Course coordinator and lecturer.
- KIN150 – Bioscience of Human Movement (Fall 2012, 3 credits, lecture/lab)  
Role: Guest Lecture

\*List of Teachers Ranked as Excellent, †Rated as Outstanding

### **2010**

- BHSc 203 – Anatomy and Physiology, McMaster University (Fall 2010)  
Role: Guest Lecture

### **2006-2010**

Graduate Teaching Assistant:

- KIN 1A03 Human Anatomy and Physiology
- KIN 2C06 Physiology of Exercise
- KIN 2H03 History and Philosophy of Kinesiology
- KIN 2C03 Neuromuscular Exercise Physiology
- KIN 2CC3 Cardiorespiratory & Metabolic Exercise Physiology
- KIN 3K03 An Introduction to Sports Injuries

## **ACADEMIC SERVICE** (Discipline)

### ***Membership in Professional Associations***

- Canadian Society for Exercise Physiology (2009 – present)
- American College of Sports Medicine (2012 – present)
- American Physiological Society (2012 – present)
- International Society for Exercise Immunology (2017 – present)
- Ontario Institute for Regenerative Medicine (2018 – present)
- Bone Marrow Adipose Tissue Society (2019 – present)

### ***Offices Held in Professional Societies***

- Member, Membership Services Committee, Canadian Society for Exercise Physiology (2016 – present)

### ***Editor for Scientific Journals and Scholarly Works***

- Editorial Board Member, Scientific Reports

### ***Reviewer for Scientific Journals and Scholarly Works***

2018-2019 (6 as of Aug 2018):

- Applied Physiology, Nutrition, and Metabolism
- Journal of Gerontology: Biological Sciences
- Journal of Physiology
- Stem Cell Research and Therapy (2)
- The Routledge Handbook on Biochemistry of Exercise

*2017-2018 (Total: 23):*

- Acta Physiologica
- American Journal of Physiology – Cell Physiology
- American Journal of Physiology – Heart and Circulatory Physiology
- Applied Physiology, Nutrition, and Metabolism
- BMC Genomics
- Brazilian Journal of Medical and Biological Research
- Cell Physiology and Biochemistry (2)
- Journal of Cachexia, Sarcopenia and Muscle (3)
- Journal of Physiology
- Medicine & Science in Sports & Exercise (2)
- Molecular Neurobiology
- Muscle and Nerve
- Physiological Reports
- Physiology & Behavior
- Stem Cell Research and Therapy (4)
- Touch Oncology

*2016-2017 (Total: 20):*

- Applied Physiology, Nutrition & Metabolism (2)
- Bentham Science Publishers (Book Chapter)
- Brain, Behaviour, and Immunity
- Cell & Tissue Research
- Exercise & Sports Science Reviews (2)
- Frontiers in Stem Cell and Regenerative Medicine Research
- International Journal of Sports Medicine
- Journal of Applied Physiology (2)
- Journal of Cachexia, Sarcopenia and Muscle (2)
- Journal of Diabetes
- Journal of Visualized Experiments
- Medicine & Science in Sports & Exercise (2)
- Oncotarget
- Stem Cell Research & Therapy (2)

*2015-2016 (Total: 7):*

- Applied Physiology, Nutrition & Metabolism (2)
- Brain, Behaviour, and Immunity
- Cellular & Molecular Biology Letters

- Exercise & Sports Science Reviews
- Journal of Applied Physiology
- Journal of Cachexia, Sarcopenia and Muscle

*2014-2015 (Total: 4):*

- Applied Physiology, Nutrition & Metabolism
- Brain, Behaviour, and Immunity
- Journal of Applied Physiology
- Journal of Cachexia, Sarcopenia and Muscle

*2013-2014 (Total: 1):*

- Translational Research

### ***Reviewer for Funding Agencies***

- Canadian Society for Exercise Physiology Seed Grants (Panel Member: 2018-2019)
- Swiss National Science Foundation (Ad hoc, 2019)
- American Institute for Cancer Research, USA (Panel Member, 2018)
- Leibniz Foundation, Germany (Ad hoc, 2018, 2019)
- Canadian Foundation for Innovation, Canada (Ad hoc, 2017)
- National Institute for Agricultural Research, France (Ad hoc, 2017)
- National Science and Engineering Research Council, Canada (Ad hoc, 2016)
- Nebraska Research Institute, USA (Ad hoc, 2015)

### ***Reviewer for Conference Abstracts and Presentations***

- Canadian Society of Exercise Physiology Student Travel Awards (Panel Member, 2018)
- Ottawa Centre on Neuromuscular Disease Trainee Short Talk Selection (Panel Member, 2017)
- Doctoral Student Award, Muscle Health Research Day, York University (Ad hoc, 2017)
- Ontario Exercise Physiology Graduate Student Award (Ad hoc, 2017)
- Oral Presentation Judge, Nutrition Symposium, Division of Nutritional Sciences, *University of Illinois* (2016)
- Poster Presentation Judge, Nutrition Symposium, Division of Nutritional Sciences, *University of Illinois* (2015)

### ***Organized Conferences***

- Pediatric Exercise Medicine Conference, Children's Hospital of Eastern Ontario and University of Ottawa Human Kinetics Partnership, Ottawa, ON, 2018 (Co-Organizer)

### ***Organized Conference Symposia***

*2018:*

- Satellite cells and their role in the hypertrophic and atrophic processes, American College of Sports Medicine Annual Meeting, Minnesota, MN (Co-Chair)

2016:

- Exercise and stem cells: thinking beyond skeletal muscle, American College of Sports Medicine Annual Meeting, Boston, MA (Chair)

### **Chaired Conference Symposia**

2019:

- Motor Neuronopathies/Mitochondrial Disorders, Ottawa Neuromuscular Disease Conference, Ottawa, ON (Chair)

### **Public Engagement and Media**

- Host: High School Lab Overview and Tour (2019).
- Guest Speaker: *“Exercise is Regenerative Medicine”*. Stem Cell Talks Ottawa. (04/2019).
- Guest Speaker: *“Exercise is Regenerative Medicine”*. Canadian Association for Research in Regenerative Medicine, Ottawa Chapter. (03/2019).
- Guest: *CTV Morning Live*, (07/2018)
- Guest Speaker: *“Exercise and Stem Cells”*. Canadian Society of Exercise Physiology Professional Development Day, Ottawa, ON (03/2018)
- Guest: *Research in Exercise and Cancer Health (REACH) Podcast*, (10/2017)
- Cancer Research Advocacy Group, University of Illinois at Urbana-Champaign (2016)
- Synapse Mentorship Program, Canadian Institute for Health Research (2009-2012)
- Venture Camp, McMaster University (2011)
- Research in Exercise and Cancer Health (REACH) Podcast (10/2017)

## **ACADEMIC SERVICE** (Campus)

### **Faculty of Health Sciences, University of Ottawa**

- Faculty task force for revision of graduate course offerings
- Guest speaker, Shared Research Platform Committee (2018.08.13)

### **School of Human Kinetics, University of Ottawa**

- School Council (2017-present)

### **College of Applied Health Sciences, University of Illinois**

- Educational Policy Committee (2015-2017)

### **Department of Kinesiology and Community Health, University of Illinois**

- Faculty Search Committee Member, Cancer Survivorship (2014)
- Ad Hoc Committee to Establish Guidelines for Specialized Faculty Promotion and Tenure (2015)

### **University of Illinois Campus**

- Division of Nutritional Sciences, Fellowship Committee Member (2014-2017)

### **Department of Kinesiology, McMaster University**

- Kinesiology Graduate Body (all elected):
  - Treasurer, 2010-2011
  - Secretary (2009-2010)
  - President (2008-2009)
  - Heimbecker Cup Representative (2007-2008).
- Graduate Student Representative (all appointed):
  - Department Council (2008-2009)
  - Graduate Curriculum & Policy Committee (2008-2009)
  - Learning Management Systems Transition Committee (2008-2009)