Curriculum Vitae

McGill University, Faculty of Medicine and Health Sciences

Date of Last Revision: February 9, 2025

A. IDENTIFICATION

Name:	Qihuang Zhang
Office Address:	2001 McGill College, Suite 1212 Montreal, Quebec
Telephone:	(514) 396-1647
Email:	qihuang.zhang@mcgill.ca
Website:	www.qihuangzhang.com
Languages:	Mandarin, English, French

B. EDUCATION:

Undergraduate:

- **Institution**: Southwestern University of Finance and Economics
- **Field**: Statistics
- **Degree**: Bachelor of Science
- **Year**: 2011 - 2015

Graduate:

- **Institution**: University of Waterloo
- **Thesis**: *SIMEX* R *Package for Mixed Measurement Error and Misclassification in Covariates*
- **Degree**: Master of Mathematics
- **Year**: 2015 - 2017

- **Institution**: University of Waterloo
- **Thesis**: *Inference Methods for Noisy Correlated Responses with Measurement Error*
- **Degree**: Ph.D.
- **Year**: 2017 - 2020

Post-graduate training:

- **Institution**: Perelman School of Medicine, University of Pennsylvania
- **Field**: Statistical Learning in Spatial Genomics

C. APPOINTMENTS:

Assistant Professor, Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, QC 2022

Associate Investigator, Brain Repair and Integrative Neuroscience (BRaIN) Program, Research Institute of McGill University Health Centre, Montreal, QC 2023

Affiliated Researcher, Quantitative Life Sciences Program, McGill University, Montreal, QC 2023

D. SPECIAL HONORS, AWARDS, RECOGNITION:

Excellence in Teaching Award 2024
"In recognition of exceptional teaching during Winter 2024 Term 2 EPIB 621"

FRQS Salary Award Junior 1 2024
Fonds de recherche du Québec Santé

Featured Paper of Biotechnology and Methods 2023
"Leveraging Spatial Transcriptomics Data to Recover Cell Locations in Single-Cell RNA-seq with CeLEry"
Nature Communications

Best Presentation Award 2020
"Generalized Network Structured Model in Discovering Gene Network."
Department of Statistics and Actuarial Science, University of Waterloo, Waterloo, Ontario, Canada

Winner of Case Study 2018
"Prediction of Popularity of TED Talks: a Comprehensive Text Mining Case Study"
The 46^{th} Annual Meeting of the Statistical Society of Canada, McGill University, Montreal, Quebec, Canada

E. TEACHING

E1. McGill Course

1. EPIB 621: Data Analysis in Health Sciences
   4 credit (2024 Winter, No. Students: 71)
2. BIOS 694: Statistical and Machine Learning in Health Sciences
   4 credit (2023 Fall, No. Students: 11)* New Course Development
3. EPIB 613: Introduction to Statistical Software
   1 credit (2022 Fall, No. Students: 72)

E2. Guest Lecture

1. CDSI Workshop: Neural Network in R 2023, 2024
2. EXMD 601: Real World Applications of Data Science and Informatics 2023, 2024
3. BMDE 505: Cell and Tissue Engineering 2024
4. STAT447/847: Neural Network in R (University of Saskatchewan) 2023
5. COMP 565: Machine Learning in Genomics and Healthcare 2023

E3. Course Mentorship

BIOS 642 Health Certificate: Health Data: Statistical Learning & Model Visualization, 2025
BIOS 643 Health Certificate: Theory to Practice - Analysis & Reporting, 2025
Instructor: Gabrielle Simoneau
Fall 2024 EPIB 613 Instructors, 2024
Instructor: Marc Parsons
BIOS 640 Health Certificate: Introduction to Health Data Science Methods, 2024
Instructor: Gabrielle Simoneau
Fall 2024 EPIB 613 Instructors, 2024
Instructor: Marc Parsons
Winter 2024 EPIB 521 Instructor, 2024
Instructor: Junwei Shen
Fall 2023 EPIB 613 Instructors, 2023
Instructor: Haoyu Wu, Junwei Shen and Victoire Michal

E4. Research Trainees Supervised:

Postdoctoral Fellow

1. *Chi-Kuang Yeh*, Sep 2023 - Jun 2025
   CANSSI Distinguished Postdoctoral Fellow
   (co-supervisor: Archer Y. Yang and Peijun Sang)

Doctoral Degree Supervision

1. *Mingchi Xu*, Sep 2023 - Present
   Ph.D. Biostatistics
   (co-supervisor: Alexandra Schmidt)

2. *Qicheng Zhao*, Sep 2024 - Present
   Ph.D. Biostatistics
   (co-supervisor: Celia Greenwood)
3. *Mincen Liu*, Sep 2024 - Present
   Ph.D. Biostatistics
   (co-supervisor: Erica Moodie)
4. *Weiyi Xiao*, Sep 2024 - Present
   Ph.D. Computer Science
   (co-supervisor: Yue Li)

Master Degree Supervision

1. *Kent Lu*, May 2024 - Present
   Master Biostatistics (Thesis)
   (co-supervisor: Archer Y. Yang)
2. *Cathy Shen*, Sep 2023 - Present
   Master Biostatistics (Thesis)
   (co-supervisor: Josée Dupuis)
3. *Qicheng Zhao*, Sep 2023 - Aug 2024
   Master Biostatistics (Thesis)
4. *Hani Rukh E Qamar*, Sep 2023 - Present
   Master Epidemiology (Thesis)
   (co-supervisor: Nitika P. Pai)
5. *Olivia Vaikla*, Sep 2023 - Present
   Master Epidemiology (Thesis)
   (co-supervisor: Nitika P. Pai)
6. *Anji Deng*, May 2023 - Apr 2024
   Master Biostatistics (Non-Thesis)
7. *Fio Vialard*, Sep 2022 - Apr 2023
   Master Epidemiology (Thesis)
   (co-supervisor: Nitika P. Pai)

Undergraduate Supervision

1. *Yinmi Chen*, Jan 2025 - Present
   Bachelor of Computer Science and Biology
2. *Yuyang Zhang*, Jan 2024 - Present
   Bachelor of Computer Science and Statistics
3. *Jieqi Luo*, Sep 2023 - Dec 2023
   Bachelor of Computer Science

Other Supervision

1. *SSC Case Study Supervision*,
   Team 1: (Case Study Winner) Qicheng Zhao, Helen He, Rubiya Akter 2024
   Team 2: Mingchi Xu, Kent Lu, Nam-Anh Tran 2024

E5. Thesis Committee

Thesis Supervisory Committee

Candidate Name	Degree	Program	University	Year
Kinaan Aamir Khan	PhD	Computer and Electrical Engineering	McGill University	2024
Sebastien Garneau	PhD	Biostatistics	McGill University	2024

Thesis Examine Committee

Candidate Name	Degree	Program	University	Year
Julien St-Perre	PhD	Biostatistics	McGill University	2024
James Willard	PhD	Biostatistics	McGill University	2024
Gilberto Chavez Martinez	PhD	Statistics	McGill University	2024
Paritosh Kumar Roy	PhD	Biostatistics	McGill University	2024
Yixiao Zeng	PhD	Quantitative Life Science	McGill University	2024
Shomoita Alam	PhD	Statistics	McGill University	2023
Yasmin Jolasun	MSc	Experimental Medicine	McGill University	2023
Wenmin Zhang	PhD	Quantitative Life Science	McGill University	2023
Michael Huang	MSc	Computer Science	McGill University	2023
Huzbah Jagirdar	MSc	Epidemiology	McGill University	2023

Thesis Protocol (Proposal) Committee

Candidate Name	Degree	Program	University	Year
Yang Lu	PhD	Biostatistics	McGill University	2025
Kinaan Aamir Khan	PhD	Computer and Electrical Engineering	McGill University	2024
Kailu Song	PhD	Quantitative Life Science	McGill University	2024
Chen-Yang Su	PhD	Quantitative Life Science	McGill University	2024
Niki Petroka	PhD	Biostatistics	McGill University	2024
Yasmin Jolasun	PhD	Experimental Medicine	McGill University	2024
Rachelle El Haber	PhD	Epidemiology	McGill University	2024
Sandesh Acharya	PhD	Medical Science	University of Calgary	2024
Paritosh Kumar Roy	PhD	Biostatistics	McGill University	2023
Vanessa McNealis	PhD	Biostatistics	McGill University	2023
Adrien Osakwe	PhD	Quantitative Life Science	McGill University	2023
Yuming Zheng	PhD	Quantitative Life Science	McGill University	2023
Junwei Shen	PhD	Biostatistics	McGill University	2023

Comprehensive Exam Committee

Candidate Name Program	University	Year
Biostatistics	McGill University	2023
Biostatistics	McGill University	2024

F. OTHER CONTRIBUTIONS:

F1. Journals

Editorial Service

Guest Editor, Frontiers in Epigenetics and Epigenomics 2023 - 2024
Academical Editor, PLOS Digital Health 2024 - Present

Journal Manuscript Review
(# of work reviewed in the past, ∗ of work reviewed in 2024)

Big Data Mining and Analytics (∗2)
Bioinformatics (#2)
Biometrics (∗1)
Biostatistics (∗1)
Canadian Journal of Statistics (#1, ∗1)
Computational Biology (#1)
Computational Statistics and Data Analysis (#1, ∗1)
Genome Biology (∗3)
Journal of Applied Statistics (#1)
Journal of the American Medical Informatics Association (#3)
Journal of the American Statistical Association (#2, ∗1)
Journal of Statistical Computation and Simulation (#2)
Mathematics (∗1)

Nature Communications (#1, ∗1)
PLOS Computational Biology (#1, ∗1)
PLOS Digital Health (#1, ∗2)
Scientific Reports (#1, ∗2)
Signal Transduction and Targeted Therapy (#2)
Statistics in Biosciences (#2)
Statistics in Medicine (#1)

F2. Grant Reviews

External Examiner,

- NSERC External Reviewer (x2) - Mathematics and Statistics Section 2024
- CIHR Spring competition - Reviewer-in-Training Program 2024
- CANSSI Ontario Data Access Grant 2024
- MRC Applied Global Health Research Board 2023
- NSERC Alliance Grants 2023

Internal Examiner,

- CIHR Faculty of Medicine and Health Science Internal Review 2024 (x2)

F3. Faculty Responsibility and Committees

Health Data Analytics Certificate Course Development, 2024 - present
Epidemiology, Biostatistics and Occupational Health, McGill

Full Member of the College of Reviewers, 2024 - present
Canadian Institutes of Health Research

Organizer, Biostatistics Seminar Series, 2023 - 2024
Department of Epidemiology, Biostatistics and Occupational Health

SSC Fundraising Committee, 2023 - Present
Society of Statistics Canada

CDSI Lecturer Search Committee, 2023
McGill University

Conference Organizing Co-Chair, 2019
The 1*st* Waterloo Student Conference in Statistics, Actuarial Science and Finance

McGill Biostatistics Program Admission Committee, 2022-2024
McGill University

F4. Academic Conference

Judge, *ICSA Conference Student Paper Award Committee* 2024
Judge, *Statistical Society of Canada Annual Meeting Best Student Oral Presentation* 2024
Session Organizer and Chair, *Statistical Society of Canada Annual Meeting* 2024
Session Chair, *Computational and Methodological Statistics* 2024

F5. Academic Membership

Society of Statistics Canada (SSC) 2016-present
American Statistical Association (ASA) 2021-present
Institute of Mathematical Statistics (IMS) 2022-present
International Chinese Statistical Association (ICSA) 2022-present

F6. Other Service

Judge, *EBOSS Public Health Research Day* 2023
Judge, *PharmaHacks 2023* 2023
Award committee member, *CRM Postdoctoral Fellow Committee* 2024
Mentor, *College of Graduate Mentorship* 2024

Mentor, *Member of Seminar Invitation Committee for Quantitative Life Sciences* 2024

G. RESEARCH:

G1. Research Activities

My research focuses on developing statistical and machine learning methodologies to address challenges in genetics and genomics data, such as missing values, high dimensions, measurement errors, and complex association structures. My recent research has centered around developing methods to process medical images, spatial omics, and single-cell RNA-seq data.

G2. Grant Obtained

(* PI: Principal Investigator; Co-PI: Co-principal Investigator)

CIHR Project Grant *($ 1,040,400) [Co-Applicant]* 2025 - 2028
Fonds de recherche du Québec Santé
Project title: Investigating the antifibrotic effects of human multipotent mesenchymal stromal cells.

FRQS Chercheurs-boursiers Junior 1 *($ 214,452) [PI]*
Fonds de recherche du Québec Santé 2024 - 2028

FRQS Établissement de Jeunes Chercheurs *($ 80,000) [PI]*
Fonds de recherche du Québec Santé 2024 - 2028

CANSSI Graduate Student Enrichment Award *($ 15,000) [PI]*
Canada Statistical Science Institute 2024 - 2026

CIHR HIV/AIDS and STBBI Bridge Grant *($ 100,000) [Co-PI]*
CIHR HIV/AIDS and STBBI Research Initiative 2024 - 2025

NSERC Discovery Award *($ 147,500) [PI]* 2023 - 2028
Natural Sciences and Engineering Research Council of Canada

CANSSI Postdoctoral fellowship *($ 140,000) [Co-Supervisor]* 2023 - 2025
Trainee: Chi-Kuang Yeh
Canada Statistical Science Institute

McGill Start-up Grant *($ 180,000) [PI]* 2022 - 2026
Faculty of Medicine and Health Science, McGill University

G3a. Refereed Journal Publications

(*co-first authorship, ✉corresponding author, 🎓trainee)

1. G. C. Matlis, **Q. Zhang**, E. J. Benson, M. K. Weeks, K. Andersen, J. Jahnavi, A. Lafontant, J. Breimann, T. Hallowell, Y. Lin, T. J. Kilbaugh, D. J. Licht, A. G. Yodh, R. M. Forti, B. R. White, W. B. Baker, R. Xiao, T. S. Ko (2024). Chassis-based fiber-coupled optical probe design for reproducible quantitative diffuse optical spectroscopy measurements. *PLOS ONE*. 19(7): e0305254.
https://doi.org/10.1371/journal.pone.0305254

2. **Q. Zhang***✉, S. Jiang*, A. Schroeder*, J. Hu, K. Li, B. Zhang, D. Dai, E. B. Lee, R. Xiao, M. Li ✉(2023). Leveraging spatial transcriptomics data to recover cell locations in single-cell RNA-seq with CeLEry. *Nature Communications*, 14(1), 4050.
https://doi.org/10.1038/s41467-023-39895-3

3. A. Sen, J. D. Baker, **Q. Zhang**, R. R. Agarwal, and J.-P. Lam (2023). Do more stringent policies reduce daily COVID-19 case counts? Evidence from Canadian provinces. *Economic Analysis and Policy* 78: 225-242.
https://doi.org/10.1016/j.eap.2023.03.006

4. Sen, Anindya, Nathaniel T. Stevens, N. Ken Tran, Rishav R. Agarwal, Qihuang Zhang, and Joel A. Dubin. "Forecasting daily COVID-19 cases with gradient boosted regression trees and other methods: evidence from US cities." *Frontiers in Public Health* 11 (2023): 1259410.
https://doi.org/10.3389/fpubh.2023.1259410

5. **Q. Zhang**, G. Y. Yi, L.-P. Chen, W. He (2023). Sentiment Analysis and Causal Learning of COVID-19 Tweets prior to the Rollout of Vaccines. *PLOS ONE*. 18(2): e0277878.
https://doi.org/10.1371/journal.pone.0277878

6. J. Fan, Y. Lyu, **Q. Zhang**, X. Wang, M. Li, R. Xiao (2022). MuSiC2: cell type deconvolution for multicondition bulk RNA-seq data. *Briefings in Bioinformatics*, 23(6):1-10.
https://doi.org/10.1093/bib/bbac430

7. **Q. Zhang** and G. Y. Yi (2023). Zero-inflated Poisson model with measurement error in the response. *Biometrics*. 79(2):1089-102.https://doi.org/10.1111/biom.13657

8. **Q. Zhang** and G. Y. Yi (2023). Generalized network structured model with mixed responses subject to measurement error and misclassification. *Biometrics*. 79(2):1073-1088.
https://doi.org/10.1111/biom.13623

9. **Q. Zhang** and G. Y. Yi (2022). Sensitivity analyses of COVID-19 data under autoregressive model with measurement error. *Journal of Applied Statistics*:1-24.
https://doi.org/10.1080/02664763.2022.2034760

10. **Q. Zhang** and G. Y. Yi (2021). Marginal analysis of bivariate mixed responses with measurement error and misclassification. *Statistical Methods in Medical Research*, 30(5): 1155-1186.
https://doi.org/10.1177/0962280220983587

11. N. Stevens, A. Sen, F. Kiwon, P. P. Morita, S. H. Steiner and **Q. Zhang** (2021). Estimating the Effects of Non-Pharmaceutical Interventions (NPIs) and Population Mobility on Daily COVID-19 Cases: Evidence from Ontario. *Canadian Public Policy*. 48(1):144-161.

12. **Q. Zhang** and G. Y. Yi (2020). Genetic association studies with bivariate mixed responses subject to measurement error and misclassification. *Statistics in Medicine*, 39(26): 3700-3719.
https://doi.org/10.1002/sim.8688

13. L.-P. Chen*, **Q. Zhang***, G. Y. Yi, W. He (2020). Model-based forecasting for Canadian COVID-19 data. *PLOS ONE*, 16(1): e0244536.
https://doi.org/10.1371/journal.pone.0244536

14. D. Liu, Y. Du, Y. Charvadeh, J. Cui, L.-P. Chen, G. Deng, **Q. Zhang**, K. Cai, J. He, W. He, G. Y. Yi (2020). A real time and interactive web-based platform for visualizing and analyzing COVID-19 in Canada. *International Journal of Statistics and Probability*, 9(5): 23-29.

15. **Q. Zhang** and G. Y. Yi (2019). R package for analysis of data with mixed measurement error and misclassification in covariates: augSIMEX. *Journal of Statistical Computation and Simulation*, 89(12), 2293-2315.
https://doi.org/10.1080/00949655.2019.1615911

16. L.-P. Chen, G. Y. Yi, **Q. Zhang**, W. He (2019). Multiclass analysis and prediction with network structured covariates. *Journal of Statistical Distributions and Applications*, 6(1), 6.
https://doi.org/10.1186/s40488-019-0094-2

17. L. Eng, D. Alton, Y. Song, J. Su, **Q. Zhang**, J. Che, D. Farzanfar, R. Mohan, O. Krys, W. Xu, D. Goldstein, M. E. Giuliani, G. Liu (2018). Awareness of the harms of continued smoking among cancer survivors. *Supportive Care in Cancer*, 1-11.

18. O. Faluyi, L. Eng, X. Qiu, J. Che, **Q. Zhang**, D. Cheng, N. Ying, A. Tse, W. Xu, A. Azad, G. Liu (2017). Validation of micro RNA pathway polymorphisms in esophageal adenocarcinoma survival. *Cancer Medicine*, 6(2), 361-373.

19. R. Gama, Y. Song, **Q. Zhang**, M. Brown, J. Wang, S. Habbous, L. Tong, S. Huang, B. O'Sullivan, J. Waldron, W. Xu, D. Goldstein, G. Liu (2017). Body mass index and prognosis in patients with head and neck cancer. *Head and Neck*, 39(6), 1226-1233.

20. V. Jayalath, A. Finelli, M. Komisarenko, N. Timilshina, **Q. Zhang**, W. Xu, N. Fleshner, R. Hamilton (2017). Association between germline genetic variation and progression in men with low-risk prostate cancer on active surveillance. *The Journal of Urology*, 197(4), 516-517.

G3b. Preprint Manuscript, Under Review or Under revision

1. Q. Zhao, **Q. Zhang**(2024). Bayesian model for disease-specific gene detection in high-dimensional spatially resolved transcriptomics. *arXiv preprint* arXiv:2409.02397.

2. Y. Zhang, **Q. Zhang**(2025+). Winnow-KAN: Single-Cell RNA-seq Location Recovery with Small-Gene-Set Spatial Transcriptomics. *Under Review.*

3. L.-P. Chen*, **Q. Zhang***(2025+). Generalized SIMEX Method: Polynomial Approximation for Extrapolation. *Under Review.*

4. F. Vialard, **Q. Zhang**, S. Nair, S. Bartlett, N. Pant Pai (2025+). Developing and validating a Bayesian clinical risk prediction model for 3 sexually transmitted infections in Canadian key populations. *Revision Submitted.*

5. A. Osakwe, W. Dong, **Q. Zhang**, R. Sladek, Y. Li (2025). SpaTM: Topic Models for Inferring Spatially Informed Transcriptional Programs. *bioRxiv*, 2025.01.24.634726

6. Y.-J. Lee, Y.-T. Chang, Y. Cho, A. Dragoiescu, M. Kowalczyk, A. Pacis, S. K. Duraikannu Kailasam, F. Lefebvre, **Q. Zhang**, X. Gao, W.-H. Huang (2025+). Molecular and functional developmental deficits in Smith-Magenis syndrome patient hiPSC-derived cortical neural models. *Under Review.*

G3b. Manuscript Submitted or Under Final Preparation

1. **Q. Zhang**, A. Deng, R. Xiao, M. Li(2024+). GALAXY: peak group alignment of mass spectrometry data. *Manuscript under preparation.*

2. F. Agbozo, A. N. Osei, **Q. Zhang**, I. Agbemafle, E. Jaeger-McEnroe, C. P. Larson, M. Djekic-Ivankovic (2024). Anemia and anthropometric status of primary children benefiting from school-based nutrition interventions in Sub-Saharan Africa: a systematic review and meta-analysis. *Manuscript under preparation.*

G4. Software

1. **Q. Zhang** (2023). CeLEry: Cell Location Recovery with spatial transcriptomics data v1.1.2 (scRNA-seq). Zenodo.
https://doi.org/10.5281/zenodo.8019107

2. **Q. Zhang** and G. Y. Yi (2021). ZIPBayes: Bayesian Methods in the Analysis of Zero-Inflated Poisson Model. *R package version 1.0.1.*
https://CRAN.R-project.org/package=ZIPBayes

3. **Q. Zhang** and G. Y. Yi (2020). GeneErrorMiss: Addressing Measurement Error and Misclassification in Bivariate Response Models. *R package version 1.0.0.*
https://github.com/QihuangZhang/GeneErrorMis

4. **Q. Zhang** and G. Y. Yi (2019). augSIMEX: Analysis of Data with Mixed Measurement Error and Misclassification in Covariates. *R package version 3.7.4.*
https://CRAN.R-project.org/package=augSIMEX

G5a. Presentations (Invited)

1. *CMStatistics 2024 Meeting, London, United Kingdom* "Zero-inflated Poisson with measurement error in the response." Dec 2024

2. *Biostatistics Seminar at University of Calgary, Alberta, Canada* "Zero-inflated Poisson with measurement error in the response." Dec 2024

3. *Statistics Seminar at Simon Fraser University, British Columbia, Canada* "Zero-inflated Poisson with measurement error in the response." Sep 2024

4. *Seminar Series in Quantitative Life Sciences, McGill University* "From Spatial Coordinates to Gene Discovery: Methodological Explorations in Spatial Transcriptomics." Sep 2024

5. *Statistical Seminar Series, Southwestern University of Finance and Economics, Chengdu, China* "Zero-inflated Poisson with measurement error in the response." Sep 2024

6. *EcoStat 2024: The 7th International Conference on Econometrics and Statistics, Beijing Normal University, Beijing, China* "Bayesian model for disease-specific gene detection in spatially resolved transcriptomics." July 2024

7. *ICSA-Canada Statistics Conference, Niagara Falls, Ontario, Canada* "Generalized SIMEX Method: polynomial approximation for extrapolation." June 2024

8. *The* 51^{th} *Annual Meeting of the Statistical Society of Canada, University of Newfoundland, St. Johns, Newfoundland and Labrador, Canada* "Bayesian model for disease-specific gene detection in spatially resolved transcriptomics." June 2024

9. *STATGEN 2024: Conference on Statistics in Genomics and Genetics, Pittsburgh, Pennsylvania, USA* "Bayesian model for disease-specific gene detection in spatially resolved transcriptomics." May 2024

10. *CMStatistics 2023 Meeting, University of Applied Sciences (Wilhelminenhof campus), Berlin, Germany* "Leveraging spatial transcriptomics data to recover cell locations in single-cell RNA-seq with CeLEry." Dec 2023

11. *Bioinformatics Seminar Series, University of Western Ontario, London, Ontario, Canada* "Leveraging spatial transcriptomics data to recover cell locations in single-cell RNA-seq with CeLEry." Nov 2023

12. *CRM-StatLab Meeting, Université de Québec à Montréal, Montreal, Quebec, Canada* "Leveraging spatial transcriptomics data to recover cell locations in single-cell RNA-seq with CeLEry." Oct 2023

13. *Department of Statistics Seminar Series, University of Manitoba, Winnipeg, Manitoba, Canada* "Modern statistical and machine learning methods for overcoming challenges in genomic data." Oct 2023

14. *Department of Biostatistics Seminar Series, Vanderbilt University, Nashville, Tennessee, USA* "Modern statistical and machine learning methods for overcoming challenges in genomic data." Sep 2023

15. *ICSA China Statistics Conference, Chengdu, Sichuan, China* "Cell location recovery with CeLEry: a supervised deep-learning algorithm for unveiling spatial origins in scRNA-seq." Jul 2023

16. *North America Machine Learning, Optimization and Statistics Symposium, Vancouver, British Columbia, USA* "A supervised deep-learning algorithm for discovering spatial origins in scRNA-seq." Jun 2023

17. *ICSA Applied Statistics Symposium, Ann Arbor, Michigan, USA* "Cell location recovery with CeLEry: a supervised deep-learning algorithm for unveiling spatial origins in scRNA-seq." Jun 2023

18. *Statistical Data Science Conference, University of British Columbia Okanagan, Kelowna, British Columbia, Canada* "Zero-inflated Poisson models with measurement error in the response." Jun 2023

19. *The* 50^{th} *Annual Meeting of the Statistical Society of Canada, Charleton University, Ottawa, Ontario, Canada* "Generalized network structured models with mixed responses subject to measurement error and misclassification." May 2023

20. *Mathematics and Statistics Seminar Series, University of Victoria, Victoria, British Columbia, Canada* "Leveraging spatial transcriptomics data to recover cell locations in single-cell RNA-seq with CeLEry." Oct 2022

G5b. Other Presentations

1. *Joint Statistical Meeting, Toronto, Ontario, Canada* "Zero-inflated Poisson models with measurement error in the response." Aug 2023

2. *University Statistical and Translational Genomics Laboratory Meeting, University of Pennsylvania, Philadelphia, Pennsylvania, USA* "CeLEry: Cell location recovery based on spatial transcriptomics data." May 2021

3. *University Presentation Day, University of Waterloo, Waterloo, Ontario, Canada* "Generalized network structured model in discovering gene network." March 2020

4. *The* 48^{th} *Annual Meeting of the Statistical Society of Canada, University of Calgary, Calgary, Alberta, Canada* "Analysis of bivariate responses in genetic association studies with measurement error and misclassification" May 2019

5. *Grace-Wenqing Data Science Research Group Meeting, Waterloo, Ontario, Canada* "Statistical learning in hidden markov model" March 2019

6. *Grace-Wenqing Data Science Research Group Meeting, Waterloo, Ontario, Canada* "High-throughput sequencing, RNA-seq data analysis and zero-inflated Poisson model" Nov 2018

7. *The* 46^{th} *Annual Meeting of the Statistical Society of Canada, McGill University, Montreal, Quebec, Canada* "Prediction of popularity of TED talks: a comprehensive text mining case study" June 2018

8. *Cancer Outcomes Medicine Biostatistics Informatics Epidemiology Laboratory, Toronto, ON, Canada* "The influence of genetic variation on the association between Statin and prostate cancer risk: a genome-wide association study" Aug 2016

9. *The* 44^{th} *Annual Meeting of the Statistical Society of Canada, Brock University, St. Catharines, Ontario, Canada* "Estimation of genotyping misclassification rate for pedigree data: a Bayesian approach" May 2016