

CURRICULUM VITAE

Sean Michael Myles

Date of birth: 15 March 1978

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www.cultivatingdiversity.org

Employment

- Founder and CEO, Foodimprover Inc. (January 2022 – present)
- Founder, Owner and Operator, growNSdrinks Analytics (June 2020 – present)
- Associate Professor, Faculty of Agriculture, Dalhousie University (July 2016 – present)
- Research Professorship, Faculty of Agriculture, Dalhousie University (July 2016 – June 2021)
- Canada Research Chair in Agricultural Genetic Diversity (July 2011 – June 2016)
- Founder, Owner and Operator, Annapolis Cider Company (April 2016 – June 2021)
- Assistant Professor, Department of Plant and Animal Sciences, Faculty of Agriculture, Dalhousie University (July 2011 – present)
- Postdoctoral researcher, Department of Genetics, Stanford School of Medicine, Stanford University (August 2010 – June 2011; Advisor: Carlos D Bustamante)
- Postdoctoral researcher at the Institute for Genomic Diversity, Cornell University (Jan 2008 – July 2010; Advisor: Ed Buckler)

Education

- PhD in Genetics, Department of Evolutionary Genetics, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany (Jan 2004 - Dec 2007; Advisor: Mark Stoneking)
- 1-year of graduate studies in Evolutionary Psychology, Department of Psychology, McMaster University, Canada (Sept 2002 – Aug 2003; Advisors: Martin Daly and Margo Wilson)
- Masters of Science in Human Biology, Institute of Biological Anthropology, University of Oxford, UK (Oct 2001 - Oct 2002; Advisor: Ryk Ward)
- Bachelor of Arts with distinction (Major in English), Saint Thomas University, Fredericton, Canada (May 2000)

Grants & Awards

1. Dalhousie University Research & Innovation International Seed Fund (\$5,000) - Advancing CRISPR genome editing in apples – PI (2022)
2. PacBio SMRT award (\$100,000) – Sequencing 10 apple genomes – PI (2021)
3. DFA travel grant (\$3,730) – Faculty of Agriculture, Dalhousie University (2021) - declined
4. MITACS Accelerate grant (\$15,000) - Discovering causal variants controlling ripening period, phenolic content and softening during storage in apple – PI (2021)
5. Innovacorp SPARK competition (\$50,000) – Startup funding for ag biotech spinoff company – PI (2021)
6. Experienced Research Excellence Award (\$1000) – Faculty of Agriculture, Dalhousie University (2020)
7. DFA travel grant (\$2,000) – Faculty of Agriculture, Dalhousie University – PI (2019)
8. Outstanding Graduate Supervision Award (\$1000) – Faculty of Agriculture, Dalhousie University (2019)
9. AAFC A-Base Funding (\$462,550) – ‘Omics’ approach to improve attributes of apple fruit – Participant (2019)
10. DFA travel grant (\$2,000) – Faculty of Agriculture, Dalhousie University – PI (2018)
11. NSERC Discovery (\$210,000) – The Genetic Basis of Apple Quality – PI (2018-2023)
12. NSF (\$511,170) – Adapting Perennial Crops for Climate Change: Graft Transmissible Effects of Rootstocks on Grapevine Shoots – Sub-Award Recipient (2017-2022)
13. DFA travel grant (\$1,400) – Faculty of Agriculture, Dalhousie University – PI (2017)
14. AAFC A-Base Funding (\$540,547) – Improving and maintaining market oriented fruit attributes for high market value of apple products – Participant (2016)

15. MITACS Accelerate (\$45,000) – Accelerating grain hemp improvement with genomics – PI (2016)
16. NSERC Engage (\$25,000) – Towards genomics-assisted breeding of medical marijuana – PI (2016)
17. DFA travel grant (\$4,000) – Faculty of Agriculture, Dalhousie University – PI (2015)
18. NSERC Engage (\$20,000) – Breeding disease resistant hops for the craft beer industry – PI (2015)
19. Strategic Research Initiative Fund (\$200,000) – Dalhousie University – Co-PI (2015-2017)
20. Canada Foundation for Innovation (\$18,208) – Infrastructure Operating Fund – PI (2014–2019)
21. NSERC Engage (\$25,000) - Exploiting next-generation genomics in aquaculture – PI (2014)
22. Productivity and Innovation Voucher, Economic and Rural Development and Tourism Nova Scotia (\$15,000) – Optimization of grape seed germination protocols – PI (2014)
23. Genome Canada (\$250,000) – Exploiting the full potential of next-generation DNA sequencing for crop improvement – PI (2013–2015)
24. Agriculture and Agri-Food Canada (\$286,000) – Identification of control mechanisms and molecular markers for apple fruit storage disorders: an integrated “omics” approach (2013–2016) - Collaborator
25. Genome British Columbia (\$585,638) - Sequencing and comparative genome mapping of Chardonnay grapevine clones (2011-2013) - Participant
26. Canadian Agricultural Adaptation Program, Agriculture and Agri-Food Canada (\$47,000) - Genetic analysis of mink populations differing in response to infection by the Aleutian mink disease virus (2012-2013) – co-PI
27. Technology and Development Grant, Nova Scotia Department of Agriculture (\$22,000) – Marker-assisted breeding of a novel ice wine grape (2012-2013) - PI
28. NSERC Discovery Grant (\$200,000) – Genome to phenome mapping and marker-assisted breeding in apples (2012–2018) - PI
29. Nova Scotia Department of the Environment (\$43,000) – Apple adaptation to climate change (2012-2013) – PI
30. Agriculture Canada, Growing Canadian Agri-Innovations Program, Canadian AgriScience Cluster for Horticulture (\$243,700) - Identifying genetic markers to enhance apple breeding in Canada (2011-2013) - PI
31. Technology and Development Grant, Nova Scotia Department of Agriculture (\$40,000) - Development of novel wine grapes through marker-assisted breeding (2011-2013) - PI
32. Technology and Development Grant, Nova Scotia Department of Agriculture (\$40,000) - Marker-assisted breeding in apples (2011-2013) - PI
33. Canada Research Chair in Agricultural Genetic Diversity (\$500,000) – Salary and research over 5 years (2011-2016) - PI
34. Canada Foundation for Innovation Leaders Opportunity Fund (\$150,000) – Equipment grant (2011) - PI
35. United States Department of Agriculture Specialty Crops Research Initiative (\$4,600,000) - Accelerating grape cultivar improvement via phenotyping centers and next generation markers (2011-2016) - Collaborator
36. National Science Foundation (NSF) Grape Research Coordination Network Fellowship (\$10,000) - Detecting selective sweeps and novel genotype-phenotype relationships in *Vitis vinifera* (2010-2011)
37. Center for Comparative and Population Genomics Postdoctoral Fellow (full salary & travel allowance), Cornell University, USA (2010) - offer declined for position at Stanford
38. National Science Foundation (NSF) Grape Research Coordination Network Fellowship (\$7000) - Quantifying gene expression variation in different tissues of *Vitis vinifera* (2009-2010)
39. Wenner-Gren Foundation for Anthropological Research Post-PhD Research Grant (\$10,550) - Uncovering the Genetic Basis of Blond Hair in Melanesia (2008)
40. PhD Scholarship, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany (2004 – 2007)
41. DAAD (German Foreign Academic Exchange Service) 6-month graduate scholarship for study at the Max Planck Institute in Leipzig, Germany (Jan – July 2004)

Publications (lab members underlined)

1. Soomro T, Watts S, Migicovsky Z, **Myles S** (2021) Quantifying the differences between cider and dessert apples. *PLoS ONE* (in preparation)
2. Davies T, Watts S, McClure K, Migicovsky Z, **Myles S** (2021) Phenotypic divergence between the cultivated apple (*Malus domestica*) and its primary wild progenitor (*Malus sieversii*). *PLoS ONE* (in press)
3. Watts S, McElroy M, Migicovsky Z, Maassen H, van Velzen R, **Myles S** (2021) *Cannabis* labelling is associated with genetic variation in terpene synthase genes. *Nature Plants* 7:1330–1334
4. Watts S, Migicovsky Z, McClure K, Yu C, Amyotte B, Baker T, Bowlby D, Burgher-MacLellan K, Butler L, Donald RG, Fan L, Fillmore S, Flewelling J, Gardner K, Hodges M, Hughes T, Jagadeesan V, Lewis N, MacDonell E, MacVicar L, McElroy M, Money D, O’Hara M, Ong Q, Vinqvist-Tymchuk M, Rupasinghe HPV, DeLong JM, Forney CF, Song J, **Myles S** (2021) Quantifying apple diversity: a phenomic characterization of Canada’s Apple Biodiversity Collection. *People, Plants, Planet* 00:1-14
5. Migicovsky Z, Yeats TH, Watts S, Song J, Forney CF, Burgher-MacLellan K, Somers DJ, Vrebalov J, van Velzen R, Giovannoni JG, Rose JKC, **Myles S** (2021) Apple ripening is controlled by a NAC transcription factor. *Frontiers in Genetics* 12:671300
6. Migicovsky Z, Gardner KM, Richards C, Chao CT, Schwaninger HR, Fazio G, Zhong GY, **Myles S** (2021) Genomic consequences of apple improvement. *Horticulture Research* 8:9
7. Migicovsky Z, Cousins P, Jordan LM, **Myles S**, Striegler RK, Verdegaal P, Chitwood DH (2021) Grapevine rootstocks affect growth-related scion phenotypes. *Plant Direct* 5:e00324
8. Karimi K, Farid AH, Sargolzaei M, **Myles S**, Miar Y (2020) Linkage Disequilibrium, Effective Population Size and Genomic Inbreeding Rates in American Mink using Genotyping-by-Sequencing Data. *Frontiers in Genetics* 11:223
9. Karimi K, Farid AH, Sargolzaei M, **Myles S**, Miar Y (2019) Genome-wide estimation of linkage disequilibrium using American mink genotyping-by-sequencing data. *Journal of Animal Science* 97:267-267
10. McClure KA, Gong YH, Song J, Vinqvist-Tymchuk M, Campbell Palmer L, Fan L, Burgher-MacLellan K, Zhang ZQ, Celton J-M, Forney CF, Migicovsky Z, **Myles S** (2019) Genome-wide association studies in apple reveal loci of large effect controlling apple polyphenols. *Horticulture Research* 6:107
11. Larsen B, Migicovsky Z, Jeppesen AA, Gardner KM, Toldam-Andersen TB, **Myles S**, Ørgaard M, Petersen MA, Pedersen C (2019) Genome-Wide Association Studies in Apple Reveal Loci for Aroma Volatiles, Sugar Composition and Harvest Date. *The Plant Genome* 12(2):1
12. Peace CP, Bianco L, Troglio M, van de Weg E, Howard NP, Cornille A, Durel C-E, **Myles S**, Migicovsky Z, Schaffer RJ, Costes E, Fazio G, Yamane H, van Nocker S, Gottschalk C, Costa F, Chagné D, Zhang X, Patocchi A, Gardiner SE, Hardner C, Kumar S, Laurens F, Bucher E, Main D, Jung S, Vanderzande S (2019) Apple whole genome sequences: recent advances and new prospects. *Horticulture Research* 6:59
13. Larsen B, Gardner K, Pedersen C, Ørgaard M, Migicovsky Z, **Myles S**, Toldam-Andersen TB (2018) Population structure, relatedness and ploidy levels in an apple gene bank revealed through genotyping-by-sequencing *PLoS ONE* 13(8): e0201889
14. Li M, An H, Angelovici R, Bagaza C, Batushansky A, Clark L, Coneva V, Donoghue M, Edwards E, Fajardo E, Fang H, Frank M, Gallaher T, Gebken S, Hill TA, Jansky S, Kaur B, Klahs P, Klein LL, Kuraparthi V, Londo J, Migicovsky Z, Miller A, Mohn R, **Myles S**, Otoni W, Pires JC, Rieffer E, Schmerler S, Spriggs E, Topp CN, Van Deynze A, Zhang K, Zhu L, Zink B, Chitwood DH (2018) Topological data analysis as a morphometric method: using persistent homology to demarcate a leaf morphospace. *Frontiers in Plant Science* 9:553
15. McElroy M, Romero Navarro JA, Mustiga GM, Stack JC, Gezan S, Penha G, Sarabia W, Saquicela D, Sotomayor I, Douglas G, Migicovsky Z, Amores F, **Myles S**, Motamayor Arias JC (2018) Prediction of Cacao (*Theobroma cacao*) Resistance to *Moniliophthora* spp. Diseases via Genome-Wide Association Analysis and Genomic Selection. *Frontiers in Plant Science* 9:343

16. Migicovsky Z, Li M, Chitwood DH, **Myles S** (2018) Morphometrics Reveals Complex and Heritable Apple Leaf Shapes. *Frontiers in Plant Science* 8:2185
17. McClure KA, Gardner KM, Douglas G, Toivonen PMA, Hampson CR, Somers DJ, Song J, Forney CF, DeLong J, Rajcan I, **Myles S** (2018) A Genome-Wide Association Study of Apple Quality and Scab Resistance. *Plant Genome* 11:170075
18. Migicovsky Z, Sawler J, Gardner KM, Aradhya MK, Prins B, Schwaninger H, Bustamante CD, Buckler ES, Zhong GY, Brown PJ, **Myles S** (2017) Patterns of genomic and phenomic diversity in wine and table grapes. *Horticulture Research* 4:17035
19. Money D, Migicovsky Z, Gardner KM, **Myles S** (2017) LinkImputeR: a tool for maximizing the utility of genotype imputation. *BMC Genomics* 18:523
20. Migicovsky Z, **Myles S** (2017) Exploiting wild relatives for genomics-assisted breeding of perennial crops. *Frontiers in Plant Science* 8:460
21. McClure KA, Gardner KM, Toivonen PMA, Hampson CR, Song J, Forney CF, DeLong J, Rajcan I, **Myles S** (2016) QTL Analysis of Soft Scald in Two Apple (*Malus x domestica*) Populations. *Horticulture Research* 3:16043
22. Migicovsky Z, Sawler J, Money D, Eibach R, Miller AJ, Luby JJ, Wührer W, Warner J, von Kintzel S, Schwaninger H, Zhong GY, Brown PJ, **Myles S** (2016) Genomic ancestry estimation in commercial grape cultivars. *BMC Genomics* 17:478
23. Migicovsky Z, Gardner KM, Sawler J, Money D, Bloom JS, Zhong GY, **Myles S** (2016) Genome to phenome mapping in apple using historical data. *The Plant Genome* 9:1-15
24. Goto-Yamamoto N, Sawler J, **Myles S** (2015) Genetic analysis of East Asian grape cultivars suggests hybridization with wild Vitis. *PLoS ONE* 10:e0140841
25. Sawler J, Stout JM, Gardner KM, Hudson D, Vidmar J, Butler L, Page JE, **Myles S** (2015) The genetic structure of marijuana and hemp. *PLoS ONE* 10:e0133292
26. Money D, Gardner KM, Schwaninger H, Zhong GY, **Myles S** (2015) LinkImpute – fast and accurate genotype imputation for non-model organisms. *G3: Genes, Genomes, Genetics* 5:2383
27. **Myles S**, Mahanil S, Harriman J, Gardner KM, Franklin JL, Reisch BI, Ramming DW, Owens CL, Li L, Buckler ES, Cadle-Davidson L (2015) Genetic mapping in grapevine using SNP microarray intensity values. *Molecular Breeding* 34:88
28. McClure K, Sawler J, Gardner K, Money D, **Myles S** (2014) Genomics: a potential panacea for the perennial problem. *American Journal of Botany* 101:1597
29. Gardner KM, Brown P, Cooke TF, Cann S, Costa F, Bustamante C, Velasco R, Troglio M, **Myles S** (2014) Fast and cost-effective genetic mapping in apple using next-generation sequencing. *G3: Genes, Genomes, Genetics* 4:1681-7
30. Chitwood DH, Ranjan A, Martinez CC, Headland LR, Thiem T, Kumar R, Covington MF, Hatcher T, Naylor DT, Zimmerman S, Downs N, Raymundo N, Buckler ES, Maloof JN, Aradhya M, Prins B, Li L, **Myles S**, Sinha NR (2014) A modern ampelography: a genetic basis for leaf shape and venation patterning in *Vitis vinifera*. *Plant Physiology* 164:259
31. Miller AJ, Matasci N, Aradhya MK, Prins B, Zhong GY, Schwaninger H, Simon C, Buckler ES, **Myles S** (2013) Vitis phylogenomics: hybridization intensities from a SNP array outperform genotype calls. *PLoS ONE* 8:e78680
32. Sawler J, Reisch BI, Aradhya MK, Prins BH, Zhong GY, Schwaninger H, Simon C, Buckler ES, **Myles S** (2013) Genomics assisted ancestry deconvolution in grape. *PLoS ONE* 8:e80791
33. McCouch S, Baute GJ, Bradeen J, Bramel P, Bretting PK, Buckler E, Burke JM, Charest D, Cloutier S, Cole G, Dempewolf H, Dingkuhn M, Feuillet C, Gepts P, Grattapaglia D, Guarino L, Jackson S, Knapp S, Langridge P, Lawton-Rauh A, Lijua Q, Lusty C, Michael T, **Myles S**, Naito K, Nelson RL, Pontarollo R, Richards CM, Rieseberg L, Ross-Ibarra J, Rounsley S, Hamilton RS, Schurr U, Stein N, Tomooka N, van der Knaap E, van Tassel D, Toll J, Valls J, Varshney RK, Ward J, Waugh R, Wenzl P, Zamir D (2013) Agriculture: Feeding the future. *Nature* 499:23
34. Emanuelli F, Lorenzi S, Grzeskowiak L, Catalano V, Stefanini M, Troglio M, **Myles S**, Martinez-Zapater JM, Zyprian E, Moreira FM, Grando MS (2013) Genetic diversity and population structure assessed by SSR and SNP markers in a large germplasm collection of grape. *BMC Plant Biology* 13:39

35. **Myles S** (2013) Improving fruit and wine: what does genomics have to offer? *Trends in Genetics* 29:190
36. Kenny E, Timpson N, Sikora M, Yee MC, Moreno-Estrada A, Eng C, Huntsman S, Gonzalez Buchard E, Stoneking M, Bustamante CD, **Myles S** (2012) Melanesian Blond Hair Is Caused by an Amino Acid Change in TYRP1. *Science* 336:554
37. Mahanil S, Ramming D, Cadle-Davidson M, Owens C, Garris A, **Myles S**, Cadle-Davidson L (2012) Development of marker sets useful in the early selection of *Ren4* powdery mildew penetration resistance and seedlessness for table and raisin grape breeding. *Theoretical and Applied Genetics* 124:23
38. Delfin F*, **Myles S***, Hughes D, Illek R, Pakendorf B, Choi Y, van Oven M, Kayser M, Stoneking M (2012) Bridging Near and Remote Oceania: MtDNA and NRY Variation in the Solomon Islands. *Molecular Biology and Evolution* 29:545 ***contributed equally**
39. Brown PJ, Upadyayula N, Mahone G, Tian F, Bradbury PJ, **Myles S**, Holland JB, McMullen MD, Buckler ES, Rocheford TR (2011) Distinct Genetic Architectures for Male and Female Inflorescence Traits of Maize. *PLoS Genetics* 7:e1002383
40. **Myles S**, Lea R, Ohashi J, Chambers G, Weiss J, Hardouin E, Engelken J, Macartney-Coxson D, Eccles D, Naka I, Kimura R, Inaoka T, Matsumura Y, Stoneking M (2011) Testing the thrifty gene hypothesis: the Gly482Ser variant in PPARGC1A is associated with BMI in Tongans. *BMC Medical Genetics* 12:10
41. Gunnarsdóttir ED, Nandineni MR, Li M, **Myles S**, Gil D, Pakendorf B, Stoneking M (2011) Larger mtDNA than Y-chromosome differences between matrilineal and patrilineal groups from Sumatra. *Nature Communications* 2:228
42. **Myles S**, Boyko AR, Brown PJ, Grassi F, Owens CL, Aradhya M, Prins B, Reynolds A, Chia JM, Ware D, Bustamante CD, Buckler ES (2011) Genetic Structure and Domestication History of the Grape. *PNAS* 108:3530
43. Delfin F, Salvador JM, Calacal GC, Perdigon HB, Tabbada KA, Villamor LP, Halos SC, Gunnarsdóttir E, **Myles S**, Hughes DA, Xu S, Jin L, Lao O, Kayser M, Hurles ME, Stoneking M, De Ungria MCA (2011) The Y-chromosome landscape of the Philippines: extensive heterogeneity and varying genetic affinities of Negrito and non-Negrito groups. *European Journal of Human Genetics* 19:224
44. Brown PJ, **Myles S**, Kresovich S (2011) Genetic support for phenotype-based racial classification in sorghum. *Crop Science* 51:1-7
45. **Myles S**, Chia J-M, Hurwitz B, Simon C, Zhong GY, Buckler E, Ware D (2010) Rapid Genomic Characterization of the Genus *Vitis*. *PLoS ONE* 5:e8219
46. Laland K, Odling-Smee J, **Myles S** (2010) How culture shaped the human genome: bringing genetics and the human sciences together. *Nature Reviews Genetics* 11:137
47. **Myles S**, Peiffer J, Brown PJ, Ersoz ES, Zhang Z, Costich DE, Buckler ES. (2009) Association Mapping: Critical Considerations Shift from Genotyping to Experimental Design. *Plant Cell* 21:2194
48. **Myles S**, Stoneking M, Timpson N (2009) An assessment of the portability of ancestry informative markers between human populations. *BMC Medical Genomics* 2:45
49. Silander K, Tang H, **Myles S**, Jakkula E, Timpson N, Cavalli-Sforza L, Peltonen L. (2009) Worldwide patterns of haplotype diversity at 9p21.3, a locus associated with type 2 diabetes and coronary heart disease. *Genome Medicine* 1:51
50. Hillmer AM, Freudenberg J, **Myles S**, Herms S, Tang K, Brockschmidt FF, Ruan Y, Stoneking M, Nöthen MM. (2009) Signature of recent positive selection at the human androgen receptor locus and its relationship to the susceptibility variants for male pattern baldness. *Human Genetics* 126:255
51. Bryk J, Harouin E, Pugach I, Hughes D, Strotmann R, Stoneking M, **Myles S**. (2008) Positive selection in East Asians for an EDAR allele that enhances NF-κB activation. *PLoS ONE* 3:e2209
52. **Myles S**, Davison D, Barrett J, Stoneking M, Timpson N. (2008) Worldwide population differentiation at disease-associated SNPs. *BMC Medical Genomics* 1:22

53. **Myles S**, Tang K, Somel M, Kelso J, Stoneking M. (2008) Identification and analysis of high Fst regions from genome-wide SNP data from three human populations. *Annals of Human Genetics* 72:99
54. **Myles S**, Hughes D, Stoneking M. (2008) Detecting local selection in humans. In Santos C, Lima M (eds) *Recent Advances in Molecular Biology and Evolution: Applications to Biological Anthropology*
55. Meyer M, Stenzel U, Pruefer K, **Myles S**, Hofreiter M. (2007) Targeted high-throughput sequencing of tagged nucleic acid samples. *Nucleic Acids Research* 35:e97
56. **Myles S**, Hradetzky E, Engelken J, Lao O, Nürnberg P, Trent R, Kayser M, Stoneking M. (2007) Identification of a candidate genetic variant for the high prevalence of type II diabetes in Polynesians. *European Journal of Human Genetics* 15:584-589
57. **Myles S**, Somel M, Tang K, Kelso J, Stoneking M. (2007) Identifying genes underlying skin pigmentation differences among human populations. *Human Genetics* 120:613
58. **Myles S**, Bouzekri N, Haverfield E, Cherkaoui M, Dugoujon JM, Ward R (2005) Genetic evidence in support of a shared European-North African dairying origin. *Human Genetics* 117:34
59. Dukas R, Morse DH, and **Myles S**. (2005) Experience levels of individuals in natural bee populations and their ecological implications. *Canadian Journal of Zoology* 83:492

Patents

- 2015 Sawler J, Myles S “Methods and Compositions for Cannabis Characterization”. (US Patent: CA2989194A1)

Invited Talks

1. Probus Canada, New Minas, Nova Scotia (2021) *The past and future of apples*
2. Rotary Club of Kentville, Nova Scotia (2020) *The benefits of stretching outside of your comfort zone*
3. Cornell University Horticulture Seminar (2020) *Genomic consequences of apple improvement*
4. 7th International Horticulture Research Congress, Shaanxi, China (2020) *Genomic consequences of apple improvement*
5. Canadian National Apple Breeding Consortium, Summerland, Canada (2019) *A national strategy to improve apples*
6. KRDC seminar series, Kentville, Canada (2019) *Canada's Apple Biodiversity Collection: genetic mapping for apple improvement*
7. Convocation Address, Faculty of Agriculture Convocation Ceremony, Truro, Canada (2019)
8. 6th International Horticulture Research Conference, Venice, Italy (2019) *How to build a better apple using genomics*
9. Genomics Forum 2019, Vancouver, Canada (2019) *Cannabis: Cultivating Knowledge, Growing Innovation*
10. Disrupt Conference, Acadia University, Wolfville, Canada (2019) *How to build a side hustle: entrepreneurship via career disruption*
11. Plant Breeding Center, UC Davis, California, USA (2018) *Genomic insights into Cannabis, Wine and Cider*
12. Cannacon, Seattle, USA (2018) *Genetic insights into Cannabis diversity*
13. 4th International Horticulture Research Conference, East Malling, UK (2017) *Genetic mapping in long-lived perennials: lessons from apples and grapes*
14. Genomics and Agriculture Conference, Mount Allison University, Sackville, NB, Canada (2017) *Genomics and the future of apple, grape and cannabis breeding*
15. UC Davis Plant Breeding Symposium Keynote Speaker, UC Davis, USA (2017) *Genetic mapping in long-lived perennials: lessons from apples and grapes*
16. Canadian National Apple Breeding Framework Meeting, Toronto, Canada (2017) *What does genomics have to offer apple breeding?*
17. Department of Biochemistry and Molecular Biology, Dalhousie University, Halifax, Canada (2017) *Genomic insights into cannabis, wine and cider*

18. Nova Scotia Community College Keynote Speaker, Kentville, Canada (2017) *The value of value-added agriculture in Nova Scotia*
19. Royal Agricultural Fair, Toronto, Canada (2016) *My passion for food*
20. Atlantic Rhododendron and Horticulture Society, Halifax, Canada (2016) *Food improvement: a tour of the modern breeder's toolkit*
21. Grape Growers Association of Nova Scotia Annual General Meeting, Kentville, Canada (2016) *Genomics-assisted ancestry estimation in commercial grape hybrids from around the world*
22. Annapolis Valley Vintners Association, Wolfville, Canada (2016) *Ancestry of wine grapes inferred through genomics*
23. Canadian Horticultural Council Annual General Meeting, Ottawa, Canada (2016) *A unified plan for a genomics-assisted Canadian apple breeding programme*
24. Genomics on the Hill, Genome Canada, Ottawa, Canada (2016) *Accelerating grape improvement in Nova Scotia*
25. FarmTech, Edmonton, Canada (2016) *The modern breeders toolkit*
26. Science Atlantic Conference, Moncton, Canada (2015) *Accelerating food improvement with genomics*
27. GrowCanada Conference, Ottawa, Canada (2014) *Genomics in Agriculture*
28. Wolfville Rotary Club, Wolfville, Canada (2014) *Improving apples with genomics*
29. Genome Canada Board of Directors Annual Meeting, Halifax, Canada (2014) *How to invest in genomics: the view from a young geneticist*
30. Data Analytics for the Wine & Fruit Growing Industries, Acadia University, Wolfville, Canada (2014) *Data-driven apple breeding in the Annapolis Valley*
31. Nova Scotia Fruit Growers' Annual Convention, Kentville, Canada (2014) *Breeding without a breeder: a model for generating novel apples for the next generation*
32. Springboard Atlantic research-industry connector, Charlottetown, Canada (2013) *Genomics: the hidden gem in the food production toolkit*
33. Julius Kühn Institute for grape breeding, Geilweilerhof, Germany (2013) *Genomic ancestry estimation in Vitis hybrids and grape breeding in Nova Scotia*
34. Atlantic Food and Horticulture Research Centre, Kentville, Canada (2013) *Sex-deprived fruit: How a Lack of Breeding Threatens our Food's Future And How Genomics Can Help Fix the Problem*
35. Department of Plant Agriculture, University of Guelph, Canada (2013) *Improving fruit and wine: how genomics can help*
36. Nova Scotia Institute of Science, Halifax, Canada (2013) *Sex-deprived fruit: How a Lack of Breeding Threatens our Food's Future And How Genomics Can Help Fix the Problem*
37. Genome Atlantic, Dalhousie University, Halifax, Canada (2013) *Improving fruit and wine: how genomics can help*
38. Dalhousie Faculty of Medicine, Halifax, Canada (2013) *More harm than good? How human genomics research threatens to increase health care disparities between rich and poor nations*
39. Genome Quebec, McGill University, Montreal, Canada (2012) *Improving fruit and wine: what does genomics have to offer*
40. Sixth Rosaceous Genomics Conference, Trento, Italy (2012) *Genotyping-by-sequencing in apple: enormous potential and significant challenges*
41. Centre Sève, Université de Sherbrooke, Quebec, Canada (2012) *Genomics reveals a lack of sex among grape varieties*
42. Department of Biochemistry and Molecular Biology, Dalhousie University, Halifax, Canada (2012) *Improving nutrition with genomics*
43. Canadian Horticultural Council, Annual General Meeting, Ottawa, Canada (2012) *Genomics promises to dramatically increase the efficiency of apple breeding*
44. Department of Biology, Saint Francis Xavier University, Antigonish, Canada (2012) *Genomics in medicine and agriculture: how to make the most of nature's diversity*
45. Nova Scotia Fruit Growers' Association, Annual Convention, Kentville, Canada (2012) *Increasing the efficiency of breeding using genetic data*

46. Centre for Comparative Genomics and Evolutionary Bioinformatics, Dalhousie University, Halifax, Canada (2012) *Genomics in medicine and agriculture: how to make the most of nature's diversity*
47. Michael Smith Laboratories, University of British Columbia, Vancouver, Canada (2011) *Genome-wide genetic mapping in medicine and agriculture: how to exploit genetic diversity*
48. Konrad Lorenz Institute for Evolution and Cognition Research, Altenberg, Austria (2011) *The past and the future of human-mediated genetic change*
49. Canadian Plant Genomics Workshop, Niagara Falls, Canada (2011) *Marker-assisted breeding in apples and grapes*
50. Grape Research Coordination Network Annual Meeting, Lake Tahoe, CA, USA (2011) *Genomics accelerates marker-assisted breeding in the grapevine*
51. E&J Gallo Winery, Modesto, CA, USA (2011) *Genomics reveals the history and informs the future of grape breeding*
52. National Research Council Plant Biotechnology Institute, Saskatoon, Saskatchewan, Canada (2011) *Genomics reveals the history and informs the future of grape breeding*
53. Nova Scotia Fruit Growers' Convention, Wolfville, NS, Canada (2011) *Maintaining, measuring and exploiting tree fruit genetic diversity*
54. Agriculture and Agri-Food Canada Research Station, Kentville, NS, Canada (2010) *Genomics reveals the history and informs the future of grape breeding*
55. Grape Research Coordination Network for Grape Functional Genomics, Geneva, NY, USA (2010) *High-Throughput Phenotyping in Vitis: Barcodes and Databases*
56. Istituto di Genomica Applicata, Udine, Italy (2010) *Genetic structure and domestication history of the grape*
57. Department of Biotechnology, University of Verona, Italy (2010) *Genetic structure and domestication history of the grape*
58. Istituto Agrario San Michele all'Adige, Trento, Italy (2010) *Genetic structure and domestication history of the grape*
59. The Plant and Animal Genomes Conference, San Diego, USA (2010) *Genome-wide SNP data refine relationships in the grapevine.*
60. European Viticulture (COST 858) meeting, Bordeaux, France (2009) *Sequencing and SNP genotyping in the USDA grape germplasm collection*
61. The Plant and Animal Genomes Conference, San Diego, USA (2009) *The 10K Vitis SNP chip: A first step towards genome-wide association studies in the grapevine.*
62. Subtropical Horticulture Research Station, National Germplasm Repository, US Department of Agriculture, Miami, USA (2009) *Genome-wide genetic characterization of a germplasm collection: lessons from the grapevine*
63. Grape Research Coordination Network for Grape Functional Genomics, Lake Tahoe, USA (2009) *Genome-wide SNP data in Vitis: one step closer to genome-wide association studies*
64. Department of Food Science, New York State Agricultural Experiment Station, Geneva, NY, USA (2008) *Genome-wide SNP discovery and genotyping in the genus Vitis*
65. Department of Viticulture and Enology, University of California Davis, USA (2008) *Genome-wide genetic characterization of the grapevine*
66. Department of Statistics, University of Oxford, UK (2007) *Worldwide population differentiation at disease-associated SNPs*
67. Institute for Biochemistry, Leipzig, Germany (2006) *Identifying candidate genes for large phenotypic differences between human populations*
68. Department of Integrative Biology, University of California at Berkeley, USA (2006) *Detecting local selection and genotype-phenotype associations using Fst*
69. Departments of Anthropology and Genetics, Stanford University, USA (2006) *Detecting local selection and genotype-phenotype associations using Fst*
70. Department of Statistics, University of Oxford, UK (2005) *Detecting the signature of local positive selection using genome-wide SNP data from 3 human populations*
71. Volvox, a European network for bioscience education, Munich, Germany (2005) *Demonstrating recent positive selection in humans - lessons from lactose tolerance.*

Conference & Workshop Presentations (lab members underlined)

1. Soomro T, Jordan M, Watts S, Migicovsky Z, Song J, Forney C, **Myles S** (2022) *Harvest date shapes the apple volatilome*. Poster presentation at the Plant and Animal Genomes Conference. San Diego, USA.
2. Davies T, Migicovsky Z, Soomro T, **Myles S** (2022) *Harvesting causal alleles: Pool-seq GWAS of ripening, softening and phenolics in apples*. Poster presentation at the Plant and Animal Genomes Conference. San Diego, USA.
3. **Myles S**, Watts S, McElroy M, Migicovsky Z, Maassen H, van Velzen R (2022) *Cannabis Labeling Is Misleading*. Oral presentation at the Plant and Animal Genomes Conference. San Diego, USA.
4. Watts S, Migicovsky Z, Douglas GM, **Myles S** (2022) *Genome-Wide Association Studies in Canada's Apple Biodiversity Collection*. Poster presentation at the Plant and Animal Genomes Conference. San Diego, USA.
5. Watts S, Migicovsky Z, Myles S (2021) *Quantifying variation across 1000 diverse apples*. Oral presentation at the Botany Annual Meeting (Virtual).
6. Migicovsky Z, Cousins P, Jordan LM, **Myles S**, Striegler RK, Verdegaal P, Chitwood DH (2021) *Grapevine rootstocks affect growth-related scion phenotypes*. Oral presentation at the Botany Annual Meeting (Virtual).
7. Yu CHJ, Rupasinghe HPV, Song J, **Myles S** (2021) *Polyphenols-rich apples exhibit anti-diabetic properties in vitro*. Oral presentation at the tri-society virtual conference on Innovation in Plant Science and Agricultural Resilience (Virtual).
8. Karimi K, Farid AH, **Myles S**, Miar Y (2020) *Identification of selection signatures for response to Aleutian disease in American mink*. Poster Presentation at the Annual Meeting of the American Society of Animal Science, Madison, WI, USA.
9. Watts S, McElroy M, Migicovsky Z, Maassen H, Hazekamp H, van Velzen R, **Myles S** (2020) *Cannabis' indica/sativa Dilemma: Clarity from Genomics and Chemistry*. Oral Presentation at the Plant And Animal Genomes Conference, San Diego, USA
10. Migicovsky Z, Zhong GY, **Myles S** (2019) *Genomic insights into apple breeding*. Oral presentation at Dalhousie University Centre for Comparative Genomics & Evolutionary Bioinformatics Retreat. Halifax, Canada
12. Song J, McClure KA, Amyotte B, Campbell-Palmer L, Vinqvist-Tymchuk M, Ghong Y, Fan L, Zhang Z, Migicovsky Z, **Myles S** (2019) *Targeted and untarged metabolomics research coupled with genome-wide association analyses reveal genetic and biochemical control mechanism of phenolic compounds in apple fruit*. Oral presentation at the 6th International Horticulture Research Conference. Venice, Italy
13. Migicovsky Z, Gardner KM, Zhong GY, **Myles S** (2019) *Genomic consequences of apple domestication*. Oral presentation at the Plants, People, Planet Symposium. London, England
14. Migicovsky Z, Yeats T, Watts S, Burgher-MacLellan K, DeLong J, Forney CF, Giovannoni J, Rose JKC, Somers D, Song J, **Myles S** (2019) *Genome-wide association study leads to a future of firmer apples*. Oral presentation at Plant Biology. San Jose, California, USA
15. Larsen B, Migicovsky Z, **Myles S**, Durel C-E, Denancé C, Muranty H, Bitz L, Toldam-Andersan TB, Pedersen C, Howard NP, van de Weg E (2019) *Pedigree inferences and climate adaptation in Scandinavian heirloom apple cultivars*. Oral presentation at the 15th Eucarpia Symposium on Fruit Breeding and Genetics. Prag, Czech Republic
16. Larsen B, Migicovsky Z, **Myles S**, Petersen MA, van de Weg E, Howard N, Pedersen C (2019) *Scandinavian Apple Cultivars: Pedigrees, Diversity and GWAS for Fruit Quality Traits*. Plant Breeding and Biotechnology Symposium, Saint Louis, USA
17. Migicovsky Z, Yeats TH, Watts S, McClure K, Burgher-MacLellan K, DeLong J, Forney C, Giovannoni JJ, Rose JKC, Somers DJ, Song J, **Myles S** (2019) *Genetic mapping reveals strong functional candidate for apple ripening*. Poster presentation at the Plant And Animal Genomes Conference, San Diego, USA

18. **Myles S**, McElroy M, Sawler J, Hazekamp A, Page J, Maassen H (2019) *Current Cannabis Labelling Practices Poorly Capture Genetic Reality*. Oral presentation at the Plant And Animal Genomes Conference, San Diego, USA
19. **Myles S**, Migicovsky Z, Zhong GY (2019) *The Genomic Consequences of Grape and Apple Improvement*. Oral presentation at the Plant And Animal Genomes Conference, San Diego, USA
20. **Myles S**, Migicovsky Z, Zhong GY, Larsen B, Pedersen C, Song J (2019) *Numerous Apple Quality Traits Are Controlled By Large Effect Loci*. Oral presentation at the Plant And Animal Genomes Conference, San Diego, USA
21. Migicovsky Z, Gardner KM, Zhong GY, **Myles S** (2019) *Genomic consequences of apple domestication*. Poster presentation at the Dalhousie University Centre for Comparative Genomics & Evolutionary Bioinformatics. Halifax, Canada
22. Migicovsky Z, Gardner KM, Zhong GY, **Myles S** (2019) *Genomic consequences of apple domestication*. Poster presentation at the Plants, People, Planet Symposium. London, England
23. Migicovsky Z, Yeats T, Watts S, Burgher-MacLellan K, DeLong J, Forney CF, Giovannoni J, Rose JKC, Somers D, Song J, **Myles S** (2019) *Genome-wide association study leads to a future of firmer apples*. Poster presentation at Plant Biology. San Jose, California, USA
24. Larsen B, Gardner K, Toldam-Andersen T, **Myles S**, Migicovsky Z, Ørgaard M, Petersen MA, Pedersen C (2018) *Population structure, parentages, ploidy levels and GWAS in an apple gene bank*. Poster presentation at the 2nd International Symposium on Plant Breeding in Horticulture. Istanbul, Turkey
25. Migicovsky Z, Sawler J, Money D, Eibach R, Miller AJ, Luby JJ, Jamieson AR, Velasco D, von Kintzel S, Warner J, Wührer W, Brown PJ, **Myles S** (2017) *Genomic ancestry estimation in grape*. Poster presentation at the Dalhousie University Postdoctoral Fellow Research Day. Halifax, Canada
26. McElroy M, Maassen H, Hazekamp A, **Myles S** (2017) *Cannabis reclassified: redefining 'indica' and 'sativa' drug types by genetics and chemistry*. Poster presentation at IACM Conference on Cannabinoids in Medicine, Cologne, Germany
27. Migicovsky Z, Li M, Chitwood DH, and **Myles S** (2017) *Quantifying the genetic basis of leaf shape in apple*. Oral and poster presentation at Gordon Research Seminar: Quantitative Genetics & Genomics, Galveston, Texas, USA
28. Migicovsky Z, Gardner KM, Money D, Sawler J, Bloom JS, Moffett P, Chao CT, Richard CM, Schwaninger H, Fazio G, Zhong GY, **Myles S** (2016) *Genomics reveals the past and informs the future of apple improvement*. Oral presentation at the Plant And Animal Genomes Conference, San Diego, USA
29. Migicovsky Z, **Myles S** (2016) *Genomic Ancestry Estimation in Grapes*. Poster presentation at the Plant And Animal Genomes Conference, San Diego, USA
30. Money D, Gardner K, **Myles S** (2015) *LinkImpute – genotype imputation for non-model organisms*. Poster presentation at the Conference for the Society of Molecular Biology and Evolution, Vienna, Austria
31. McClure KA, Gardner KM, Toivonen PMA, Hampson CR, Lannard B, Rajcan I, Song J, **Myles S** (2015) *Genetic mapping using next-generation DNA sequencing in apple*. Oral presentation at the 10th Canadian Plant Genomics Workshop, Victoria, British Columbia, Canada.
32. **Myles S**, Migicovsky Z, Sawler J, Gardner KM, Brown PJ, Aradhya MK, Buckler ES, Zhong GY (2015) *Genome to phenome mapping in highly diverse perennial crops: examples from apples and grapes*. Poster presentation at Gordon Research Conference: Quantitative Genetics and Genomics, Lucca, Italy
33. Troggio M, Bianco L, Cestaro A, Di Guardo M, Micheletti D, Banchi E, Costa F, Gardner K, Sargent DJ, **Myles S**, Van de Weg E, Velasco R (2014) *SNP discovery and high-throughput genotyping in heterozygous fruit crops*. Oral presentation at 58th annual congress of the Italian Society of Agricultural Genetics, Alghero, Italy.

34. Money D, Gardner K, **Myles S** (2014) *Exploiting the full potential of next-generation DNA sequencing through genotype imputation*. Poster presentation at the Evolution Conference 2014, Raleigh, NC, USA
35. Money D, Gardner K, **Myles S** (2014) *LD-kNNi - a new, fast and accurate imputation method for non-model organisms*. Poster presentation at the Plant Genomics Congress, St Louis, MO, USA
36. Farid AH, Gardner K, Butler L, Rupasinghe PP, **Myles S** (2014) *Genome-wide association mapping of response to infection by the Aleutian mink disease virus*. Oral presentation at the 10th World Congress on Genetics Applied to Livestock Production
37. Sawler J, **Myles S** (2013) *Genome-wide association and genomic selection in grape*. Oral presentation at Plant Genomes and Biotechnology conference, Cold Spring Harbor, New York, USA
38. Goto-Yamamoto N, Kono H, Numata M, Joyo M, Sawler J, **Myles S** (2013) *Taxonomic Analysis of 'Koshu' with SNPs and Chloroplast DNA*. Oral presentation at Japanese Society of Enology and Viticulture Annual Meeting, Japan.
39. Gardner K, Brown PJ, Cooke T, Cann S, Bustamante CD, Velasco R, Troglio M, **Myles S** (2013) *Creating a saturated genetic linkage map on a budget: capturing genomewide polymorphisms in an apple (Malus x domestica) mapping population using genotyping by sequencing (GBS)*. Oral presentation at the Canadian Plant Genomics Workshop, Halifax, Canada.
40. Sawler J, **Myles S** (2013) *Genomic Ancestry Estimation in Interspecific Grape Hybrids*. Oral presentation at the Canadian Plant Genomics Workshop, Halifax, Canada.
41. Sauerteig K, Rajcan I, **Myles S** (2013) *Genome to phenome mapping in the Apple Biodiversity Collection*. Poster presentation at the Canadian Plant Genomics Workshop, Halifax, Canada
42. Goto-Yamamoto N, Kono H, Numata M, Joyo M, Sawler J, **Myles S** (2013) *Taxonomic Analysis of 'Koshu' with SNPs and Chloroplast DNA*. Oral Presentation at the Japanese Society for Enology and Viticulture annual meeting, Yamanashi, Japan.
43. Gardner K, Schwaninger H, Cann S, Baldo A, Chao T, Fazio G, Volk G, Richards C, Zhong G-Y, **Myles S** (2013) *Genome-wide Survey of Genetic Diversity in Apple using Genotyping-by-Sequencing*. Oral presentation at Plant and Animal Genomes Conference, San Diego, USA
44. Sawler J, **Myles S** (2012) *Enhancing traditional grape breeding through genomic ancestry selection: a preliminary method*. Oral presentation at the 8th Canadian Plant Biotechnology Conference, Guelph, Ontario, Canada
45. Cooke T, Cornejo O, **Myles S**, Motamayor JC, Bustamante CD (2012) *Mapping the self-incompatibility locus in T. cacao through genotyping-by-sequencing*. Poster presentation at the Plant and Animal Genomes Conference, San Diego, USA
46. **Myles S**, Brown PJ, Cooke TF, di Gaspero G, Bustamante CD (2011) *Genome-wide scan for selection and introgressions from the wild in V. vinifera*. Poster presentation and poster prize winner at the Grape Research Coordination Network Conference, Lake Tahoe, CA, USA
47. Cornejo OE, **Myles S**, Mockaitis K, Royaert S, Livingstone D, Kuhn DN, Schnell RJ, Bustamante CD, Motamayor JC (2011) *Building a next generation platform for association studies in cacao*. Oral presentation at the Plant and Animal Genomes Conference, San Diego, USA
48. **Myles S**, Buckler E (2010) *Genetic characterization of the USDA grape germplasm collection: Challenges and lessons learned*. Oral presentation at the 10th International Conference on Grapevine Breeding and Genetics, Geneva, NY, USA
49. **Myles S**, Boyko AR, Bustamante CD, Buckler E (2010) *Genome-wide SNP data refine relationships in the grapevine*. Oral presentation at the Molecular Biology and Evolution Conference, Lyon, France
50. **Myles S**, Chia JM, Hurwitz B, Simon C, Zhang GY, Ware D, Buckler E (2009) *Genome-wide genetic characterization of the grape*. Poster presentation at the Plant and Animal Genomes Conference, San Diego, USA
51. Chia JM, Hurwitz B, **Myles S**, Gore M, Wei S, Buckler E, Ware D (2009) *A Pipeline For SNP Discovery and Genotyping Based on Short-Read Plant Libraries*. Poster presentation at the Plant and Animal Genomes Conference, San Diego, USA

52. **Myles S**, Buckler E (2008) *Genome-wide genetic variation in Vitis*. Oral presentation at the Conference of the American Society for Enology and Viticulture – Eastern Section, Saint Catharines, Canada
53. **Myles S**, Bryk J, Hardouin E, Stoneking M (2007) *Positive selection in East Asians: Identification and functional characterization of a putatively adaptive variant in the EDAR gene*. Oral presentation at the Molecular Biology and Evolution Conference, Halifax, Canada
54. **Myles S**, Blass T, Oerlecke I, Kayser M, Stoneking M (2006) *Genetic relationships between Papuan and Austronesian-speaking groups in Island Melanesia: insights from mtDNA*. Oral presentation at the OMLL workshop Language and Genes in East Asia/Pacific, Uppsala, Sweden
55. **Myles S**, Blass T, Oerlecke I, Kayser M, Stoneking M (2006) *Human population history in the Solomon Islands: insights from mtDNA*. Poster presentation at the EMBO workshop Human Evolution and Disease, Hyderabad, India
56. Gunnarsdottir E, **Myles S**, Mark Stoneking (2006) *Genetic ancestry and population history of three groups in the Philippines*. Poster presentation at the EMBO workshop Human Evolution and Disease, Hyderabad, India
57. **Myles S**, Hradetzky E, Lao O, Nürnberg P, Kayser M, Stoneking M (2006) *Searching for the signature of positive selection on diabetes-associated alleles in Polynesians*. Oral presentation at the Molecular Biology and Evolution Conference, Tempe, Arizona, USA
58. **Myles S**, Hradetzky E, Lao O, Nürnberg P, Kayser M, Stoneking M (2005) *Positive selection at diabetes-associated SNPs in Polynesians*. Poster presentation at the National Genome Research Network meeting in Bonn, Germany
59. Workshop on Languages and Genes in Aussois, France (2005) - Invited participant
60. **Myles S**, Tang K, Stoneking M (2005) *Detecting the signature of local positive selection using genome-wide SNP data from 3 human populations*. Oral presentation at the Molecular Biology and Evolution Conference, Auckland, New Zealand
61. **Myles S**, Bouzekri N, Dugoujon JM, Ward R (2003) *The Evolution of Lactose Tolerance*. Poster presentation at the Human Behaviour and Evolution Society Conference, University of Nebraska, USA
62. **Myles S**, Bouzekri N, Dugoujon JM, Ward R (2003) *The Evolution of Lactose Tolerance in the Berber*. Oral presentation at the Ontario Ecology and Ethology Colloquium, McMaster University, Canada

Media Coverage

1. CBC's Nature of Things (November 2021) [The New Human](#)
2. Cannabis Life Network (November 2021) [Indica and Sativa are wrong, study find you buy cannabis for terpenes](#)
3. Saltwire (October 2021) [Why are Cannabis labels misleading?](#)
4. Cannabis Business Times (October 2021) [The Problem with 'Indica' and 'Sativa' on Cannabis Labels: New Report](#)
5. Mirage News (October 2021) [Cannabis labels often wrong and misleading](#)
6. Dal News (October 2021) [Buyer beware: study shows cannabis labelling can be misleading](#)
7. The Province (October 2021) [Canadian researchers say cannabis labelling would benefit from a more scientific approach](#)
8. Global TV (October 2021) [Nova Scotia study finds cannabis products routinely mislabelled](#)
9. Phys.org (October 2021) [Cannabis labels often wrong and misleading](#)
10. Genome Atlantic News (December 2019) [Dr. Sean Myles dishes on apple breeding](#)
11. The Weather Network (November 2019) ['Highly unusual' Pink Pearl apples could one day come to a store near you](#)
12. CBC Radio – The Current (October 2019) [Ever tried a Pink Pearl? It's just one variety in this orchard growing apples of the future](#)
13. Genome Atlantic News (July 2019) [Helping Maritime apple growers with Genomics](#)
14. The Weather Network (June 2019) [Experimental Orchard Helps Breed Frost Resistant Apples](#)
15. New York Times (June 2019) [A French Wine With a 900-Year-Old Vintage](#)

16. The Atlantic (June 2019) [A Medieval Grape Is Still Used to Make Wine](#)
17. Medium.com (January 2019) [Do Different Strains of Marijuana Cause Different Highs? Cannabis researchers say popular notions of indica and sativa are “nonsense”](#)
18. Dal.ca (September 2018) [A Royal Crew: Dal celebrates largest-ever class of royal society of Canada honourees](#)
19. AAFC news (August 2018) [National consortium wants Canada to have a bigger bite of apple market](#)
20. The Star (September 2018) [Most cannabis labelling ‘doesn’t hold up to any genetic scrutiny,’ says Nova Scotia professor](#)
21. Smithsonian Magazine (June 2018) [The Quest to Grow the First Great American Wine Grape](#)
22. Compute Canada (May 2018) [An apple a day](#)
23. Germination.ca (March 2018) [The Future of Cannabis is in Seed](#)
24. CBC’s The National (January 2018) [What’s in your weed: Why cannabis strains don’t all live up to their billing](#)
25. Nature News & Scientific American (July 2017) [Massive database of 182,000 leaves is helping predict plants’ family trees](#)
26. Civilized Life Magazine (October 2016) [Researcher Says Strain Names Are Nonsense: ‘We Know Extraordinarily Little’](#)
27. CHSR radio, University of New Brunswick (February 2016) Live interview about cannabis breeding and genomics
28. The Aquinian – St. Thomas University Magazine (October 2015) [STU alumni recognized for scientific twitter](#)
29. Discovery Magazine (September 2015) [We Have No Idea What Kind Of Cannabis We’re Buying](#)
30. Chronicle Herald (September 2015) [You can’t tell a pot from the label](#)
31. Financial Times (September 2015) [The Double Life of Cannabis](#)
32. High Times Magazine (September 2015) [Indica vs. Sativa: The Small But Significant Difference in Cannabis Genes](#)
33. CBC News (September 2015) [UBC study exposes labelling of marijuana strains](#)
34. Popular Science (August 2015) [Dank Indica? Your drug dealer might be ripping you off](#)
35. WIRED magazine (August 2015) [Sorry, but the names for weed strains are kinda meaningless](#)
36. Vancouver Sun (August 2015) [Marijuana classification muddled and confused](#)
37. Phys.org (August 2015) [Botanists conduct first large-scale genetic study of marijuana, hemp](#)
38. CBC News (August 2015) [Wired names Dalhousie University researcher on best online science list](#)
39. Progress Magazine (August 2015) [Good breeding: A Dalhousie University scientist is getting some help in his genomic apple quest](#)
40. WIRED magazine (August 2015) [Named one of “The 27 best feeds to follow in the world of science”](#)
41. Nova Scotia Federation of Agriculture Newsletter (August 2015) *Aiming for Perfection* – feature article on Myles lab research
42. WIRED magazine (August 2015) [Scientists and brewers are on a quest to breed a better hop for your beer](#)
43. News 957 Halifax (July 24, 2015) Radio interview on the Sheldon MacLeod Show about hop breeding project
44. CBC News (July 23, 2015) [Tatamagouche Brewing Company and Dalhousie seek better hops](#)
45. CTV News (July 9, 2015) [Feature story on MITACS student intern](#)
46. CBC TV, radio and online (July 9, 2015) [Nova Scotia apple growing goes high-tech with bar code data collection](#)
47. Chronicle Herald (July 9, 2015) [Data seeds apple research](#)
48. Talking Biotech Podcast (June 20, 2015) [Grape Domestication and Improvement](#)
49. Radio Canada TV (February 1, 2014) [La Semaine Verte](#)
50. Chronicle Herald (January 22, 2014) [From your phone to the table](#)
51. Canadian Geographic (November 6, 2013) [Nova Scotia genetics researcher revolutionizing apple agriculture](#)

52. University Affairs Magazine (October 23, 2013) [Dalhousie's Johnny Appleseed of the Annapolis Valley](#)
53. Dal News (October 10, 2013) [How'd ya like them apples? Dal Researcher helps generate superior crops](#)
54. Canada Foundation for Innovation, online (Sept. 10, 2013) [Apples to apples: Fruit breeding gets a boost from genomics](#)
55. ABC Australia (August 7, 2013) [Seeding the future: tapping gene banks to secure our food future](#)
56. CTV News Atlantic, TV (May 28, 2013) Planting the Apple Biodiversity Collection
57. CBC News Nova Scotia, TV (May 28, 2013) Planting the Apple Biodiversity Collection
58. Global TV, Halifax (May 28, 2013) [Researchers work to create genetically perfected apples in Annapolis Valley](#)
59. Progress Magazine (May, 2013) [Profile: Better together](#)
60. Global TV, Halifax (May 7, 2013) [Live television interview](#)
61. CBC Radio's Information Morning, Halifax (May 6, 2013) Live radio interview
62. Toronto Star (May 8, 2012) [Canadian geneticist discovers secret behind the blond-haired Solomon Islanders](#)
63. CBC Radio's Quirks and Quarks (May 5, 2012) Evolution Goes Blonde
64. Vancouver Sun (May 4, 2012) [Blond hair in Solomons not a gift from Europeans](#)
65. Discover Magazine (May 4, 2012) [Case closed: blonde Melanesians understood](#)
66. LA Times (May 3, 2012) [Blond hair evolved separately in Europe and the South Pacific](#)
67. Nature News (May 3, 2012) [Blonde hair evolved more than once](#)
68. New York Times (May 3, 2012) [Another genetic quirk of the Solomon Islands: blond hair](#)
69. New Scientist (May 3, 2012) [Blond hair evolved independently in Pacific islands](#)
70. Spektrum (May 3, 2012) [Natürlich blond](#)
71. MendelSpod.com (April 10, 2012) [The future of winemaking with Sean Myles](#)
72. NPR radio (August 15, 2011) [The Heat is On For California Wines](#)
73. Wine Spectator (March 22, 2011) [Your Great-Grandchildren's Grapes?](#)
74. The Toronto Star (February 26, 2011) [The oenophile's guide to grape sex](#)
75. The Telegraph Journal (January 28, 2011) [N.B. Scientist at forefront of Grape Genetics Research](#)
76. The Chronicle Herald (January 26, 2011) [Wine grapes starved for sex: Geneticist discovers vintner's product needs reproductive variety](#)
77. New York Times (January 25, 2011) [Lack of sex among grapes tangles family vine](#)
78. New Scientist (January 23, 2011) [Wine family tree revealed](#)
79. CBC Radio (January 22, 2011) Interviewed on CBC's national science radio show "Quirks and Quarks"
80. GenomeWeb Daily News (January 21, 2011) Genotyping study provides clues to domestic grape history, diversity
81. USA Today (January 19, 2011) [Grapes domesticated 8,000 years ago](#)
82. USDA-ARS News and Events. (January 18, 2011) [USDA Scientists and Collaborators Complete More Comprehensive Genetic Analysis of Domesticated Grape](#)
83. BBC Radio Scotland (January 20, 2011) Interviewed on "Newsdrive"
84. BBC News (January 17, 2011) [New grapes needed to keep wine flowing](#)
85. BBC Radio World Service (January 17, 2011) Interviewed on "World Today"
86. ScienceDaily. (April 13, 2010) [Bringing better grapes a step closer to reality](#)
87. New York Times (March 2, 2010) [Human Culture, an Evolutionary Force](#)

Organization Membership and Service

- President, Wolfville Tritons Swim Club (2021 – present)
- Member of the Royal Society's College of New Scholars, Artists and Scientists (September 2018 – present)
- Partner in DivSeek (www.divseek.org) (2014 – present)
- Member of the United States Department of Agriculture's Apple Crop Germplasm Committee (2013 - present)

- Associate of the Centre for Comparative Genomics & Evolutionary Bioinformatics (CGEB), Dalhousie University (2013 - present)
- Member of Research Sub-Committee, Senate Academic Programs and Research Committee, Dalhousie University (2013 – present)
- Associate Member of the Wine Research Centre, University of British Columbia (2012 – present)
- Member of Nova Scotia Institute of Science (2011 – present)
- President, Nova Scotia Cider Association (2019 – 2021)
- Member of the Scientific Advisory Board, AnandiaLabs (2015 - 2018)
- Member of Research Committee, Grape Growers' Association of Nova Scotia (2012 – 2016)
- Member of Scientific Advisory Board, Genome BC (2011 – 2013)
- Member of Faculty of Graduate Studies, University of Guelph (2013 – 2016)

Noteworthy Meetings

- Scotia Horticultural Congress, Wolfville, Canada (Jan 2014) – Regional agriculture conference - Participant
- F5://Food (Refresh Food), Wolfville, Canada (Jan 2014) – Regional agriculture conference - Participant
- Plant And Animal Genomes, San Diego, USA (Jan 2014) – International conference – Genome Atlantic sponsored invited participant
- SeedSeq and the Digital Seed Bank, San Diego, USA (Jan 2014) – Meeting for strategy development of the international SeedSeq initiative – Genome Canada sponsored invited participant
- Vino Summit, UBC Okanagan, Canada (July 2013) – NSERC-sponsored meeting to identify national research needs, collaborative opportunities, and research priorities for the Canadian wine and grape industries – Invited participant
- Brock University, Canada (June 2013) – Development of application for National Centres of Excellence funding for Canadian grape and wine research – Invited participant
- Innovation Summit, Halifax, Nova Scotia (April 2013) – Strategy development for enhancing innovation in Nova Scotia – Invited panel member
- Crop Wild Relative Genomics, Asilomar, USA (Dec 2012) – Crop Diversity Trust sponsored meeting leading to development of international SeedSeq initiative – Invited participant

Teaching

- Instructor – Research Methods/Honours thesis (RESM4014/4015), Dalhousie University, Canada (2021 – present)
- Instructor – Molecular Analysis of Populations (AGRI5390), Dalhousie University, Canada (2021 – present)
- Instructor – Population and Quantitative Genetics (GENE3001), Dalhousie University, Canada (2014 – 2016)
- Instructor – Principles of Heredity, Acadia University, Canada (Fall 2009)
- Teaching Assistant - Human Learning and Cognition, McMaster University, Canada (2002)
- Teaching Assistant - Animal Behaviour Laboratory, McMaster University, Canada (2003)

Languages

- English (mother tongue)
- Fluent in German and French
- Adequate Swiss-German