# Sarah A Gagliano Taliun

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### **Research Focus**

My research team seeks to identify and better understand the genetic factors contributing to complex diseases of aging by applying statistical and computational approaches.

#### **Academic Positions**

Principal Investigator, Montreal Heart Institute, Montreal, Canada

July 2020 – present July 2020 – present

Research Assistant Professor/professeure sous octroi adjointe,
 Department of Medicine (primary affiliation) and Department of
 Neurosciences (secondary affiliation), Faculty of Medicine,

Université de Montréal, Montreal, Canada

#### **Education and Training**

 Postdoctoral Research Fellow, School of Public Health, University of Michigan, Ann Arbor, USA

Supervisors: Gonçalo Abecasis and Michael Boehnke

Weston Brain Institute International Fellowship in Neuroscience
 Supervisor: Michael Weale, King's College London

Project: In silico identification of genetic risk variants for Parkinson's disease

PhD, Medical Science, Institute of Medical Science, University of Toronto, Canada
 Supervisors: James Kennedy and Jo Knight
 Research conducted at Centre for Addiction and Mental Health (CAMH)

Dissertation: In silico prioritization of genetic risk variants using functional genomic information

• **Honours BSc**, Biochemistry & Human Biology with high distinction, University of June 2012 Toronto, Canada

### **Funding**

- CIHR Catalyst Grant: "Interactive visualization of genetic variant-trait associations in the CLSA dataset" (my role: nominated principal applicant)
- CIHR Project Grant: "Identifying causal pathways for hematuria using comprehensive omics strategies: genomics, transcriptomics and proteomics" (my role: nominated principal applicant) 2024–2027
- CIHR Project Grant: "Study of sex-specific biological factors underlying cognitive function and cardiovascular outcome"; Nominated principal applicant: Marie-Pierre Dubé (my role: co-principal applicant)
- CIHR Project Grant: "Precision medicine study of treatment options in type 2 diabetes patients without cardiovascular disease"; Nominated principal investigator: Marie-Pierre Dubé (my role: co-applicant)
- CIHR Team Grant: Diabetes Mechanisms and Translational Solutions General Pool, "Precision medicine study of type 2 diabetes in the COLCOT-T2D trial"; Nominated principal investigator: Marie-Pierre Dubé (my role: co-investigator)

•	Operational Funds, Institut de valorisation des données (IVADO)	2021–2023
•	Economic recovery credits – support for researchers, FRQS	2021
•	Junior 1 Research Scholar in artificiel intelligence and digital health, Fonds de la	2020–2024
	Recherche en Santé du Québec (FROS)	

# **Scholarships and Awards**

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•	Outstanding Researcher, CIHR Reviewer in Training Programme	Fall 2022
•	Precision Health Scholars Award, University of Michigan	2019–2020
•	Stellar Abstract Award Program in Quantitative Genomics (PQG), Harvard	November 2018
•	Postdoctoral Fellowship Award, Stanley Center for Psychiatric Research, Broad	2017–2018
•	Weston Brain Institute International Fellowship in Neuroscience December	2015 – May 2016
•	"3 Minute Thesis" competition, University of Toronto finalist	April 2015
•	McLaughlin Early Career Investigator Award	October 2015
•	Younger Family Foundation Award	Fall 2015
•	CIHR STAGE (Strategic Training for Advanced Genetic Epidemiology) trainee	2015–16
•	Institute of Medical Science Open Fellowship Award	Fall 2014
•	University of Toronto McLaughlin Centre Training Award	Fall 2014
•	Peterborough K.M. Hunter Graduate Studentship	Fall 2014
•	Institute of Medical Science Open Fellowship Award	Fall 2013
•	School of Graduate Studies Conference Grants	Fall 2012, 2013
•	University of Toronto McLaughlin Centre Training Award	September 2012
•	Canadian Bioinformatics Workshop Registration Award	September 2012
•	Institute of Medical Science Entrance Award, University of Toronto	September 2012
•	University of Toronto Fellowship – MSc	September 2012
•	Silver Medal in Biochemistry, University of Toronto	June 2012
•	Fr. Robert Madden, csb Award for outstanding contribution to student life	
	at St. Michael's College, University of Toronto	June 2012
•	St. Michael's College In-Course Scholarship	2010-2012
•	<b>Dean's List Scholar</b> in the Faculty of Arts and Science, University of Toronto	2009-2012
•	University of Toronto Scholar	2008-2009
•	Governor General's Academic Bronze Medal	June 2008

## **Publications**

Summary of published peer-reviewed publications since 2014	published peer-reviewed publications since 2014		
	Quantity		
(Co-)First author (excluding articles for which I am both first and senior author)	13		
Senior author	13		
Co-author	28		

<sup>\*</sup> Equal contribution \*\* (Co-)senior and/or corresponding author \_\_\_\_ Trainee under my supervision <u>Peer-reviewed</u>

- 1. R. Tadros, S.L. Zheng, C. Grace, P. Jordà, C. Francis, D.M. West, [...] **S.A. Gagliano Taliun** [...] J.S. Ware, C.R. Bezzina, H. Watkins (2024) Large scale genome-wide association analyses identify novel genetic loci and mechanisms in hypertrophic cardiomyopathy. *Nature Genetics*.
- 2. <u>W. Belbellaj, F. Lona-Durazo</u>, C. Bodano, D. Busseuil, M-C. Cyr, E. Fiorillo, A. Mulas, S. Provost, M. Steri, T. Tanaka, B. Vanderwerff, J. Wang, R.P. Byrne, F. Cucca, M-P. Dubé, Luigi Ferrucci<sup>6</sup>, R.L. McLaughlin, J-C. Tardif, M. Zawistowski, **S.A. Gagliano Taliun**. (2024) The role of genetically predicted serum iron levels on neurodegenerative and cardiovascular traits. *Scientific Reports*.
- 3. <u>F. Lona-Durazo</u>, K. Omachi, D. Fermin, F. Eichinger, J.P. Troost, I.R. Dinsmore, Lin M-H., T. Mirshahi, A.R. Chang, J.H. Miner, A.D. Paterson, M. Barua, **S.A. Gagliano Taliun**\*\* (2024)

- Common genetically predicted skipping of COL4A4 exon 27 is associated with hematuria and albuminuria. *Journal of the American Society of Nephrology*. PMID: 39190490
- 4. <u>R. Diany</u>, **S.A. Gagliano Taliun**\*\* (2024) Systematic review and phenome-wide scans of genetic associations with vascular cognitive impairment. *Advanced Biology*.
- 5. N. Neale\*, F. Lona-Durazo\*, M. Ryten\*\*, S.A. Gagliano Taliun\*\* (2024) Leveraging sex-genetic interactions to understand brain disorders: recent advances and current gaps. *Brain Communications*.
- 6. <u>J. Bellavance</u>\*, <u>L. Wang</u>\*, **S.A. Gagliano Taliun**\*\* (2024) Eight quick tips for including chromosome X in genome-wide association studies. *PLoS Computational Biology*.
- 7. C. Savignac, F. St-Onge, S. Villeneuve, A. Badhwar, **S.A. Gagliano Taliun**, S. Farhan, M.R. Geddes, Y. Iturria Medina, J. Poirier, R.N. Spreng, D. Bzdok (2023) Dissociable influences of maternal vs paternal Alzheimer's risk on neurocognitive and cardiovascular health in men and women. *Alzheimer's & Dementia*. 19: e072360.
- 8. **S.A Gagliano Taliun**, I.R. Dinsmore, T. Mirshahi, A.R. Chang, A.D. Paterson, M. Barua (2023) GWAS for the composite traits of hematuria and albuminuria. *Scientific Reports*. 13:18084. PMID: 37872228
- 9. K. D'Sa, S. Guelfi, J. Vandrovcova, R.H. Reynolds, D. Zhang, J. Hardy, J.A. Botía, M.E. Weale, K. Small, **S.A. Gagliano Taliun**, M. Ryten (2023) Analysis of subcellular RNA fractions demonstrates significant genetic regulation of gene expression in human brain post-transcriptionally. *Scientific Reports*. 13:13874. PMID: 37620324
- 10. <u>Q. Ye</u>, **S.A. Gagliano Taliun**\*\* (2023) Genetically predicted waist to hip circumference ratio and coronary artery disease: a sex-specific Mendelian randomization study. 4:100230. *HGG Advances*. PMID: 37663544
- 11. <u>F. Lona-Durazo</u>, R.H. Reynolds, S.W. Scholz, M. Ryten, **S.A. Gagliano Taliun\*\*** (2023) Regional genetic correlations highlight relationships between neurodegenerative diseases and the immune system. *Communications Biology*. 6:729. PMID: 37454237
- Z. Chen, R.H. Reynolds, A.F. Pardiñas, S.A. Gagliano Taliun, W. van Rheenen, K. Lin, A. Shatunov, E.K. Gustavsson, I. Fogh, A.R. Jones, W. Robberecht, P. Corcia, A. Chiò, P.J. Shaw, K.E. Morrison, J.H. Veldink, L.H. van den Berg, C.E. Shaw, J.F. Powell, V. Silani, J.A. Hardy, H. Houlden, M.J. Owen, M.R. Turner, M. Ryten, A. Al-Chalabi (2023) The contribution of Neanderthal introgression and natural selection to neurodegenerative diseases. *Neurobiology of Disease*. 180:106082. PMID: 36925053
- 13. R.H. Reynolds, A.Z. Wagen, <u>F. Lona-Durazo</u>, S.W. Scholz, M. Shoai, J. Hardy, **S.A. Gagliano Taliun**, M. Ryten (2023) Identifying local genetic correlations among neurodegenerative and neuropsychiatric diseases. *npj Parkinson's disease*. 9:70. PMID: 37117178
- 14. M. Yu, M. Aguirre, M. Jia, K. Gjoni, A. Córdova Palomera, C. Munger, D. Amgalan, X.R. Ma, A. Pereira, C. Seidman, J. Seidman, M. Tristani-Firouzi, W.K. Chung, E. Goldmuntz, D. Srivastava, R. Loos, N. Chami, H. Cordell, M. Dressen, B. Müller-Myhsok, H. Lahm, M. Krane, K. Pollard, J. Engreitz, S.A. Gagliano Taliun, B. Gelb, J.R. Priest (2023) Oligogenic architecture of rare noncoding variants distinguishes 4 congenital heart disease phenotypes. Circulation: Genomic and Precision Medicine. e003968. PMID: 37026454
- 15. M. Shoaib, Q. Ye, H. IglayReger, M. Boehnke, C.F. Burant, S.A. Soleimanpour, **S.A. Gagliano Taliun\*\*** (2023) Evaluation of polygenic risk scores to differentiate between type 1 and type 2 diabetes. *Genetic Epidemiology*. 47, 303-313. 10.1002/gepi.22521. PMID: 36821788
- G.J.M. Zajac, S.A. Gagliano Taliun, C. Sidore, S.E. Graham, B.O. Åsvold, B. Brumpton, J.B. Nielsen, W. Zhou, M. Gabrielsen, A.H. Skogholt, L.G. Fritsche, D. Schlessinger, F. Cucca, K. Hveem, C. Willer, G.R. Abecasis (2023) A Fast Linkage Method for Population GWAS Cohorts with Related Individuals. *Genetic Epidemiology*. 10.1002/gepi.22516. PMID: 36739617
- 17. C. Savignac, S. Villeneuve, A. Badhwar, K. Saltoun, K. Shafighi, C. Zajner, V. Sharma, **S.A. Gagliano Taliun**, S. Farhan, J. Poirier, D. Bzdok (2022) APOE alleles are associated with sex-specific structural differences in brain regions affected in Alzheimer's disease and related dementia. *PLoS Biology* 20(12): e3001863. PMID: 36512526
- 18. G.R.B. Saunders\*, X. Wang\*, F Chen\*, S-K. Jang\*, M Liu\*, C. Wang\*, S. Gao, Y. Jiang, C. Khunsriraksakul, J.M. Otto, 23andMe Research Team, The Biobank Japan Project, [...] ~100

- middle authors [...], C. Batini, A. Bergen, L. Bierut, S.P. David, **S.A. Gagliano Taliun**, D.B. Hancock, B. Jiang, M.R. Munafò, T. Thorgeirsson, D.J. Liu\*\*, Scott Vrieze\*\* (2022) Multi-Ancestry Meta-analyses map 2,143 loci for Tobacco and Alcohol Use. *Nature*. 612:720-724. PMID: 36477530
- 19. <u>Y. Zhao</u>, **S.A. Gagliano Taliun** (2022) Lipid-lowering drug targets and Parkinson's disease: a sex-specific Mendelian randomization study. *Frontiers in Neurology*. 3:940118. PMID: 36119674
- S.C. Hanks, L. Forer, S. Schönherr, J. LeFaive, T. Martins, R. Welch, S.A. Gagliano Taliun, D. Braff, J.M. Johnsen, E.E. Kenny, B.A. Konkle, M. Laakso, R.F.J. Loos, S. McCarroll, C. Pato, M.T. Pato, A.V. Smith, NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium, M. Boehnke, L.J. Scott, C. Fuchberger. (2022) Extent to which array genotyping and imputation with large reference panels approximates deep whole genome sequencing. American Journal of Human Genetics. 109(9):1653-1666. PMID: 35981533
- 21. M.R. Moksnes, A. Falkmo Hansen, S.E. Graham, **S.A. Gagliano Taliun**, K-H. Wu, K. Thorstensen, L.G. Fritsche, D. Gill, S. Burgess, F. Cucca, D. Schlessinger, G.R. Abecasis, B. Olav Åsvold, J.B. Nielsen, K. Hveem, C.J. Willer & B.M. Brumpton. (2022) Genome-wide meta-analysis of iron status and the effect of iron on all-cause mortality in HUNT. *Communications Biology*. 5:591. PMID: 35710628
- 22. T.N. Kelly\*, X. Sun\*, K.Y. Ye\*, M.R. Brown\*, **S.A. Gagliano Taliun**\*, J.N. Hellwge\*, X. Mi\*, J.A. Brody\* [...] ~100 middle authors [...] T.L. Edwards, G.R. Abecasis, X. Zhu, D. Levy, D.K. Arnett, A.C. Morrison. (2022) Insights from a Large-Scale Whole Genome Sequencing Study of Systolic Blood Pressure, Diastolic Blood Pressure, and Hypertension. *Hypertension*. PMID: 35652341
- 23. **S.A. Gagliano Taliun**, P. Sulem, G. Sveinbjornsson, D.F. Gudbjartsson, K. Stefansson, A.D. Paterson, M. Barua. (2022) GWAS of hematuria. *Clinical Journal of the American Society of Nephrology*. 17(5):672-683. PMID: 35474271
- 24. T. Singh, T. Poterba, D. Curtis, H. Akil, M. Al Eissa, J.D. Barchas, N. Bass, T.B. Bigdeli, G. Breen, E.J. Bromet, P.F. Buckley, W.E. Bunney, J. Bybrerg-Grauholm, W.F. Byerley, [...] S.A. Gagliano Taliun [...] ~100 middle authors [...] R.A. Ophoff, T.M. Werge, P.F. Sullivan, M.J. Owen, M. Boehnke, M.C. O'Donovan, B.M. Neale, M.J. Daly. (2022) Exome sequencing identifies rare coding variants in 10 genes which confer substantial risk for schizophrenia. *Nature*. 604:509-516. PMID: 35396579
- 25. **S.A. Gagliano Taliun\*\*** & D.M. Evans. (2021) Ten simple rules for conducting a Mendelian randomization study. *PLoS Computational Biology*. 17(8): e1009238. PMID: 34383747
- 26. R. Feleke, R.H. Reynolds, A. Smith, B. Tilley, **S.A. Gagliano Taliun**, J. Hardy, P.M. Matthews, S. Gentleman, D. Owen, M.R. Johnson, P. Srivastava, M. Ryten. (2021) Cross-platform transcriptional profiling identifies common and distinct molecular pathologies in Lewy Body diseases. *Acta Neuropathologica*. 142(3):449-474. PMID: 34309761
- 27. M. Riise Moksnes, H. Røsjø, A. Richmond, M. Nakrem Lyngbakken, S.E. Graham, A. Falkmo Hansen, B.N. Wolford, S.A. Gagliano Taliun, J. LeFaive, H. Rasheed, L. Thomas, W. Zhou, A. Campbell, D.J. Porteous, P. Welsh, N. Sattar, G. Davey Smith, L. Fritsche, J.B. Nielsen, B.O. Åsvold, K. Hveem, C. Hayward, C. Willer, B.M. Brumpton, T. Omland. (2021) Genome-wide association study of cardiac troponin I in the general population. *Human Molecular Genetics*. ddab124. PMID: 33961016
- 28. Z. Chen, D. Zhang, R.H. Reynolds, E. Gustavsson, K. D'Sa, S. García Ruiz, A. Fairbrother-Browne, J. Vandrovcova, J. Hardy, H. Houlden, **S.A. Gagliano Taliun**, J. Botía, M. Ryten. (2021) Human-lineage-specific genomic elements are enriched within genes implicated in neurodegenerative diseases. *Nature Communications*. 12:2076. PMID: 33824317
- 29. D. Taliun\*, D.N. Harris\*, M.D. Kessler\*, J. Carlson\*, Z.A. Szpiech\*, R. Torres\*, **S.A. Gagliano Taliun**\*, A. Corvelo\*, [...] ~100 middle authors [...], C.C. Laurie, C.E. Jaquish, R.D. Hernandez, T.D. O'Connor, G.R. Abecasis. (2021) Sequencing of 53,831 diverse genomes from the NHLBI TOPMed Program. *Nature*. 590:290-299. PMID: 33568819
- 30. J.B. Nielsen, O. Rom, I. Surakka, S. Graham, W. Zhou, T. Roychowdhury, L. Fritsche, **S.A. Gagliano Taliun** [...] ~50 middle authors [...] M. Boehnke, S. Kathiresan, G.R. Abecasis, Y.E. Chen, C. Willer, K. Hveem. (2020) Loss-of-function genetic variants with impact on liver-related blood traits highlight potential therapeutic targets for cardiovascular disease. *Nature Communications*. 11:6417. PMID: 33339817

- 31. X. Zhao, D. Qiao, C. Yang, S. Kasela, W. Kim, N. Shrine, C. Batini, T. Sofer, **S.A. Gagliano Taliun** [...]  $\sim$  60 middle authors [...] M. Cho, A. Manichaikul. (2020) Whole genome sequence analysis of pulmonary function and COPD in 19,996 multi-ethnic participants. *Nature Communications*. 11:5182. PMID: 33057025
- 32. Z. Chen, W. Yan Yau, Z. Jaunmuktane, A. Tucci, P. Sivakumar, **S.A. Gagliano Taliun** [...] ~20 middle authors [...] J. Hardy, M. Ryten, J. Vandrovcova, H. Houlden. (2020) Neuronal intranuclear inclusion disease is genetically heterogenous. *Annals of Clinical and Translational Neurology*. 10;7(9):1716-172. PMID: 32777174
- 33. **S.A. Gagliano Taliun**\*, P. VandeHaar\*, A.P. Boughton, R.P. Welch, D. Taliun, E.M. Schmidt, W. Zhou, J.B. Nielsen, C.J. Willer, S. Lee, L.G. Fritsche, M. Boehnke, G.R. Abecasis (2020) Exploring and visualizing large-scale genetic associations using PheWeb. *Nature Genetics*. 52:550–552. PMID: 32504056
- 34. W. Zhou\*, Z. Zhao\*, J.B. Nielsen, L.G. Fritsche, J. LeFaive, **S.A. Gagliano Taliun**, W. Bi, M.J. Daly, B.M. Neale, K. Hveem, G.R. Abecasis, C.J. Willer, S. Lee. (2020) Scalable generalized linear mixed model for region-based association tests in large biobanks and cohorts. *Nature Genetics*. 52:634–639. PMID: 32424355
- 35. F. Zhang, M. Flickinger, **S.A. Gagliano Taliun**, InPSYght Psychiatric Genetics Consortium, G.R Abecasis, L.J. Scott, S.A. McCarroll, C.N. Pato, M. Boehnke, H.M. Kang (2020) Ancestry-agnostic estimation of DNA sample contamination from sequence reads. *Genome Research*. 30(2):185-194. PMID: 31980570
- 36. S. Guelfi, K.D'Sa, J. Botía, J. Vandrovoca, R.H. Reynolds, D. Zhang, A. Ramasamy, D. Trabzuni, L. Collado-Torres, A. Thomason, P. Quijada Leyton, S.A. Gagliano Taliun, Mike A. Nalls, C. Smith, J. Hardy, M.E. Weale, K.S. Small, M. Ryten (2020) Regulatory sites for known and novel splicing in human basal ganglia are enriched for disease-relevant information. *Nature Communications*. 11:1041. PMID: 32098967
- 37. R.H. Reynolds, J. Hardy, M. Ryten\*\*, **S.A. Gagliano Taliun**\*\* (2019) Informing disease modelling with brain-relevant functional genomic annotations. *Brain*. 0:1-19. PMID: 31603214
- 38. D. Dutta, **S.A. Gagliano Taliun**, J. Weinstock, M. Zawistowski, C. Sidore, F. Cucca, D. Schlessinger, G. Abecasis, C. Brummett, S. Lee. (2019) Meta-MultiSKAT: Multiple phenotype meta-analysis for region-based association test. *Genetic Epidemiology*. 43(7):800-814. PMID: 31433078
- 39. L.G. Fritsche, L. J. Beesley, P. VandeHaar, R.B. Peng, M. Salvatore, M. Zawistowski, **S.A. Gagliano Taliun**, S. Das, J. LeFaive, E.O. Kaleba, T.T. Klumpner, S.E. Moser, V.M. Blanc, C.M. Brummett, S. Kheterpal, G. R. Abecasis, S.B. Gruber, B. Mukherjee (2019) Exploring various polygenic risk scores for skin cancer in the phenomes of the Michigan Genomics Initiative and the UK Biobank with a visual catalog: PRSWeb. *PLOS Genetics*. 15(6):e1008202. PMID: 31194742
- 40. **S.A. Gagliano Taliun** (2019) Genetic determinants of low vitamin B12 levels in Alzheimer's disease risk. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*. 11:430-434. PMID: 31206009
- 41. R.H. Reynolds, J.A. Botía, M.A. Nalls, International Parkinson's Disease Genomics Consortium (IPDGC), J. Hardy, **S.A. Gagliano Taliun\*\***, M. Ryten\*\* (2019) Moving beyond neurons: the role of cell type-specific gene regulation in Parkinson's disease heritability. 5:6. *NPJ Parkinsons Disease*. PMID: 31016231
- 42. **S.A. Gagliano\*\***, S. Sengupta, C. Sidore, A. Maschio, F. Cucca, D. Schlessinger, G.R Abecasis\*\* (2018) Relative impact of indels versus SNPs on complex disease. *Genetic Epidemiology*. 43(1):112-117. PMID: 30565766
- 43. C.D. Hughes, M.L. Choi, M. Ryten, L. Hopkins, A. Drews, J.A. Botía, M. Iljina, M. Rodrigues, S.A. Gagliano, S. Gandhi, C. Bryant, D. Klenerman (2018) Picomolar concentrations of oligomeric alpha synuclein sensitizes TLR4 to play an initiating role in PD pathogenesis. *Acta Neuropathologica*. 137(1):103-120. PMID: 30225556
- 44. W. Zhou, J.B. Nielsen, L.G. Fritsche, R. Dey, M.B. Elvestad, B.N. Wolford, J. LeFaive, P. VandeHaar, **S.A. Gagliano**, A. Gifford, L.A. Bastarache, W-Q. Wei, J.C. Denny, M. Lin, K. Hveem, H.M. Kang, G.R. Abecasis, C.J. Willer, S. Lee (2018) Efficiently controlling for case-control imbalance and sample relatedness in large-scale genetic association studies. *Nature Genetics*. 50(9):1335-1341. PMID: 30104761

- M. Hernandez-Fuentes, C. Franklin, I. Rebollo-Mesa, J. Mollon, F. Delaney, E. Perucha, C. Stapleton, R. Borrows, C. Byrne, G. Cavalleri, B. Clarke, M. Clatworthy, J. Feehally, S. Fuggle, S.A. Gagliano, S. Griffin, A. Hammad, R. Higgins, A. Jardine, M. Keogan, T. Leach, I. MacPhee, Patrick B. Mark, J. Marsh, P. Maxwell, W. McKane, A. McLean, C. Newstead, T. Augustine, P. Phelan, S. Powis, P. Rowe, N. Sheerin, E. Solomon, H. Stephens, R. Thuraisingham, R. Trembath, P. Topham, R. Vaughan, S.H. Sacks, P. Conlon, G. Opelz, N. Soranzo, M.E. Weale, G.M. Lord, United Kingdom and Ireland Renal Transplant Consortium (UKIRTC), Wellcome Trust Case Control Consortium (WTCCC)-3 (2018) Long- and short-term outcomes in renal cadaveric allografts: a large recipient and donor genome-wide association study. *American Journal of Transplantation*. 18(6):1370-1379. PMID: 29392897
- 46. **S.A. Gagliano** (2017) It's all in the brain: a review of available functional genomic annotations. *Biological Psychiatry*. 81(6):478-483. PMID: 27788914
- 47. **S.A. Gagliano**, J. G. Pouget, J. Hardy, J. Knight, M.R. Barnes, M. Ryten, M.E. Weale (2016) Genomics implicates adaptive and innate immunity in Alzheimer's and Parkinson's. *Annals of Clinical and Translational Neurology*. 3(12):924-933. PMID: 28097204
- 48. G. Zai, [...] **S.A. Gagliano** [...], ~40 alphabetized middle authors [...], J.L. Kennedy (2016) Rapporteur Summaries of Plenary, Symposia, and Oral sessions from the XXIIIrd World Congress of Psychiatric Genetics Meeting in Toronto, Canada, October 16-20, 2015. *Psychiatric Genetics*. 26(6):229-257. PMID: 27606929
- 49. **S.A. Gagliano**, C. Ptak, D.Y.F. Mak, M. Shamsi, G. Oh, J. Knight, P.C. Boutros, A. Petronis (2016) Allele-skewed DNA modification in the brain: relevance to schizophrenia GWAS. *American Journal of Human Genetics*. 98(5):956-962. PMID: 27087318
- 50. **S.A. Gagliano**, R. Ravji, M.R. Barnes, M.E. Weale, J. Knight (2015) Smoking gun or circumstantial evidence? comparison of statistical learning methods using functional annotations for prioritizing risk variants. *Scientific Reports*. 5:13373. PMID: 26300220
- 51. **S.A. Gagliano**, A.D. Paterson, M.E. Weale, J. Knight (2015) Assessing models for genetic prediction of complex traits: a comparison of visualization and quantitative methods. *BMC Genomics*. 16:405. PMID: 25997848
- 52. C.C. Zai, V. Gonçalves, A.K. Tiwari, **S.A. Gagliano**, G. Hosang, V. de Luca, S.A. Shaikh, N. King, Q. Chen, W. Xu, J. Strauss, G. Breen, C.M. Lewis, A.E. Farmer, P. McGuffin, J. Knight, J.B. Vincent, J.L. Kennedy (2014) A genome-wide association study of suicide severity scores in bipolar disorder. *Journal of Psychiatric Research*. 65:23-9. PMID: 25917933
- 53. **S.A. Gagliano**, A. K. Tiwari, N. Freeman, J.A. Lieberman, H.Y. Meltzer, J.L. Kennedy, J. Knight, D.J. Müller (2014) Protein kinase cAMP-dependent regulatory type II beta (*PRKAR2B*) gene variants in antipsychotic-induced weight gain. *Human Psychopharmacolgy*. 29(4):330-5. PMID: 24737441
- 54. **S.A. Gagliano**, M.R. Barnes, M.E. Weale, J. Knight (2014) A Bayesian method to incorporate hundreds of functional characteristics with association evidence to improve variant prioritization. *PLoS ONE*. 9(5):e98122. PMID: 24844982

#### Scientific commentaries (edited, but not peer-reviewed)

- **1. S.A. Gagliano Taliun** (2024) My first few years as an early-career researcher: five lessons learned from a tandem bike ride. *Academic Matters*. https://academicmatters.ca/an-early-career-researchers-lessons-learned/
- 2. **S.A. Gagliano Taliun** (2022) Science communication with a French twist. *Nature*. https://doi.org/10.1038/d41586-022-01715-x. PMID: 35725825
- 3. **S.A. Gagliano Taliun** (2021) One scientist couple's five suggestions to solve the 'two body problem'. *Nature*. https://doi.org/10.1038/d41586-021-00917-z
- 4. **S.A. Gagliano Taliun** (2020) How to navigate academia as a female who is the first in her family with a PhD. *Academic Matters*. https://academicmatters.ca/how-to-navigate-academia-as-a-female-who-is-the-first-in-her-family-with-a-phd/
- 5. **S.A. Gagliano Taliun** (2019) Teaching at the university-level is not a hassle. *Nature*. 574(7777): 285. PMID: 31591538

# **Oral Presentations as Invited Speaker**

Summary of oral presentations as an invited speaker since 2018	
	Quantity
Local	4
National	3
International	4

- 1. Western Bioinformatics Seminar Series. "Understanding the genetics of hematuria" (Virtual meeting; 26 septembre 2024)
- 2. Seminar at the Département de pharmacologie et physiologie, Université de Montréal. "La randomisation Mendélienne pour identifier les liens de causalité" (Montreal, Quebec, Canada; September 14, 2023)
- 3. Nephrotic Syndrome Study Network (NEPTUNE) Steering Committee meeting "Common genetically predicted splicing of *COL4A4* exon 27 is associated with hematuria" (Virtual meeting; May 9, 2023)
- 4. VAST Seminar series "Genome-wide association studies to understand genetic factors contributing to complex traits including vascular dementia" (Virtual meeting; February 17, 2023)
- 5. Statistical methods for genetics & genomics- research seminar and journal club, University of Toronto. "Leveraging dense genotype imputation for disease-associated rare variant discovery" (Virtual meeting; May 21, 2021)
- Association canadienne-française pour l'avancement des sciences (ACFAS) meeting. "L'imputation des génotypes permet la découverte de variations rares associées aux maladies" (Virtual meeting; May 7, 2021)
- 7. Beyond Mendelian Genetics Symposium: Joint Genome Biology and Precision Medicine and Molecular Basis of Rare Diseases Section Symposium. "Leveraging dense genotype imputation for disease-associated rare variant discovery" (Virtual meeting; December 10, 2020)
- 8. Invited Seminar, Centre for Addiction and Mental Health. "Using regulatory elements to prioritize genetic risk variants for neurodegeneration" (Toronto, Ontario, Canada; August 22, 2018)
- 9. Invited Seminar, Michigan State University. "Prioritizing risk variants for neurodegeneration using functional genomics" (East Lansing, Michigan, USA; June 15, 2018)
- 10. Annual Canadian Human and Statistical Genetics meeting. "Understanding brain disorders through functional genomics" (Harrison Hot Springs, British Columbia, Canada; June 11, 2018)
- 11. Genomics of Brain Disorders. "Neurodegeneration: Beyond the brain" (Hinxton, UK; April 24, 2018)

#### **Oral Presentations**

- \_\_\_\_ Trainee under my supervision
  - 1. Scientific Day of the Department of Neurosciences, Université de Montréal. "L'impact du taux de fer dans le sang sur les maladies neurodégénératives et cardiovasculaires" (Montréal, Québec; 23 avril 2024) Presented by: Wiame Belbellai
  - 2. American Society of Human Genetics (ASHG) Meeting. "Regional genetic correlations highlight relationships between neurodegenerative diseases and the immune system" (Los Angeles, California; October 28, 2022) Presented by: <a href="Frida Lona Durazo">Frida Lona Durazo</a>
  - 3. Whole Genome Sequencing of Psychiatric Disorders (WGSPD) meeting. "InPSYght case-control and leveraging controls from TOPMed" (Cambridge, Massachusetts; January 24, 2019)
  - 4. Trans-omics for Precision Medicine (TOPMed) meeting "TOPMed imputed UK Biobank genetic data reveals disease-associated rare loss of function variation" (Tysons, Virginia; Dec. 5, 2018)

- 5. Program in Quantitative Genomics (PQG) Conference. "Dense imputation of the UK Biobank genetic data reveals disease-associated rare loss of function variation" (Boston, Massachusetts; November 1, 2018)
- 6. Whole Genome Sequencing of Psychiatric Disorders (WGSPD) meeting. "InPSYght case-control and controls from other sources" (Bethesda, Maryland; January 10, 2018)
- 7. University of Michigan Biostatistics Grand Rounds "PheWAS of >100 traits in the SardiNIA study: Insights" (Ann Arbor, Michigan; November 2, 2017)
- 8. Whole Genome Sequencing of Psychiatric Disorders (WGSPD) meeting. "Joint analysis of sequenced InPSYght African American schizophrenia and bipolar cases and controls with TOPMed external controls" (Cambridge, Massachusetts; June 5, 2017)
- 9. Center for Biomedicine, European Academy of Bolzano (EURAC). "PheWAS of >100 traits in SardiNIA" (Bolzano, Italy; Nov 22, 2016)
- 10. European Mathematical Genetics Meeting (EMGM). "In silico identification of genetic risk variants for Parkinson's disease" (Newcastle, UK; May 12, 2016)
- 11. World Congress of Psychiatric Genetics (WCPG) 2015 annual meeting. "*In silico* prioritization of genetic risk variants for psychiatric disorders using functional genomic information" (Toronto, Ontario; October 20, 2015)
- 12. Harvey Stancer Research Day 2014. "Assessing models for genetic prediction of complex traits: visualization and quantitative methods" (Toronto, Ontario; June 19, 2014)
- 13. Statistical Society of Canada annual meeting. "Investigation of Predictive Accuracy Measures for Genetic Models" (Toronto, Ontario; May 26, 2014)
- 14. Toronto Bioinformatics User Group. "A method to incorporate hundreds of functional characteristics with association evidence to improve SNP prioritization" (Toronto, Ontario; November 27, 2013) https://www.youtube.com/watch?v=xpDYFfAfPZE
- 15. Harvey Stancer Research Day 2013. "Protein kinase cAMP-dependent regulatory type II beta (PRKAR2B) gene variants in antipsychotic-induced weight gain" (Toronto, Ontario; June 13, 2013)
- 16. Neuroscience Research Exchange Day. "Distribution of epiSNPs in sub-threshold variants from genome-wide association studies for psychiatric disorders" (Toronto, Ontario; April 12, 2013)
- 17. Genetic Analysis Workshop 18 Conference. "GAW18: Gene-based tests" (Stevenson, Washington; October 16, 2012); Co-presenters: Heather Cordell and Indranil Mukhopadhyay

### Poster Presentations as First Author or Senior Author

- \_\_\_\_ Trainee under my supervision
- 1. <u>R. Diany</u>, **S.A. Gagliano Taliun**. "Systematic review, phenome-wide scans and creation of knowledge mobilization output on the genetics of vascular cognitive impairment" Canadian Stroke Congress (29 November 2024)
- 2. <u>F. Lona-Durazo</u>, R.P. Byrne, R.L. McLaughlin, **S.A. Gagliano Taliun**. "Sex-specific causal inference assessment of immune cells and protein levels in neurodegenerative diseases" American Society of Human Genetics (ASHG) Meeting (Denver, Colorado, 6 novembre 2024)
- 3. <u>F. Lona-Durazo</u>. K. Omachi, D. Fermin, F. Eichinger, J.P. Troost, M-H. Lin, I.R. Dinsmore, T. Mirshahi, A.R. Chang, J.H. Miner, A.D. Paterson, M. Barua, **S.A. Gagliano Taliun**. "Association of genetically predicted skipping of COL4A4 exon 27 with hematuria and albuminuria" (Montreal, Québec, 7 octobre 2024)
- 4. <u>J. Bellavance</u>, M. Kazemi, D. Taliun, **S.A. Gagliano Taliun**. "CLSA-PheWeb: L'exploration d'associations génétiques dans la cohorte CLSA" Journée de la Recherche de l'Institut de Cardiologie de Montréal. (Montréal; 6 juin 2024)
- 5. <u>L. Wang</u>, <u>F. Lona-Durazo</u>, **S.A. Gagliano Taliun**. "The link between genetically predicted smoking, drinking and Alzheimer's disease in genetically diverse populations" Journée de la Recherche de l'Institut de Cardiologie de Montréal. (Montréal; 6 juin 2024)
- 6. <u>R. Diany</u>, **S.A. Gagliano Taliun**. Revue systématique sur les associations génétiques du déficit d'origine vasculaire. Journée de la Recherche de l'Institut de Cardiologie de Montréal. (Montréal; 6

- juin 2024)
- 7. <u>J. Bellavance</u>, M. Kazemi, D. Taliun, **S.A. Gagliano Taliun**. "CLSA-PheWeb: L'exploration d'associations génétiques dans la cohorte CLSA" Journée de la Recherche du Département de médecine de l'Université de Montréal. (Montréal; 22 mai 2024) *Prix pour meilleure présentation par affiche*.
- 8. <u>F. Lonza-Durazo</u>, K. Omachi, D. Fermin, F. Eichinger, J.P. Troost, J.H. Miner, A.D. Paterson, M. Barua, **S.A. Gagliano Taliun**. "Skipping of COL4A4 exon 27 is associated with hematuria" American Society of Human Genetics (ASHG) Meeting (Washington DC, November 2, 2023)
- 9. <u>W. Belbellaj</u>, **S.A. Gagliano Taliun**. "The Impact of Iron Levels in the Blood on Neurodegenerative and Cardiovascular Diseases" World Congress of Psychiatric Genetics (Montréal; October 12, 2023)
- 10. M. Shoaib, Q. Ye, M. Boehnke, C. Burant, S. Soleimanpour, S.A. Gagliano Taliun. "Evaluation of polygenic risk scores to differentiate between type 1 and type 2 diabetes" American Society of Human Genetics (ASHG) Meeting. (Los Angeles, California; October 26, 2022)
- 11. <u>Q. Ye</u>, **S.A. Gagliano Taliun**. "Sex-specific risk scores for coronary artery disease using machine learning models" American Society of Human Genetics (ASHG) Meeting. (Los Angeles, California; October 26 2022)
- 12. **S.A. Gagliano Taliun**, Y. Li, D. Ray, P. Yajnik, NIMH InPSYght Consortium and NHLBI TOPMed Program, S. Lee, L.J. Scott, S.A. McCarroll, C.N. Pato, G.R. Abecasis, M. Boehnke, H.M. Kang. "High-specificity variant filter enables joint analysis of whole genome sequence data from multiple studies and sequencing centres" American Society of Human Genetics (ASHG) Meeting. (Houston, Texas; October 17, 2019)
- 13. **S.A. Gagliano**, W. Zhou, J.B. Nielson, J. LeFaive, S. Das, D. Taliun, R. Dey, G.R. Abecasis. "Analysis of densely imputed UK Biobank genetic data reveals disease-associated rare loss of function variation" American Society of Human Genetics (ASHG) Meeting. (San Diego, California; October 17, 2018) *Top 10% of submissions*.
- 14. **S.A. Gagliano**, W. Zhou, J.B. Nielson, J. LeFaive, S. Das, D.Taliun, R. Dey, G.R. Abecasis. "Analysis of densely imputed UK Biobank genetic data reveals disease-associated rare loss of function variation previously only implicated in family studies" UK Biobank Conference Early-Career Researcher of the Year (London, UK; June 21, 2018) *Top 20% of submissions*.
- 15. **S.A. Gagliano**, S. Sengupta, C. Sidore, A. Maschio, F. Cucca, D. Schlessinger, G.R. Abecasis. "Pinpointing GWAS signals: Indels vs. SNPs" American Society of Human Genetics (ASHG) Meeting. (Orlando, Florida; October 19, 2017)
- 16. **S.A. Gagliano**, J.G. Pouget, J. Hardy, J. Knight, M.R. Barnes, M. Ryten, M.E. Weale. "Genetic variability in both the adaptive and innate immune systems contribute to Alzheimer's and Parkinson's disease risk" International Genetic Epidemiology Society (IGES) Meeting (Toronto, Ontario; October 25, 2016)
- 17. **S.A. Gagliano**, C. Ptak, D.Y.F. Mak, M. Shamsi, G. Oh, J. Knight, P.C. Boutros, A. Petronis. "Allelespecific DNA modification: relevance to GWAS of complex traits" World Congress of Psychiatric Genetics (WCPG). (Toronto, Ontario; October 17, 2015)
- 18. **S.A. Gagliano**, A.D. Paterson, M.E. Weale, J. Knight. "Assessing models for genetic prediction of complex traits: a comparison of visualization and quantitative methods" American Society of Human Genetics (ASHG) Meeting. (Baltimore, Maryland; October 7, 2015)
- 19. **S.A. Gagliano**, R. Ravji, M.R. Barnes, M.E. Weale, J. Knight. "Comparing statistical learning methods for genetic variant prioritization" International Genetic Epidemiology Society (IGES) Meeting. (Baltimore, Maryland; October 4, 2015)
- 20. **S.A. Gagliano**, R. Ravji, M.R. Barnes, M.E. Weale, J. Knight. "Comparison of machine-learning methodologies to prioritize genetic variants based on functional data" American Society of Human Genetics (ASHG) Meeting (San Diego, California; October 21, 2014)
- 21. **S.A. Gagliano**, M.R. Barnes, M.E. Weale, J. Knight. "A Bayesian method to incorporate hundreds of functional characteristics with association evidence to improve variant prioritization" Institute of Medical Science Scientific Day (Toronto, Ontario; May 22, 2014)
- 22. S.A. Gagliano, M.R. Barnes, M.E. Weale, J. Knight. "Enrichment of functional information (543

- annotation tracks) in GWAS hits" American Society of Human Genetics (ASHG) Meeting (Boston, Massachusetts; October 24, 2013)
- 23. **S.A. Gagliano**, D.Y.F. Mak, C. Ptak, P.C. Boutros, A. Petronis, J. Knight. "Distribution of epiSNPs in Sub-threshold Variants from Genome-wide Association Studies for Psychiatric Disorders" World Congress of Psychiatric Genetics (Boston, Massachusetts; October 18, 2013)
- 24. **S.A. Gagliano**, A.K. Tiwari, N. Freeman, J.A. Lieberman, H.Y. Meltzer, D.J. Mueller, J.L. Kennedy, J. Knight "Protein kinase cAMP-dependent regulatory type II beta (PRKAR2B) gene variants in antipsychotic-induced weight gain" Canadian College of Neuropsychopharmacology annual meeting (Toronto, Ontario; May 30, 2013)
- 25. **S.A. Gagliano**, D.Y.F. Mak, C. Ptak, P.C. Boutros, A. Petronis, J. Knight. "Distribution of epiSNPs in sub-threshold variants from genome-wide association studies for psychiatric disorders" Institute of Medical Science Scientific Day (Toronto, Ontario; May 28, 2013)
- 26. **S.A. Gagliano**, K. Benke, J. Knight. Genetic Analysis Workshop 18 Conference, "Functional Annotation of Rare Variants in GAW18 Data" (Stevenson, Washington; October 16, 2012)

# Teaching

#### **Graduate level**

- **Co-instructor**, NSC2005: Neurogenetics and Neurogenomics Winter 2025 Prepared and taught 3 2h classes on GWAS and complex traits for this undergraduate course.
- Co-instructor, NSC6040: Neuro-omics Winter 2023, 2024
   Prepared and taught 3 3h classes on GWAS and complex traits of ~6 students, including polygenic risk scores, gene-by-environment interactions and Mendelian randomization, for this graduate-level course. Prepared and graded a homework assignment.
- Co-instructor, CGE6004: Population genetics and epidemiology, Winter 2022, 2023
   Université de Montréal
   Prepared and taught a 3h class on GWAS and complex traits for this graduate-level course of ~10
- students.

   Guest lecturer, MSO6018: Introduction to Genetic Epidemiology, Winter 2021, 2022, 2023
  - Université de Montréal
    Prepared and taught a 3h class on Mendelian Randomization for this graduate-level course of
    ~15 students. Taught two 3h classes on this topic in 2022, which included a take-home practical
    activity. In 2023, in addition to the 2022 tasks, I also co-taught an in-class practical activity.
- Co-instructor, Human Genetics 542: Molecular Basis of Human Genetic Winter 2019, 2020
   Disease, University of Michigan

   Prepared and delivered four classes on complex traits and gene-environment interactions for this graduate-level course of ~30 students. Created and graded assignments and exam.
- **Guest lecturer**, Epidemiology 516: Genomics in Epidemiology, University Spring 2018, 2019 of Michigan

  Co-prepared and co-taught a lecture and a hands-on practical on Biobanks and Electronic Health Records in Genetics for this graduate-level course of ~24 students.
- **Co-instructor**, Human Genetics 544: Basic Concepts in Population and Fall 2017 Statistical Genetics, University of Michigan Prepared and led four 1.5h white-board-format lectures and two in-class discussions for ~20 graduate students. Met regularly with the co-instructors for planning and grading.
- **Practical Sessions Assistant** at a five-day Advanced GWAS Course

  Tested tutorials provided by the lecturers, and aided students with computer issues.
- **Co-leader hands-on tutorial series** in statistical genetics at CAMH 2013-15 Topics included methods for genome-wide association and sequencing studies.

#### Undergraduate level

• Faculty mentor, Genomics, Big Data Summer Institute, University of Michigan Summer 2019
Prepared Mendelian randomization (MR) practical for ~15 students and supervised four of the students on a project using MR on real data from large-scale cohorts

- **Guest lecturer**, Biostatistics 666: Statistical Methods in Human Genetics, Fall 2016, 2017 University of Michigan
  - Prepared and gave Functional Genomics lecture for this graduate-level course of ~30 students.
- **Mentor** for high school summer student June August 2015 Supervised the student through the completion of a genome-wide association study

#### Secondary school level

- **Mentor** for students Winter 2015, Fall 2016, Winter 2017, Fall 2017, Winter 2019, Fall 2019 participating in the Ontario On-Line Research Co-op program Created/graded assignments, met regularly with student/group of students, assisted with writing a final research paper, and provided feedback to the co-op teacher.
- **DNA Day Ambassador**, Skyline High School, Ann Arbor, Michigan April 2018 Co-led a lesson on genetics and inheritance for Grade 9 students.

#### Co-mentoring of undergraduate/graduate students

- Honorary Senior Research Associate, UCL Institute of Neurology, Neurodegenerative Diseases
  - Affiliation for my role as mentor for Regina H. Reynolds (supervisor: Mina Ryten)
- **Teaching Assistant**, HMB265H- General and Human Genetics, University of *May June 2015* Toronto
  - Prepared and led weekly tutorials, graded, helped with exam invigilation.
- **Co-mentor** (with one of my PhD supervisors) for an undergraduate research student from Vellore Institute of Technology, India
- Co-mentor (with one of my PhD supervisors) for an undergraduate exchange student from University College London, UK
   Supervised methods comparison of statistical learning models for genetic risk prediction.

### **Supervision/Mentorship**

### Trainee Supervision, Université de Montréal (UdeM)

Postdoctoral Mentor, Université de Montréal

Le Chang
September 2024 –
Frida Lona Durazo (Postdoctoral scholarship, FRQS)
November 2021 –
Muhammad Shoaib
July 2021 – November 2022

Bioinformatics MSc or PhD, Research-based, Université de Montréal

Linda (Yuan) Wang - MSc

Justin Bellavance - MSc

Wiame Belbellaj - MSc (UdeM MSc recruitment scholarship)

September 2023 
May 2022 - June 2024

#### Bioinformatics Masters Research Internship Supervisor, Université de Montréal

Oumaima Hamza May 2021 – October 2021 Hester Faou January 2021 – June 2021

#### Undergraduate Research, Université de Montréal

Rime Diany

June 2023 – August 2023; June 2024 – August 2024

Nikita Neale

June 2023 – August 2023; June 2024 – August 2024

Melody Zuo (PREMIER scholarship)

May 2022 – August 2022; September 2024 – December 2024

Yangfan Zhao

June 2021 – August 2022

#### CÉGEP interns

Rayen Amrani April 2023 – May 2023

#### **Service on Graduate Student Committees**

PhD committee member

Soheila Moeini (PhD committee member) 2024 –

Manpreet Singh (PhD committee member)	2024 –
Cécile Poulain (PhD committee president)	2022 -
Graduate student Mentor, Université de Montréal	
Carolane Charest (MSc)	2024 <i>– 2026</i>
Rose Laflamme (PhD)	2022 – present
Justin Pelletier (MSc)	2020 – 2022
Evenination committee iven month or an avaidant Université de Mantuéel	
<u>Examination committee jury member or president, Université de Montréal</u> Federico Pratesi (PhD examination committee examiner)	2025
Raphael Avocegamou (MSc examination committee president)	November 2024
Jessy Carol Ntunzwenimana (PhD examination committee president)	October 2024
Sébastien Audet (Pre-doctoral examination committee member)	July 2024
Annu Beniwal (PhD examination committee member)	2024
Mame Seynabou Diop (Predoc examination committee president)	June 2024
Isabelle Hébert-Milette (PhD examination committee president)	September 2023
Xavier Navarri (Pre-doctoral examination committee member)	September 2023
Yann Ilboudo (PhD examination committee president)	September 2023
Amélie Jeuken (MSc examination committee president)	August 2023
Saiyet de la Caridad Baez Llovio (MSc committee member)	May 2023
Sayeh Kazem (Pre-doctoral examination committee member)	December 2022
Marjorie Labrecque (MSc examination committee examiner)	July 2022
Catherine Proulx (MSc examination committee president)	June 2022
Justin Pelletier (MSc examination committee president)	June 2022
Fatima Mostefai (Pre-doctoral examination committee president)	August 2021
у	
Examination committee jury member or president, other universities	
Zoe Schmilovich, McGill University (PhD examination committee jury)	March 2024
Leticia Camargo Tavares, Monash University (PhD examination committee jury)	October 2023
Gwenaëlle Lemoine, Université Laval (PhD examination committee jury)	December 2021
Certifications and Other Training	
<ul> <li>Communication Strategies for a Virtual Age (University of Toronto via Coursera</li> </ul>	•
<ul> <li>Training for Diversity &amp; Inclusive Teaching (University of Michigan)</li> </ul>	Winter 2018
THE500H: Teaching in Higher Education (University of Toronto)	Fall 2015
<ul> <li>Scientific Computing &amp; High Performance Computing (SciNet)</li> </ul>	September 2015
<ul> <li>Advanced University Teaching Preparation (University of Toronto)</li> </ul>	May 2014
Professional Service	
	waaiatian fantha
Co-organizer, Neuroscience Department Research Day (special mention of approximate to a second but the Department Chair)	
very great work by the Department Chair)	April 2024
Poster presentation moderator, 25 <sup>th</sup> Montreal Heart Institute Research Day	June 2023
<ul> <li>Member, Equity, Diversity and Inclusion (EDI) Planning committee, Research (</li> </ul>	
Heart Institute	2021 – 2022
	ary 2023 – present
2023 Vascular Training (VAST) Conference organizing committee member, Mo	
Conference held from N	•
Co-moderator for ASHG poster talks session	October 25, 2022
Platform Advisory Committee member, VCI Health Research Training (VAST) P	
	/ 2022 – July 2024
Oral Presentation judge at the 24 <sup>th</sup> Montreal Heart Institute Research Day	June 2022
IVADO MSc Excellence Scholarships Reviewer	March 2022
ASHG Program Committee member  January 2022	2 – December 2024

Co-moderator for ASHG platform session "Novel associations take October 19, 2021 novel statistical methods" CIHR "Fellowships - Post-PhD" Awards Committee ECR member *July 2021 – July 2022* Poster judge at the 23<sup>rd</sup> Montreal Heart Institute Research Day June 2021 Co-Moderator for ASHG platform session "A Deep Dive into Deep Learning" October 17, 2019 ASHG abstract reviewer, Statistical Genetics and Genetic Epidemiology 2019 Co-Moderator for ASHG platform session "Biases of Polygenic Risk Scores" October 20, 2018 Writer, ASHG newsletter, The Nascent Transcript 2017 - 2018 Proposer/Moderator for ASHG invited session October 20, 2017 "Using controls from external studies: issues, methods & successes" **IGES Webmaster** (Communications Committee) July 2016 - present Post announcements to the website, updated to new website **IGES Young Investigators Committee member** 2015 - 2018 Co-organized Young Investigators Mixer at the 2016 Meeting in Toronto **ASHG Genetics Education Outreach Network member** January 2015 – present Poster co-judge at the Summer Undergraduate Research Day August 2014

for the Institute of Medical Science, University of Toronto

**DNA Day Essay Contest Judge for ASHG** 

2014 - 2017

Reviewer for Annals of Oncology, Annals of Medicine, Annals of Translational Medicine, BMC Psychiatry, Brain, Brain and Behavior, Canadian Journal of Cardiology, Circulation, Current Drug Targets, European Journal of Epidemiology, Frontiers in Genetics, Frontiers in Immunology, Frontiers in Neuroscience, Genes, Genomics, GigaScience, Human Genetics and Genomics Advances, Human Reproduction, International Journal of Epidemiology, International Journal of Psychiatry in Clinical Practice, Journal of Neuroscience, Molecular Biology Reports, Molecular Genetics and Genomics, Nature, Nature Communications, Nature Genetics, Nature Reviews Methods Primers, Neurobiology of Aging, PeerJ, PLoS Computational Biology (associate editor), PLoS Genetics, PLoS ONE, Psychiatric Genetics, Psychiatry Research, Science Advances, Scientific Reports, Stroke, Thrombosis Research