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Education

1995	**PhD in Statistics** University of Waterloo, Ontario, Canada Dissertation: "Estimation from Truncated Data with Supplementary Information, with Application to Field Reliability" Supervisor: Jerald F. Lawless
1987	**MSc in Probability and Statistics** Peking University, Beijing, P.R. China Master's Thesis: "Sequential Tests on Exponential Processes" Supervisor: Jiading Chen
1983	**BSc in Mathematics** Peking University, Beijing, P.R. China

Employment History

2010-present	**Professor** Department of Statistics and Actuarial Science, Simon Fraser University
2020-2022	**Graduate Study Chair** Department of Statistics and Actuarial Science, Simon Fraser University
2017-2020	**Affiliate Professor** Irving K. Barber School of Arts and Sciences, University of British Columbia - Okanagan
2005-2015	**Associate Member** Faculty of Health Sciences, Simon Fraser University
2003-2010	**Associate Professor** Department of Statistics and Actuarial Science, Simon Fraser University
2003-2004	**Associate Professor** (on leave) Department of Mathematical Sciences, University of Memphis
2000-2003	**Adjunct Faculty Member** Department of Biostatistics, St. Jude Children's Research Hospital
Summer 1999	**Visiting Assistant Professor** Department of Biostatistics, Harvard University
1998-2003	**Assistant Professor** Department of Mathematical Sciences, University of Memphis
1997-1998	**Research Scientist** Department of Biostatistics and Center for Biostatistics in AIDS Research, Harvard School of Public Health

1996-1997	**Research Fellow** Department of Biostatistics and Center for Biostatistics in AIDS Research, Harvard School of Public Health (supervised by S.W. Lagakos)
1995-1996	**Visiting Scholar** Environmental Health Centre, Health Canada (supervised by D. Krewski)
Spring 1995	**Postdoctoral Fellow** Department of Statistics & Act. Science, University of Waterloo (supervised by J.F. Lawless)

Honors and Awards

NSERC Discovery Accelerator Supplement (R611689-RGPAS493023 CND $40,000/year; 2016-2019)

ASA Fellow, American Statistical Association (2012).

Elected ISI Member, International Statistical Institute (2007).

NSERC University Faculty Award, Natural Sciences and Engineering Research Council of Canada (2003-2008).

Full Graduate Faculty, University of Memphis (1998-2004).

Early Career Research Award, University of Memphis (2002).

Frank Wilcoxon Prize 1998, American Statistical Association and American Society for Quality Control. See *AmStat News*, 1999.

New Faculty Research Award, University of Memphis (1999).

Pierre Robillard Award 1996 (Best Canadian Ph.D. thesis in Statistics in 1995), presented by SSC. See *AmStat News*, 1996.

NSERC Visiting Scholar Fellowship, Natural Sciences and Engineering Research Council of Canada (1995-1996).

Ontario Graduate Scholarship (OGS), Ontario Ministry of Training, Colleges and Universities, Canada (1993-1994).

Research/Conference Grants

Principal Investigator

CANSSI CRT Award "The Application of Statistical Methods to Wastewater Analysis" (CND $70,000/year, 2024-2027; jointly with C. Dean and R. Delatolla)

NSERC Discovery Grant (RGPIN 177430), "Statistical Modelling and Inference with Complex Data" (DG R611382 CND $33,000/year; 2023-2028)

SFU Provost and Vice-President Academic's 2023-2024 Conference Fund to Workshop "North American Machine Learning, Statistics, and Optimization Symposium", June 23-25 2023 ($3,500; 2023)

NSERC Discovery Grant (RGPIN 177430), "Statistical Modelling and Inference with Unconventional Data" (DG R611382 CND $40,000/year; 2016-2022)

CANSSI CRT Award "Statistical Analysis of Large Administrative Health Databases: Emerging Challenges and Strategies" (CND $60,000/year, 2017-2020; jointly with R. Platt and G. Yi).

SSHRC Support "Developing Predictive Models to Quantify Happiness", Access to Statistics Canada Research Data Centres (2015-2019, extended to 2021).

CANSSI Award of $18,500 and **PIMS Award** of $2,000 to Workshop - SFU "Statistical Analysis of Large Administrative Health Databases: Emerging Challenges and Strategies" April 4-6 2016 (jointly with R. Platt and G. Yi)

NSERC Discovery Grant (RGPIN 177430), Natural Sciences and Engineering Research Council of Canada (CND $16,000/year; 2011-2016).

NSERC Discovery Grant (RGPIN 177430), Natural Sciences and Engineering Research Council of Canada (CND $15,000/year; 2006-2011).

NIH R01 Grant (R01 AI056995), National Institute of Allergy and Infectious Diseases (direct cost US $210,000; 2003-2007).

NSERC Discovery Grant (RGPIN 177430), Natural Sciences and Engineering Research Council of Canada (CND $17,000/year; 2003-2006).

President's Research Grants Fund, Simon Fraser University (CND $10,000; 2004-2005).

Start-Up Fund, Simon Fraser University (CND $25,000; 2003-2005).

New Faculty Research Grant, University of Memphis (US $7,500; 1999-2000)

Co-Investigator (since 2000)

- Sports Analytics (PI: T. Swartz), CANSSI Collaborative Research Team Project ($200,000; 2021-2024).
- Emerging Infectious Disease Modelling Initiative (PIs: V. Murty and J. Wu), NSERC - EIDM Initiative ($3,000,000; 2021-2023: JHU's awarded with $75,000)
- Advances and Innovations in Statistics and Data Sciences: ICSA - Canada Chapter Symposium (PI: D. Kong and L. Kong), CANSSI Award of $5,000 and PIMS Award of $3,000.

- Emulating target trials with big data to strengthen the evidence base for the clinical management of opioid use disorder (PI: B. Nosyk), National Institutes of Health (NIH) ($490,000/year; 2021-2025)
- Understanding Frequent Emergency Department Visitors in Alberta and Ontario through Advanced Statistical Modeling Techniques (PI: R. Rosychuk), Canadian Institutes of Health Research (CIHR) ($70,000; 2018-2019).
- Evolving Marked Point Processes with Application to Wildland Fire Regime Modelling (PI: J. Braun and D. Woolford), CANSSI Collaborative Research Team Project ($200,000; 2015-2018).
- Embracing Challenges and Opportunities of Statistics and Data Sciences in the Modern World: A Workshop of ICSA - Canada Chapter (PI: X. Lu), CANSSI Collaborative Research Team Project ($10,000; 2015).
- Novel Statistical Methods for Multiple Event Processes: Application to Emergency Department and Physician Visits for Pediatric Mental Health Care (PI: R. Rosychuk), Canadian Institutes of Health Research (CIHR) ($572,000; 2011-2016).
- Continuity, Compliance, and Effectiveness of Care among Breast Cancer Survivors (PI: M. McBride), Canadian Institutes of Health Research (CIHR) ($4,000,000; 2011-2016).
- Computer Network Enhancement (PI: B. McNeney), Natural Sciences and Engineering Research Council of Canada (NSERC) ($96,081; 2011-2013).
- Analysis of Health Services Utilization by Survivors of Cancer Diagnosed Before Age 20 (PI: M. McBride), Canadian Institutes of Health Research (CIHR) ($2,975,000; 2008-2013).
- Biological Breast Cancer Classification by qRT-PCR with Washington University and University of British Columbia (PI: M. Ellis), National Institute of Health (NIH) (2005-2007)
- Sickle Cell Disease Center with St.Jude Children's Research Hospital (PI: W.C. Wang), National Institute of Health (NIH) (2000-2003)
- Clinical Nutrition with St.Jude Children's Research Hospital (PI: M.R. Williams), National Institute of Health (NIH) (2000-2003).

Editorial/Referee Services

Co-Editor
Statistics in Biosciences (2021-2023; Coordinating Editor for 2022-2023)

Associate Editor
Canadian Journal of Statistics (2010-2012, 2022-present)
Lifetime Data Analysis (2010-2017, 2020-present)
Statistics in Biosciences (2009-2020)
Statistical Papers (2011-2016)
Statistica Sinica (2022-present)

Guest Co-Editor
A Special Issue of "Alternative Models to the Cox Proportional Hazards Model" in *Computational and Mathematical Methods in Medicine* (2012)

Grant Application Review

Review panel

- CIHR review panel for Public Health (on CIHR College of Reviewers since 2017): CIHR-PH1, 2012; CIHR-PH2, 2017; CIHR-PH1, 2019-2021; CIHR-COVID19, 2020; CIHR-HPM (Standing Committee Member), 2022-2025.
- NIH review panels for (i) the Biostatistical Methods and Research Design Study Section (2006), (ii) NIAID for HIV/AIDS Clinical Trials Networks (2006), (iii) the Analytics and Statistics for Population Research (ASPA, 2022; ASPB, 2023)
- BIRS (Banff International Research Station) scientific report review: workshop proposal 2022.

Proposal referee

- CANSSI reviewer for a CRT LOI (2022).
- NSERC referee for grants in Statistical Sciences (2005-present: 2016 [2]; 2017 [2]; 2018 [2]; 2019 [1]; 2020 [2]; 2021 [3]; 2023 [3]).
- Netherlands Organisation for Scientific Research (2014); German Research Foundation (2015).
- NSF referee for proposals in Statistics (2010, 2011).
- NIH referee for NIH challenge/BMRDS grants (2009, 2010).

Book/Paper Review

Book Review
American Statistician, *Journal of American Statistical Association*, *Biometrics*.

Conference Paper
2009: "Sixth St. Petersburg Statistics Workshop", Russia;
2011: "Statistical Concepts and Methods for the Modern World", Sri Lanka.

Journal Paper

Australian & New Zealand Journal of Statistics; *Annals of Applied Statistics*; *Annals of Institute of Statistical Mathematics*; *Annals of Statistics*; *Applied Statistics (JRSSC)*; *Australian & New Zealand Journal of Statistics*; *Biometrical Journal*; *Biometrika*; *Biometrics*; *Biostatistics*; *Canadian Journal of Statistics*; *Communications in Statistics (B)*; *Computational Statistics and Data Analysis*; *Controlled Clinical Trial*; *Econometrics and Statistics*; *Environmetrics*; *Encyclopedia of Environmetrics*; *IIE Transactions*; *IEEE Transactions on Knowledge and Data Engineering*; *Infectious Disease Modelling*; *The Institute of Statistical Mathematics*; *International Journal of Biostatistics*; *Iranian Journal of Science and Technology (Sciences)*; *Journal of Biopharmaceutical Statistics*; *Journal of International Business Studies*; *Journal of the American Statistical Association*; *Journal of the Royal Statistical Society. Series B (JRSSB)*; *Journal of Mathematical Modeling*; *Journal of Multivariate Analysis*; *Journal of Nonparametric Statistics*; *Journal of Statistical Planning and Inference*; *Lifetime Data Analysis*; *Mathematical Biosciences*; *Medical and Pediatric Oncology*; *BMC Medical Research Methodology*; *Scandinavian Journal of Statistics*; *Statistical Methods in Medical Research*; *Statistical Science*; *Statistics in Medicine*; *Statistical Papers*; *Statistica Sinica*; *Statistics in Medical Research*; *Technometrics*; *Transaction on Knowledge and Data Engineering.*

Invited Presentations

Sessions of Conference/Workshop:

- JSM 2023, Toronto, Ontario, Canada.
- ICSA 12th International Conference, Hongkong (delivered by T. Thomson, a former PhD student).
- ISI 2023, Ottawa, Ontario, Canada.
- WNAR 2023, Anchorage, Alaska, USA (delivered by Angela Chen, a PhD student).
- LiDS 2023, Raleigh, North Carolina, USA.
- JSM 2022, Washington DC, USA.
- BIRS Workshop 22w5010 "Emerging Challenges for Statistics and Data Sciences: Complex Data with Missingness, Measurement Errors, and High Dimensionality", May 22–27, 2022.
- SSC 2021, Canada *(virtual due to the COVID-19 pandemic)*
- Statistics 2021 Canada, Canada *(virtual due to the COVID-19 pandemic)*
- BIRS Workshop 2020 on Identification, Validation, and Use of Surrogate Markers, Casa Matematica Oaxaca, Mexico *(postponed to 2022 due to the COVID-19 pandemic)*

- JSM 2020, Philadelphia, USA *(switched to online due to the COVID-19 pandemic)*
- ICSA 2020, Wuhan, China *(cancelled due to the COVID-19 pandemic)*
- Fields Workshop 2020 on Advancing Knowledge about Spatial Modeling, Infectious Diseases, Environment and Health, Toronto, Canada *(switched to online due to the COVID-19 pandemic)*
- SSC 2020, Ottawa, Canada *(cancelled due to the COVID-19 pandemic)*
- ICSA International Conference 2019, Hangzhou, China (delivered by Yi Xiong, a PhD student)
- ICSA-Canada Chapter 2019, Kingston, Canada
- JSM 2019, Colorado, USA
- ICSA China Conference 2019, Tianjin, China (delivered by Dongdong Li, a former PhD student)
- Lifetime Data Science (LiDS) 2019, Pittsburgh, USA
- SSC 2019, Calgary, Canada (delivered by Trevor Thomson, a graduate student)
- BIRS Workshop 2019 on Large Administrative Data, Banff, Canada
- Conference on Advances in Finite Mixture and Other Non-regular Models, Guilin, Guangxi, China, 2018. (delivered by Y. Xiong, a graduate student)
- The 2nd International Conference on Econometrics and Statistics (EcoSta 2018), Hong Kong, China. (delivered by D. Li, a graduate student)
- BIRS Workshop 2017 on Inferential Challenges for Large Spatio-Temporal Data Structures, Banff, Canada
- International Workshop on Biostatistics at Jilin University 2017, China. (delivered by D. Li, a graduate student)
- Data Science, Precision Medicine and Risk Analysis with Lifetime Data (LIDA 2017), Connecticut, USA
- SSC 2017, Manitoba, Canada

- 2017 Biostatistics Workshop: Statistical Inference for Biomedical Big Data, Florida, USA
- ICSA International Conference 2016, Shanghai, China
- BIRS Workshop on Newest Developments and Urgent Issues in Measurement Error and Latent Variable Problems 2016, Banff, Canada.
- The 26th Annual Conference of the International Environmetrics Society (TIES), Edinburgh, 2016. (delivered by Y. Xiong, a graduate student)
- International Workshop on Biostatistics at Jilin University 2016, China
- ENAR 2016, Austin, Texas, USA. (delivered by H. Wang, a graduate student)
- CANSSI Workshop - SFU, 2016.
- Fields Workshop on Complex Spatio-Temporal Data Structures 2015, Toronto, Canada.
- SSC 2015, Halifax, Canada (delivered by Y. Xiong, a graduate student).
- JSM 2014, Boston, USA (delivered by R. Rosychuk, the co-author).
- ICSA/KISS Joint Conference 2014, Portland, USA
- Statistical Society of Canada (SSC) Annual Meeting 2014, Toronto, Canada
- Society for Clinical Trials (SCT) Annual Meeting 2012, Miami, USA
- Statistical Society of Canada (SSC) Annual Meeting 2012, Guelph, Canada
- Conference on Risk Assessment and Evaluation of Predictions, Washington DC (2011)
- Statistical Society of Canada (SSC) Annual Meeting 2011, Nova Scotia, Canada (delivered by M. Lorenzi, then a PhD student).
- International Conference on Applied Statistics and Financial Mathematics, Hong Kong (2010).
- ICSA International Conference 2010, Guangzhou, China
- Impact of Biostatistical Science - Advances in Research: AIDS, Cancer, Environment, Athens, Greece (2010).
- Sixth St. Petersburg Statistics Workshop, St. Petersburg State University, Russia (2009).
- BIMS Workshop on Longitudinal Analysis, Banff, Canada (2009).
- ICSA 2007 Applied Statistics Symposium, NC, USA.
- ICSA International Conference 2007, Taipei.
- First International Workshop in Sequential Methodologies (IWSM), Auburn University, Auburn, AL (2007). (delivered by L. Zhao, then a PhD student)

- ICSA 2006 Applied Statistics Symposium, CT, USA.
- NPCDS workshop on "Current Issues in the Analysis of Incomplete Data", Fields Institute in Toronto (2005).
- ASA/IMS Spring Research Conference, Santa Fe, USA (1998).
- ICSA 1997 Applied Statistics Symposium, NJ, USA.
- Annual Meeting of Statistical Society of Canada (SSC), Waterloo (1996).
- JSM 1994, Toronto, Canada.

Departmental/Institutional Seminars: (2004 - present)

- CANSSI Saskatchewan Health Science Collaborating Centre (2022, *virtual*).
- Department of Biostatistics, Columbia University (2020). *(cancelled due to the COVID-19 pandemic)*
- Department of Mathematics and Statistics, University of Saskatchewan (2020).
- School of Public Health, University of Toronto (2019).
- Department of Statistics and Actuarial Science, Western University (2019).
- Institute of Statistics, Nankai University (2016).
- Joint SFU and UBC Statistics Seminar (2012).
- Department of Statistics, University of British Columbia (2011).
- Department of Biostatistics, University of Iowa, USA (2010).
- Division of Biostatistics, Albert Einstein College of Medicine, New York, USA (2008).
- Department of Mathematics and Statistics, University of Victoria, Canada (2008).
- Department of Statistics and Actuarial Science, Western Ontario University, Canada (2007).
- Department of Statistics, Huazhong (Central China) Normal University, P.R. China (2007).
- Department of Statistics, University of Missouri-Columbia, USA (2006).
- UBC-SFU Joint Seminar, Vancouver, Canada (2006).
- Department of Biostatistics, Columbia University (2004).
- Department of Psychology, Simon Fraser University (2004).
- Biostatistics Research Group, Vancouver, Canada (2004).
- Clinical Epidemiology Rounds, Vancouver, Canada (2004).

Research Publications and Manuscripts

Papers in Refereed Journals

Thomson, T.J., Hu, X.J., Nosyk, B. (2023+). "Estimating Effects of Time-Varying Exposures on Mortality Risk", *Journal of Applied Statistics*, in press.

Thomson, T.J., Hu, X.J., Nosyk, B. (2023). "Evaluating Effects of Various Exposures on Mortality Risk of Opioid Use Disorders with Linked Administrative Databases", *Statistics in Biosciences*, published online.

Peng, K.K., Renouf, E.M., Dean, C.B., Hu, X.J., Delatolla, R., Manuel, D.G. (2023). "An exploration of the relationship between wastewater viral signals and COVID-19 hospitalizations in Ottawa, Canada", *Infectious Disease Modelling*, 8: 617-631.

Liu, J., Bellows, B., Hu, X.J., Wu, J., Zhou, Z., Soteros, C., Wang, L. (2023). "A new time-varying coefficient regression approach for analyzing infectious disease data", *Scientific Reports*, 13 (1), 14687.

Rosychuk, R.J., Chen,A.A., Ospina, M.B., McRae, A.D., Hu, X.J., McLane, P. (2023). "Transitions in health care settings for frequent and infrequent users of emergency departments: a population-based retrospective cohort study", *BMC Health Services Research*, 23 (1), 1250.

Xiong, Y., Braun, J.W., Duchesne, T., and Hu, X.J. (2023). "Regression Analysis of Spatially Correlated Event Durations With Missing Origins Annotated by Longitudinal Measures", *Statistica Sinica*, 33 (4): 2431-2461. doi: 10.5705/ss.202021.0118

Li, D., Hu, X.J., and Wang, R. (2023). "Evaluating Association Between Two Event Times with Observations Subject to Informative Censoring", *Journal of the American Statistical Association*, 118 (542): 1282-1294. doi:10.1080/01621459.2021.1990766

Rosychuk, R.J., Chen, A.A., McRae, A., McLane, P., Ospina, M.B., Hu, X.J. (2022). "Age-varying effects of repeated emergency department presentations for children in Canada", *Journal of Health Services Research & Policy*, 27 (4): 278-286. doi:10.1177/13558196221094248

O'Connor, T.A., Panenka, W.J., Livingston, E.M., Stubbs, J.L., Askew, J., Sahota, C.S., Feldman, S.J., Buchanan, T., Xu, L., Hu, X.J., Lang, D.J., Woodward, M.L., Thornton, W.L., Gicas, K.M., Vertinsky, A.T., Heran, M.K., Su, W., MacEwan, G.W., Barr, A.M., Honer, W.G., and Thornton, A.E. (2022). "Traumatic brain injury in precariously housed persons: Incidence and risks", *eClinical Medicine*, 44, 101277. doi: 10.1016/j.eclinm.2022.101277

Xiong, Y., Braun, W.J., and Hu, X.J. (2021). "Estimating duration distribution aided by auxiliary longitudinal measures in presence of missing time origin", *Lifetime Data Analysis*, 27(3): 388-412. doi: 10.1007/s10985-021-09520-w

Chen, A., Ospina, M., McRae, A., McLane, P., Hu, X.J. , Fielding, S., Rosychuk, R.J. (2021). "Characteristics of Frequent Users of Emergency Departments in Alberta and Ontario, Canada: An Administrative Data Study", *Canadian Journal of Emergency Medicine*, 23(2): 206-213. doi: 10.1007/s43678-020-00013-7

Wu, L.Y., Danielson, A.J., Hu, X.J., and Swartz, T.B. (2021). "A Contextual Analysis of Crossing the Ball in Soccer", *Journal of Quantitative Analysis in Sports*, 17 (1): 57-66. doi: 10.1515/jqas-2020-0060

Pietrosanu, M., Rosychuk, R.J., and Hu, X.J. (2021). "Handling missing birthdates in marginal regression analysis with recurrent events", *Communications in Statistics - Simulation and Computation*, 50(1), 142-152. DOI: 10.1080/03610918.2018.1554106

Rosychuk, R.J., Bachman, J., Chen, A., Hu, X.J. (2020). "Handling Coarsened Age Information in the Analysis of Emergency Department Presentations", *BMC Medical Research Methodology*, 30, 297. DOI: 10.1186/s12874-020-01181-x

Thiessen, M., Cui, Q., Hu, X.J., and Rosychuk R.J. (2020). "Exploring Spatio-temporal Patterns in Mental Health Related Emergency Department Use from Children and Adolescents", *Spatial and Spatio-temporal Epidemiology*, 34, 100358. DOI: 10.1016/j.sste.2020.100358

Chen, A., Fielding, S., Hu, X.J., McLane, P., McRae, A., Ospina, M., Rosychuk, R.J. (2020). "Frequent Users of Emergency Departments and Patient Flow in Alberta and Ontario, Canada: An Administrative Data Study", *BMC Health Services Research*, 20, 938.

Guo, L., Hu, X.J., and Xiong, Y. (2020). "Estimation under Cox Cure Model with Covariates Missing Not at Random, with Application to Disease Screening/Prediction", *Canadian Journal of Statistics*, 48(4): 608-632. doi: 10.1002/cjs.11550

Mackey, D., Lachance, C.C., Wang, P.T., Feldman, F. Laing, A.C. Leung, P.M., Hu, X.J., and Robinovitch, S.N. (2019). "Randomized trial of compliant flooring for the prevention of fall-related injuries in long2 term care: The Flooring for Injury Prevention (FLIP) Study", *PLOS Medicine*, 16(6): e1002843.

Thomson, T., Braun, W.J., and Hu, X.J. (2019). "On the Time to First Spotting in Wildland Fires", *Communications in Statistics - Simulation and Computation*, 51(5), 2381-2396. DOI: 10.1080/03610918.2019.1696972

Li, D., Hu, X.J., McBride, M.L., and Spinelli, J.J. (2020). "Multiple event times in the presence of informative censoring: modeling and analysis by copulas", *Lifetime Data Analysis*, 26: 573-602. doi: 10.1007/s10985-019-09490-0

Li, T., Somers, J., Hu, X.J., and Lawrence, M. (2019). "Bayesian Sensitivity Analysis for Non-ignorable Missing Data in Longitudinal Studies", *Statistics in Biosciences*, 11(1): 184-205. doi.org/10.1007/s12561-019-09234-6

Liu, L, Liu, Y., Xiong, Y, and Hu, X.J. (2019). "Cox Regression of Clustered Event Times with Covariates Missing Not at Random", *Scandinavian Journal of Statistics*, 46(4), 1315-1346.

Rosychuk, R.J., Newton, A.S., and Hu, X.J. (2019). "Age Affects the Impact of Important Predictors on Mental Health Emergency Department Visits", *Journal of Behavioral Health Services & Research*, 2019 Oct;46(4):625-635. doi: 10.1007/s11414-018-9642-7

Kang, K., Song, X., Hu, X.J., and Zhu, H. (2018). "Bayesian adaptive group lasso with semiparametric hidden Markov models", *Statistics in Medicine*, 38(9), 1634-1650. DOI: 10.1002/sim.8051

Xiong, Y., Bingham, D., Braun, W.J., and Hu, X.J. (2019). "Moran's I statistic-based nonparametric test with spatio-temporal observations", *Journal of Nonparametric Statistics*, 31(1): 244-267. 10.1080/10485252.2018.1550197

Braun, W.J., Hu, X.J. and Kang, X. (2018). "Data Sharpening Guided by Global Constraint in Local Regression", *Statistica Sinica*, 28: 2733-2748. DOI: 10.5705/ss.202017.0056

Guo, L., Hu, X.J. and Liu, Y. (2017). "Estimation under Cox Proportional Hazards Model with Covariates Missing not at Random", *Communications in Statistics - Theory and Methods*, 46(18): 8952-8972.

Hu, X.J. and Rosychuk, R.J. (2016). "Extended Cox Regression Analysis of Recurrent Event Data with Coarsened Information on Censoring", *Biometrics*, 72: 1113–1122. doi: 10.1111/biom.12503 (a recipient of the Academic Faculty Research Paper Award, Department of Pediatrics, University of Alberta)

Wang, H., Hu, X.J., McBride, M.L., and Spinelli, J.J. (2014). "Analysis of Counts with Two Latent Classes, with Application to Risk Assessment Based on Physician-Visit Records of Cancer Survivors", *Biostatistics*, 15: 384-397.

Huang, Y., Hu, X.J., and Dagne, G.A. (2014). "Jointly modeling time-to-event and longitudinal data: a Bayesian approach", *Statistical Methods & Applications*, 23: 95-121.

Zhao, L. and Hu, X.J. (2013). "Estimation with right-censored observations under semi-Markov model", *Canadian Journal of Statistics*, 41: 237-256.

Hu, X.J. and Zhang, B. (2012). "Pseudolikelihood Based Testing Procedures with Response-Related Incomplete Data", *Statistical Papers*, 54(2): 387-400.

Cook, V.J., Hu, X.J. and Swartz, T.B. (2011). "Cox Regression with Missing Non-Random Covariates", *Statistics in Biosciences*, 3: 208-222.

Hu, X.J., Lorenzi, M., Spinelli, J., Ying, S.C., and McBride, M. (2011). "Analysis of Recurrent Events with Non-negligible Event Duration", *Lifetime Data Analysis*, 17: 215-233.

Wu, L., Liu, W. and Hu, X.J. (2010). "Joint Inference on HIV Viral Dynamics and Immune Suppression in Presence of Measurement Errors", *Biometrics*, 66: 327-335.

McBride, M.L., Rogers, P.C., Sheps, S.B., Glickman, V., Broemeling, A.M., Goddard, K., Hu, X.J., Lorenzi, M., Peacock, S., Pritchard, S., Rassekh, S.R., Siegel, L., Spinelli, J.J., Teckle, P. and Xie, L. (2010). "Childhood, Adolescent, and Young Adult Cancer Survivors Research Program of British Columbia: Objectives, Study Design, and Cohort Characteristics", *Pediatr Blood Cancer*, 55: 324-330.

Hu, X.J., Lagakos, S.W., and Lockhart, R.A. (2009). "Marginal analysis of panel counts through estimating functions", *Biometrika*, 96: 445-456.

Zhao, L., Hu, X.J., and Lagakos, S.W. (2009). "Statistical monitoring of clinical trials with multivariate response and/or multiple arms: a flexible approach", *Biostatistics*, 10: 310-23.

Hu, X.J., Lagakos, S.W., and Lockhart, R.A. (2009). "Generalized least squares estimation of the mean function of a counting process based on panel counts", *Statistic Sinica*, 19: 561-80.

Wu, L., Hu, X.J., and Wu, H. (2008). "Joint inference for nonlinear mixed-effects models and time-to-event at the presence of missing data", *Biostatistics*, 9: 308-320.

Hu, X.J. and Lagakos, S.W. (2007). "Nonparametric Estimation of the Mean Function of a Stochastic Process with Missing Observations", *Lifetime Data Analysis*, 13: 51-73.

Hu, X.J., Schroeder, R.J., Wang, W.C., and Boyett, J.M. (2007). "Pseudoscore-based estimation from biased observations", *Statistics in Medicine*, 26: 2836-52.

Franklin, J.A., Gaur, A., Shenep, L.J., Hu, X.J. and Flynn, P.M. (2004). "In-Situ Diagnosis of Catheter-Related Bacteremia without Reripheral Blood Culture", *The Pediatric Infectious Disease Journal*, 23: 614-8.

Williams, M.R., Hinds, P., Ke, W. and Hu, X.J. (2004). "A Randomized Study on Comparison of Hospitalized Pediatric Patients Dining with Caregiver vs Independently", *The Journal of Pediatric Oncology Nursing*, Vol 21, No 4: 223-32.

Howard, S.C., Naidu, P.E., Hu, X.J., Jeng, M.R., Rodriguez-Galindo, C., Rieman, M.D., and Wang, W. C. (2004). "Moderate Aplastic Anemia in Pediatric Patients", *Pediatric Blood Cancer*, 43: 1-7.

Hu, X.J., Sun, J. and Wei, L.J. (2003). "Regression Analysis of Panel Count Data", *Scandinavian Journal of Statistics*, 25: 25-43.

Gulick, R.M., Hu, X.J., Fiscus, S.A., Fletcher, C.V., Haubrich, R., Cheng, H., Edward A., Lagakos, S.W., Swanstrom R., Freimuth, W., Snyder, S., Mills, C., Fischl, M., Pettinelli, C., and Katzenstein D. (2002). "Durability of Response to Treatment for Antiretroviral-experienced Subjects: 48 Week Results from AIDS Clinical Trials Group (ACTG) Study 359", *The Journal of Infectious Diseases*, 186: 626-33.

Steen, R.G., Hu, X.J., Elliott, V.E., Miles, M.A., Jones, S., and Wang, W.C. (2002) "Kindergarten Readiness Skills in Children with Sickle Cell Disease: Evidence of Early Neurocognitive Damage?" *Journal of Child Neurology*, 17: 111-6.

Gulick, R.M., Hu, X.J., Fiscus, S.A., Fletcher, C.V., Haubrich, R., Cheng, H., Edward A., Lagakos, S.W., Swanstrom R., Freimuth, W., Snyder, S., Mills, C., Fischl, M., Pettinelli, C., and Katzenstein D. (2000). "Randomized Study of Saquinavir with Ritonavir or Nelfinavir Together with Delavirdine, Adefovir or Both in HIV-Infected Adults with Virologic Failure on Indinavir: AIDS Clinical Trials Group (ACTG) Study 359", *The Journal of Infectious Diseases*, 182: 1375-84.

Fletcher, C.V., Acosta, E.P., Cheng, H., Haubrich, R., Fischl, M., Raasch, R., Mills, C., Hu, X.J., Katzenstein D. and Gulick, R.M (2000). "Competing Drug-Drug Interactions Among Multidrug Antiretroviral Regimens used in the Treatment of HIV-Infected Subjects: ACTG884." *AIDS*, 14: 2495-501.

Hu, X.J. and Lagakos, S.W. (1999). "Interim Analyses Using Repeated Confidence Bands", *Biometrika*, 86: 517-29.

Hu, X.J. and Lagakos, S.W. (1999). "Interim Analyses for the Mean Function of a Stochastic Process, with application to AIDS Clinical Trials", *Statistics in Medicine*, 18: 2287-99.

Hu, X.J., Lawless, J.F., and Suzuki, K. (1998). "Nonparametric Estimation of a Lifetime Distribution When Censoring Times are Missing", *Technometrics*, 40: 3-13.

Hu, X.J. and Lawless, J.F. (1997). "Pseudolikelihood Estimation in a Class of Problems with Response-Related Missing Covariates", *The Canadian Journal of Statistics*, 25: 125-142.

Hu, X.J. and Lawless, J.F. (1996). "Estimation of Rate and Mean Functions from Truncated Recurrent Event Data", *J. Amer. Statist. Assoc.*, 91: 300-310.

Hu, X.J. and Lawless, J.F. (1996). "Estimation from Truncated Lifetime Data with Supplementary Information on Covariates and Censoring Times", *Biometrika*, 83: 747-761.

Lawless, J.F., Hu, X.J., and Cao, J. (1995). "Methods for the Estimation of Failure Distributions and Rates from Automobile Warranty Data", *Lifetime Data Analysis*, 1: 227-240.

Book Review and Review Article

Dean, C. and Hu, X.J. (2012). "Longitudinal Studies" in *Encyclopedia of Environmetrics* Second Edition , A.-H. El-Shaarawi and W. Piegorsch (eds). John Wiley & Sons Ltd, Chichester, UK, pp. 1514 - 1518 . DOI 10.1002/9780470057339.val018.pub2

Hu, X.J. (2007). "A Review on *Statistical Monitoring of Clinical Trials – A Unified Approach*, by M.A. Proschan, K.K.G. Lan, and J.T. Wittes", *Biometrics*, 63, Fall.

Hu, X.J. (2004). "A Review on *Applied Longitudinal Data Analysis for Epidemiology: A Practical Guide*, by J.W.R. Twisk", *Journal of American Statistical Association*, October.

Hu, X.J. (2003). "A Review on *Generalized Linear Models, with Applications in Engineering and the Sciences*, by Myers, Montgomery and Vining" *The American Statistician*, May.

Conference Abstracts/Posters (incomplete, Since 2015)

McLane, P., *Chen, A., Ospina, M., McRae, A., Hu, X.J., Rosychuk, R.J. (2021). "Transitions in Health Care States for Frequent and Non-Frequent Users of Emergency Departments: A Population-Based Retrospective Cohort Study", Canadian Association of Emergency Physicians (CAEP) Annual Conference. (Virtual Platform-moderated poster)

Rosychuk, R.J., *Bachman, J., Chen, A., Hu, X.J. (2020). "Handling Coarsened Age Information in the Analysis of Emergency Department Presentations", International Biometric Conference. Seoul, Korea. July 5-10, 2020. (Conference cancelled due to Covid-19)

Rosychuk, R.J., *Chen, A., Fielding, S., Hu, X.J., McLane, P., McRae, A., Ospina, M. (2020). "Characteristics of Frequent Users of Emergency Departments in Alberta and Ontario, Canada: An Administrative Data Study", Canadian Association of Emergency Physicians (CAEP) Meeting. Ottawa, Ontario. (LO25 Conference Cancelled due to Covid-19)

*Bachman, J., Hu, X.J., Rosychuk, R.J. (2018). "Modeling Coarsened Recurrent Event Data from Administrative Databases". Women and Children's Health Research Institute (WCHRI) Annual Research Day. Edmonton, Alberta. October 24, 2018.

*Thiessen, M., Hu, X.J., Rosychuk, R.J. (2018). "Spatio-Temporal Analysis of Children and Adolescents' Emergency Department Use for Mental Health Reasons in Alberta, Canada". Joint Statistical Meetings. Vancouver, British Columbia. July 29, 2018.

*Pietrosanu, M., Rosychuk, R.J., Hu, X.J. (2017). "Handling Missing Birthdate Information in Marginal Regression Analysis with Recurrent Events". Faculty of Medicine Annual Summer Students Research Day. Edmonton, Alberta. November 3, 2017.

Rosychuk, R.J., Hu, X.J. (2016). "Stratified Regression Analysis of Recurrent Events with Coarsened Censoring Times", Women and Children's Health Research Institute (WCHRI) Annual Research Day. Edmonton, Alberta.

Rosychuk, R.J., Hu, X.J. (2016). "Stratified Regression Analysis of Recurrent Events with Coarsened Censoring Times", Population-Based Time-to-event Analyses International Conference, London School of Hygiene and Tropical Medicine. London, United Kingdom.

Software Development

R-Package: sharpPen "Penalized Data Sharpening for Local Polynomial Regression"; Version: 1.7, `https://CRAN.R-project.org/package=sharpPen`; Author: Braun, W.J., Wang, D., Hu, X.J. (2021)

Other Publications

Hu, X.J. (1992). "Some Sequential and Three-stage Tests for Exponential Processes," *Technical Report* STAT-92-19, Univ. of Waterloo.

Papers under Review

Thomson, T., Hu, X.J., and Nosyk, B. (2023+). "Developing a Predictive Survival Model with Administrative Health Records"

K. Ken Peng, K.K., Hu, X.J., Swartz, T. (2023+). "Investigating time to corner kick in soccer by analysis of event history data"

Chen, A.A., Renouf, E.M., Dean, C.B., Hu, X.J. (2023+). "Exploring COVID-19 Mortality across Public Health Units in Ontario, Canada via Generalized Additive Models"

Cen, M., Meng, X., Hu, X.J., Liu, J. and Wu, J. (2022+). "PDE-Based Bayesian Hierarchical Modeling for Event Spread, with Application to Covid-19 Infection"

Xiong, Y., Hu, X.J., and Rosychuk, R.J. (2022+). "Exploring Dierences between Two Decades in Mental Health Related Emergency Department Visits from People Younger than 18 Years Old via Recurrent Events Analyses"

Xiong, Y., Hu, X.J.(2022)."Subsampling and Data Integration in Estimating Distributions of Ignition Time and Duration for Reported Wildfires"

Student Advising

Major Supervisor/Adviser

Doctorate

- Kangyi (Ken) Peng (2022 - present), Simon Fraser University, jointly with T. Swartz: "Understanding Association of Two Stochastic Processes, with Applications in Public Health and Sports Analytics".
- Haoxuan (Charlie) Zhou (2022 - present), Simon Fraser University: "Machine Learning Classification with Event History Data".
- Anqi (Angela) Chen (2020 - present), Simon Fraser University, jointly with R. Rosychuk: "Modeling and Analysis of Partly Observed Process Data". (*A recipient of SFU Entrance Scholarship for Doctorate Student, 2020-2023: $21,000/year*)
- Mengxiao Xu (2019 - present), Simon Fraser University: "Statistical Analyses with Complex Data, with Application to Car Warranty Claims".
- Trevor Thomson (2017 - 2023), Simon Fraser University, jointly with B. Nosyk: "Inference Using Historial Opioid Agonist Treatment Expose on Mortality Risk". (*A recipient of NSERC Scholarship for Doctorate Student - CGS D, 2017-2020; a recipient of LiDS student paper award 2021*)

- Yi Xiong (2015 - 2020), Simon Fraser University, jointly with J. Braun: "Statistical Analysis of Event Times with Missing Origins Aided by Auxiliary Information, with Application to Wildfire Management". (*A recipient of LiDS 2019 student paper award*)
- Dongdong Li (2014 - 2018), Simon Fraser University, jointly with J.J. Spinelli: "Statistical Approaches in Analysis of Data from Administrative Database". (*A recipient of NSERC Scholarship for Doctorate Student (PGS D) 2015-2018; a recipient of SSC 2016 student travel award*)
- Huijing Wang (2012 - 2015), Simon Fraser University: "Analysis of Counts with Two Latent Classes, with Application to Risk Assessment Using Physician Visit Records". (*A recipient of SSC 2013 Student Travel Award*)
- Lihui Zhao (2005-2009), Simon Fraser University: "Multi-State Models for Event History Data Analysis".
- R. Jason Schroeder (2000-2004), University of Memphis: "Parametric Estimation with Response-Related Incomplete Data".

Master's (since 2005)

- So Yeon Park (2023 - present), Simon Fraser University: TBD
- Quinn Forzley (2022 - present), Simon Fraser University: "Evaluating Impacts of Predictor Misclassification in Derivation and Validation of Clinical Decision Rule (CDR)". (*A recipient of CIHR Health Research Training Award (CGS-M, 2023), and SFU - Eaves Award (2023)*
- Gurashish Bagga (2021 - 2023), Simon Fraser University: "Offensive and defensive penalties on score differentials and drive outcomes in NFL". (*A recipient of Mitacs Accelerate Internship, summer 2022*)
- Linwan Xu (2021 - 2023), Simon Fraser University: "Handling Missing Data in A 10 Year Longitudinal Physical and Mental Health Study".
- Mengqi (Molly) Cen (2020 - 2022), Simon Fraser University: "PDE-Based Bayesian Hierarchical Models for COVID-19 Spread".
- Hasan Abdul Karim Nathani (2020 - 2022), Simon Fraser University: "Innovative Analysis of Canadian Obstructive Lung Disease (COLD) Study".
- Megan Kurz (2018 - 2020), Simon Fraser University: "Modeling and Analysis of Multi-type Recurrent Events, with Application to Opioid Agonist Treatment".
- Qi (Emma) Wen (2017 - 2019), Simon Fraser University: "Prediction for Federal Election with National Health Survey Information".
- Michelle Thiessen (2016 - 2018), Simon Fraser University, jointly with Rhonda Rosychuk: "Spatio-Temporal Analysis of Alberta Pediatric Mental Health Care Data".

- Trevor Thomson (2015 - 2017), Simon Fraser University, jointly with John Braun: "Statistical Issues in Forest Fire Control".
- Terry Tang (2014 - 2017), Simon Fraser University: "Statistical Issues in Prediction for Election".
- Yi Xiong (2012 - 2014), Simon Fraser University: "Regression Analysis and Model Diagnosis with Spatial-Temporal Data, with Application to Forest Fire Control".
- Fei Wang (2012 - 2014), Simon Fraser University: "Application of Point Process in Analysis of Mental Health Related Emergency Department Visits".
- Lu Wang (2011 - 2013), Simon Fraser University: "Analysis of Clustered Event Times with Right-Censoring".
- Huijing Wang (2010 - 2012), Simon Fraser University: "Analysis of Counts with Two Latent Classes, with Application to Risk Assessment Using Physician Visit Records".
- Zhiwei Tang (2009 - 2011), Simon Fraser University: "Some Issues on Design and Data Analysis in Practical Studies".
- Suli (Christy) Ma (2007-2009), Simon Fraser University: "Data Analyses of Physician Visits Over Time: Frequency and Cost".
- Yunfeng (Eric) Dai (2005-2008), Simon Fraser University: "Prediction of Graft-Versus-Host Disease Based on High-Throughout Flow Cytometry Data".
- Celes Ying (2005-2006), Simon Fraser University: "Generalized Longitudinal Data Analysis, with Application to Evaluating Hospital Utilization based on Administrative Database".

Undergraduate Research Students

- SFU-USRA – Andy Chen, summer 2013 "Exploring the Hong Kong Diabetes Registry"
- NSERC-USRA – Philippa Swartz, summer 2015, summer 2016 "Predictive Model Development for Quality of Life Planner"
- SFU VPR-USRA – Peiwei (Ted) Wang, summer 2018 "Dealing with Statistical Challenges in Analysis of SFU-FLIP Study Data"
- SFU VPR-USRA – Linwan Xu, summer 2020 "Missing Data in Longitudinal TBI Study"
- SFU Charles Allard-USRA – So Yeon Park, summer 2022 "Can data from a voluntary based survey yield informative inference?"
- NSERC-USRA – Rachel Oh, summer 2022 "How to handle data collected by non-probability sampling?"
- NSERC-USRA – Rachel Oh, summer 2023 "Can Data from a Voluntary Based Survey Yield Informative Inference?"

Co-Superviser/Academic Adviser

- Kai Zhao (2021 - present), PhD student: Simon Fraser University, jointly with Hui Xie.
- Lulu Guo (2018 - present), PhD student: Simon Fraser University, jointly with Hui Xie.
- Rui Ma (2018-2019), a visiting PhD student from Jilin University under the supervision of Jianguo (Tony) Sun, sponsored by the Chinese Scholarship Council.
- Katharine Lee (summer 2017), High school student: "Reconstructing visual images from brain activity using magnetoencephalography".
- Matthew Pietrosanu (summer 2017), Undergraduate student: University of Alberta, jointly with Rhonda Rosychuk. "Exploring Approaches for Handling Missing Birthdate Information" *Applying for NSERC MSc Student Studentship*
- Yue Ma (2016 - 2018), MSc student: Simon Fraser University, jointly with Hui Xie: "Multivariate CACE Analysis with an Application to Arthritis Health Journal Study".
- Tian Li (2015 - 2017), MSc student: Simon Fraser University, jointly with Lawrence McCandless: "Bayesian Longitudinal Analysis".
- Kasra Yousefi (2014 - 2015), PhD student: Simon Fraser University, jointly with Tim Swartz: "Polishing current tools with genomic information for prostate cancer treatment and the management of other urologic cancers".
- Jeffery Bachman (2014 - 2017), MSc student: University of Alberta, jointly with Rhonda Rosychuk. "New Spatial Statistical Models and Analysis Methods for Recurrent Events Provide Insight Into Pediatric Mental Health Data for Emergency Department and Physician Visits in Alberta" *Applying for Alberta Innovates - Health Solutions Graduate Studentship*
- Lishua (Lisa) Guo (2013 - 2016), PhD student: Wuhan University, jointly with Yanyan Liu: "Cox Regression Analysis with Covariates Missing Not At Random". (Sponsored by the Chinese Scholarship Council, Lisa visited SFU Aug 2014 - July 2015.)

Committee Member/Internal Examiner

Master's 2004: Jeremy Hamm, SFU; 2005: Sandy Shen, SFU; Eric Sayre, SFU; 2006: Zhijian Chen, SFU; 2007: Dean Vrecko, SFU; 2008: Wei Qian, SFU; 2009: Jingyu (Jayla) Chen, SFU; 2010: Lingzhi (Chris) Jiang, SFU; Carol Co, SFU; 2011: Olga Strizhkova, SFU; 2012: Juan Valero, SFU; Hua Zheng, SFU; Fabian Moya, SFU; 2014: Bingying Chen, SFU; 2015: Dongmeng Liu, SFU; 2016: Thilini Surendra Acharige, SFU; 2016: Yang Bai, SFU; 2017: Joanna Zhao, SFU; 2018: JinCheol Choi, SFU; 2019: Joel Therrien, SFU; 2020: Matthew Berkowitz, SFU; Sichen (Coco) Liu, SFU; 2021: Lisa McQuarrie, SFU; 2022: Carla Louw, SFU; 2023: Hashan Peiris, SFU; Junpu Xie, SFU; Liwei (Dave) Lai, SFU.

Doctorate	1999: Zhenzhen Ye, UM; 2000: Debora Ingrim, UM; 2001: Wei Wang, UM; 2002: Juhong Zhu, UM; 2004: Bin Zhang, Harvard School of Public Health; 2004: Wilson Lu, SFU; 2007: Maggie Cheang, University of British Columbia; 2011: Darby Thompson, SFU; 2012: Carolyn Huston, SFU; 2012: Jean Shin, SFU; 2014: Zheng Sun, SFU; 2021: Christina Nieuwoudt, SFU; 2021: Steve Taylor (INS), SFU

External Examiner

U of Manitoba	He (Daniel) Li, PhD thesis defence (Winter, 2010)
U of Waterloo	Liqun Diao, PhD thesis defence (Summer, 2013)
U of Calgary	Longlong Huang, PhD thesis defence (Winter, 2016)
McGill U	Yishu Wang, PhD thesis defence (Winter, 2018)
Western U	D.Z. Dexen Xi, PhD thesis defence (Winter, 2020)
U of Calgary	Mohammad Chowdhury (Zia), PhD thesis defence (Community Health Sciences; Winter, 2021)
Simon Fraser U	Steve Taylor, PhD thesis defence (Individualized Interdisciplinary Studies; Summer, 2021)

Other Visitor/Student Supervision

Post-doctoral	spring 2007: Wei Liu, UBC; 2011-2013: Hsing-Ming Cheng, UAlberta (jointly with Rhonda Rosychuk); 2017-2018: Xin (Shane) Liu, Western (jointly with Grace Yi); 2019-2020: Qi Cui; 2020-2021: Yi Xiong (jointly with Rhonda Rosychuk)
Doctorate	fall 2005, spring 2006: Chunfang Lin, SFU; 2009-2011: Maria Lorenzi, SFU
Master's	fall 2004 - spring 2006: John Bentley, SFU; summer 2012, Juan Valero
Undergraduate	summer 2007: Suli Ma, SFU; fall 2008 - 2009: Yingying Chen, SFU; summer 2010: Huijing Wang, SFU; summer 2013: Catherine Peng, SFU; summer 2015: Andy Leung; summer 2020: Molly Cen; spring 2021: Sheril Eda
Precollege	summer 2012: Philippa Swartz; summer 2018: Katharine Lee
Visiting Scholar	2018-2019: Xuejing Meng, Hubei University of Economics, China

Teaching

Simon Fraser University (2003-present)

STAT 201 "Statistics for Life Sciences" (fall 2012; fall 2014)
STAT 270 "Introduction to Probability and Statistics" (summer 2011; fall 2013; fall 2016)
STAT 285 "Intermediate Probability and Statistics" (spring 2009; spring 2011; fall 2011; fall 2018; fall 2021; spring 2023)
STAT 305/605 "Introduction to Biostatistical Methods" (spring 2024)
STAT 330 "Introduction to Mathematical Statistics" (fall 2017; fall 2020)
STAT 350 "Linear Regression Analysis" (fall 2007)
STAT 402/602 "Categorical Data Analysis" (spring 2012-3)

STAT 445/645 "Applied Multivariate Analysis" (spring 2019)
STAT 450/650 "Mathematical Statistics" (fall 2004; fall 2023)
STAT 475/675 "Applied Discrete Data Analysis" (spring 2014-5; spring 2017-8; spring 2021)
STAT 802 "Multivariate Analysis" (fall 2004; fall 2006-7)
STAT 805 "Discrete Data Analysis" (fall 2003; fall 2005)
STAT 854 "Biometrics" (spring 2013; spring 2015; spring 2017; spring 2019; spring 2021; spring 2023)
STAT 855 "Lifetime Data Analysis" (spring 2014; spring 2018; spring 2022)
STAT 890 /856"Longitudinal Data Analysis" (fall 2009; spring 2011-2; spring 2024)

Wuhan University, China (Winter, 2011)

Short Course "Longitudinal Data Analysis"

University of Memphis (1998-2003)

MATH 4-6635 "Introduction to Probability Theory"
MATH 4-6636 "Introduction to Statistical Theory"
MATH 7-8651 "Linear Models"
MATH 7-8762 "Survival Analysis"
MATH 7613 "Probability Theory"
MATH 7641 "Analysis of Variance"
MATH 7-8657 "Multivariate Statistical Methods"
MATH 7-8759 "Categorical Data Analysis"

Committee Service

National and International Organizations

- Member of the Scientific Program Committee for ICSA China Conference - Chengdu, 2023;
- Member of the CANSSI Nomination Committee for Rockie AD (2022)
- Chair-Elect (2021-2), Chair (2023-4) ICSA - Canada Chapter
- Member of the Program Committee for ICSA International Conference - Hong Kong 2022;
- Member of the Program Committee for ICSA - Applied Statistics Symposium 2022, Florida, USA;
- Member of the Program Committee for ICSA - China Conference 2020, Wuhan, China;
- Chair of the ICSA Nomination Committee 2020;
- Member of the COPSS Presidents' Award Committee (2021-2024);
- Member of the Regional Advisory Board, Western North American Region of the International Biometric Society (WNAR) (2020-2021);
- Section Secretary, Executive Committee for ASA-LiDS Section (2019-2021);
- Member of the CIHR College of Reviewers (2017-present);

- Member of the Board of Directors, Canadian Statistical Sciences Institute (CANSSI) (2017-2020);
- Member of the CRM-SSC Award Committee, Statistical Society of Canad (SSC) (2017-2019);
- Member of the Program Committee for ICSA - Canada Chapter 2017, Vancouver;
- Member of the Program Committee for 2017 Lifetime Data Conference (LIDA), Connecticut, USA;
- Member of the Committee on Women in Statistics, Statistical Society of Canada (SSC) (2015-2017, Chair in 2017-2018);
- Member of the Program Committee for ICSA - Canada Chapter 2015;
- President of Biostatistics Section, Statistical Society of Canada (2013-2014);
- Member of the Executive Committee for 2014 ICSA and KISS Joint Conference;
- Alberta - British Columbia - Yukon Regional Representative of the SSC Board of Directors, Statistical Society of Canada (2011-2012);
- Member of the ICSA Board of Directors, International Chinese Statistical Association (2010-2012);
- Member of the ICSA 2011 Program Committee;
- Education Office Review Committee of Chinese Government Award for Self-financed Students Abroad (2007-present);
- Judge for Student Presentations at (i) SSC 2009, (ii) WNAR/IMS 2009;
- Member of SSC's Committee on Professional Development (2005-7);
- Member of SSC's Public Relations Committee (2005-7);
- SSC Representative on JSM 2007 Program Committee;
- Vice-President of ASA Western Tennessee Chapter, Memphis (2002-2003).

University/Institute Committees

- Member of Biostatistics Protocol Review Committee, St. Jude Children's Research Hospital (2000-2003);
- Representative at College Council fo Research and Graduate Studies, University of Memphis (2001-2002);
- SFU Research Ethics Board, Simon Fraser University (2006-7);
- SFU College of Internal Peer Pre-Reviewers for NSERC DG (2021-present);
- Search Committee for Dean of Faculty of Science, SFU (2021-2022).

Departmental Committees

- Graduate Study (2020-2022)
- Member of Tenure and Promotions Committee (2003-4; 2006-7; 2008-9, 2011, 2012, 2014-5, 2017-8, 2018-2019, 2020-2021, 2022-2023)
- Departmental Seminar Coordinator (2018-2019)
- Undergraduate Program Review Committee (2010-2012)
- Undergraduate Advising Committee (2004-6; 2007-present)
- Search Committee (2004-5; 2006-7; 2016-7, 2018-2019, 2021-2022, 2022-2023, 2023-2024)
- Biostatistics Search Committee of Faculty of Health Sciences (2006-7)
- Ad-hoc Committee for Department External Review (2012-2013)

Other Professional Activities

Interdisciplinary Collaboration (since 2003)

- Three Pyruvate Dose Escalation Study in Pregnant Guinea Pigs Consuming a Western Diet (PI: Lanette J Friesen-Waldner, Western University) (2023-present)
- Prediction for Lifetimes of Financial Products (PI: Don Chen, Scotia Bank) (2022-present, supervising graduate students Angela Chen and Gurashish Bagga)
- Missing Data Issues in the Hotel Study (PI: Al Thornton and Wendy Thornton, SFU-Psychology) (2022-present, supervising MSc student Linwan Xu)
- Childhood Adolescent and Young Adult Cancer Survivor Program II (PI: Stuart Peacock) (2020-present)
- Incident Traumatic Brain Injury (TBI) in Precariously Housed Persons (PI: Al Thornton, SFU-Psychology) (2020-2021, supervised USRA Linwan Xu to work on the project)
- Approval Rating of Vancouver Mayor (PI: Kennedy Stewart, Mayor of City of Vancouver), (2019-2022, supervised graduate student Mengxiao Xu and USRA Rachel Oh)
- Statistical Analysis for SFU-FLIP Study (PI: Dawn Mackey), Biomedical Physiology and Kinesiology (BPK), SFU (2017- present; supervised P Wang to work on it during 2017-2018)
- Prediction for Federal Election of Canada (PI: Kennedy Stewart), MP, Burnaby - Douglas NDP (2014-2018; supervised graduate students, T Tang (2016), M Thiessen (2017) and Q Wen (2018) to work on the projects)
- Comparison between Groups with Day-Care vs Unplanned Overnight Care vs Planned Overnight Care at Hospital (PI: Paul Oxley), Surrey Memorial Hospital, BC, Canada (2017)
- International Marketing (PI: Jing Li), SFU Business (2016)

- Prediction for Federal Election of Canada (PI: Kennedy Stewart), MP, Burnaby - Douglas NDP (2014).
- Demand Forecasting for Movie Theaters (PI: J. Ho), SFU Business (2010 - 2012).
- Exit Polls: Vancouver Civic Election 2008 (PI: Kennedy Stewart), Public Policy Program, Simon Fraser University (2008).
- Early Life Determinants of Asthma and the Related (PI: D. Daley), St. Paul Children's Hospital (2007-2008).
- Chemotherapy Anxiety Reduction for Breast Cancer (CARE-BC; PI J.E. Stephen), BC Cancer Agency (2007-2008).
- Prediction of Graft-Versus-Host Disease (PI: R. Brinkman), BC Cancer Agency (2007-2008).
- Choices about Risk-Reducing Mastectomy (PI: J.L. Bottorff), UBC School of Nursing (2007).
- Invasive Species Data Analysis: Challenges of Biased Observations (PI: D. Knowler), SFU School of Resource and Environmental Management (2006).
- Analysis of Health Services Utilization by Survivors of Cancer Diagnosed Before Age 20 (PI: M. McBride), BC Cancer Agency (2005-2007).
- Source Case Cluster-status and the Development of Latent and Active Tuberculosis in Contacts (PI: V.J. Cook), BC Centre for Disease Control (2005-2007).

Workshop/Invited Session Organization

- "Newly developed point process models for repeated events ", JSM 2024, Portland, USA;
- "Statistics in Biosciences (SIBS): Subsampling and Data Intergration", ICSA-Canada Chapter Symposium 2024
- "Statistics in Biosciences (SIBS): Real world challenges and recent methodological developments ", SSC 2024;
- "Statistics in Biosciences (SIBS): Real World Challenges and Recent Methodological Developments", JSM 2023, Toronto;
- "Statistics in Biosciences (SIBS): Real World Challenges and Recent Methodological Developments", ISI World Statistics Congress 2023, Ottawa;
- "North American Machine Learning, Statistics, and Optimization Symposium", Vancouver, June 23-25, 2023.
- "Statistics in Biosciences (SIBS): Real World Challenges and Recent Methodological Developments", WNAR 2023, Anchorage, Alaska;
- "Statistics in Biosciences (SIBS): Real World Challenges and Recent Methodological Developments", ICSA International Conference 2022, Hong Kong;

- "Statistics in Biosciences (SIBS): Real World Challenges and Recent Methodological Developments", ICSA Canada Chapter Meeting 2022, Banff, Canada;
- "Statistics in Biosciences (SIBS): Real World Challenges and Recent Methodological Developments", ICSA - Applied Statistics Symposium 2022, Florida, USA;
- "Real-World Challenges and Recent Statistical Developments", ICSA-CC invited session, SSC 2022;
- "Recent Advances on Approaches to Statistics in Biosciences", SSC-Biostat Section invited session, SSC 2022;
- "Recent Methodological Advances on Statistics in Biosciences", SSC 2021;
- "Challenges and Strategies from Data with Complex Structures", JSM 2020;
- "Cross-sectional analysis of life history data", LiDS 2019;
- "Statistical Challenges from Health Administrative Data", BIRS Workshop 2019;
- "Analyses of Big/Large Health Data: Challenges and Strategies", SSC 2018;
- "Statistical Approaches are in Great Demand", ICSA-CC 2017;
- "Challenges and Strategies in Analysis of Complex Data", JSM 2017;
- "Complex Data Analysis: Methodologies and Applications", ICSA 2017;
- "Data Science in Biomedical Studies", SSC 2017;
- "Advancing Statistical Approaches in Event History Data Analysis", JSM 2011;
- "Handling Missing Data in Longitudinal Studies", ICSA 2011;
- "Modeling and Analyzing Spatial/Temporal Events", JSM 2010;
- Workshop on "Modelling Indirectly or Imprecisely Observed Data", Fields Institute, 2009 (jointly with J. Braun and P. Brown);
- "Field Reliability", Spring Research Conference (SRC) 2009;
- "Statistics in Medical Research", ICSA 2009 Applied Symposium;
- "Survival Analysis and Clinical Trials", WNAR/IMS 2009;
- "Recent Development in Event History Data Analysis", JSM 2008;
- "Statistical Consulting in Medical Areas", a round table session at JSM 2006 (SSC Representative);
- "Analyses in Semiparametric Transformation Models", ICSA 2006 Applied Symposium;
- "Statistical Issues and Approaches in Designing and Monitoring Clinical Trials", SSC 2006;
- "Statistics in Medical Studies", SSC 2005.

Short Visits (since 2003)

- Biostatistics, Columbia University, New York City, USA (Feb 21-5, 2004; Aug 11-3, 2005);
- Environmental Study, Tongji Medical School, Wuhan, China (June 30-July 3, 2004);
- Biostatistics, Harvard School of Public Health, Boston, USA (Apr 10-7, Aug 8-10, 2005);
- Stats and Act. Sci., Univ of Western Ontario, London, Canada (Feb 24-28, 2007);
- Biostatistics, Enstein Cancer Center, New York City, USA (Feb 11-15, 2008);
- Biostatistics, University of Iowa, Iowa City, USA (Feb 28 - March 3, 2010).
- Mathematics and Statistics, Wuhan University, China (Dec 18 - 31, 2011; July 12 - 15, 2014).
- School of Medicine, University of Alberta, Edmonton, Canada (May 7 - 10, 2012; Feb 13 - 15, 2014).
- Biostatistics, University of Washington – Seattle, Seattle, USA (June 1 - 2, 2015).
- Statistics, Nankai University, Tianjin, China (July 5 - 6, 2016).
- Statistics, University of Waterloo, Waterloo, Canada (April 30, 2019).
- Statistics, Western University, London, Canada (Oct 3 - 4, 2019).
- Harvard Medical School, Boston, USA (Oct 7 - 16, 2019).
- Biostatistics, University of Toronto, Toronto, Canada (Oct 17, 2019).
- Mathematics and Statistics, University of Saskatchewan, Saskatoon, Canada (Feb 5-8, 2020).
- Medicine and Dentistry, University of Alberta, Edmonton, Canada (Feb 9-12, 2020).

External Review for Faculty Tenure/Promotion (since 2005)

- Biostatistics, Columbia University (2006);
- Biostatistics, Queen's University (2010);
- Mathematics and Statistics, Texas State University – San Marcos (2011);
- Mathematics and Statistics, York University (2011);
- Community Health Sciences, University of Nevada (2012);
- Biostatistics, Indiana University (2013);
- Public Health Sciences, Queen's University (2015);
- Statistics and Actuarial Science, Western University (2015);
- Mathematics and Statistics, University of Saskatchewan (2016);

- Mathematics and Statistics, University of Saskatchewan (2017);
- Mathematics and Statistics, Memorial University of Newfoundland (MUM, 2018);
- Community Health Sciences, University of Nevada (2018);
- Public Health, University of Toronto (2019);
- Mathematics and Statistics, UNC Charlotte, USA (2019);
- Fred Hutchinson Cancer Research Center, University of Washinton - Seattle (2019);
- Institute of Translational Medicine, University of Liverpool (2019);
- Mathematics, Queen's University (2021);
- Biostatistics and Bioinformatics, Duke University (2021);
- Biostatistics, Case Western Reserve University (2022).