

# Ričardas Zitikis, MSc, PhD

## Curriculum Vitae

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## Ričardas Zitikis, MSc, PhD

### Canadian Citizen<sup>1</sup>

#### General information

#### CONTACT INFORMATION

**Address:** School of Mathematical and Statistical Sciences  
Western University  
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London, Ontario N6A 5B7  
Canada

**E-mails:** rzitikis@uwo.ca  
zitikis@stats.uwo.ca

**Affiliations:** Member of the Board of Directors  
RISC Foundation<sup>a</sup>  
Canada

Adjunct Professor (with graduate supervision rights)  
Department of Mathematics and Statistics  
Faculty of Science  
York University  
4700 Keele Street  
Toronto, Ontario M3J 1P3  
Canada

PhD Programme Committee and Teaching Board  
Economics, Statistics and Data Science (ECOSTAT)  
Department of Economics, Management and Statistics  
University of Milano-Bicocca  
Piazza dell'Ateneo Nuovo  
Milan, Lombardy 20126  
Italy

<sup>a</sup>Incorporated under the Canada Not-for-profit Corporations Act.

#### EDUCATION

1985 M.Sc.

- Awarded: 25 June 1985 by Vilnius University, Lithuania
- Specialty: Applied Mathematics
- Awarded qualification: Mathematician
- Thesis: *Non-expanding Operators in Banach Spaces*
- Defence location: Faculty of Mathematics, Vilnius University, Lithuania
- Supervisor: Vygantas Paulauskas

1988 Ph.D.

- Awarded: 13 December 1988 by Vilnius University, Lithuania
- Specialty: Physical and Mathematical Sciences
- Thesis: *Asymptotic Expansions in the Local Limit Theorem for Cramér-von Mises-Smirnov Statistics*
- Defence location: Faculty of Mathematics, Vilnius University, Lithuania
- Supervisors: Vidmantas Bentkus and Vygantas Paulauskas

#### EXPERTISE: CONSULTING, RESEARCH, AND TEACHING

Some of my non-confidential research has been published in more than 150 peer-reviewed articles

##### General

Decision making under risk and uncertainty

##### A specimen of specific areas

Business analytics and decisions

Insurance (risk measures, premiums)

Econometrics (economic inequality, time series)

Economics (behavioural theory, utility, preferences)

Finance (behavioural theory, portfolio theory)

Mathematics, probability, statistics

Random/stochastic processes and cash flows

Reliability engineering

Risk analysis

Theoretical biology (lifetime phases)

<sup>1</sup>Prior to becoming a citizen of Canada, I had Lithuanian citizenship, which I automatically lost when I became Canadian in August 2000, in Winnipeg, Manitoba.

## Employment and affiliations

### ACADEMIC EMPLOYMENT HISTORY

- 1985 – 1988 Junior Research Fellow  
Department of Mathematical Statistics, Institute of Mathematics and Informatics (IMI), Lithuanian Academy of Sciences, Vilnius, Lithuania.
- 1988 – 1990 Research Fellow  
Department of Probability Theory, Institute of Mathematics and Informatics (IMI), Lithuanian Academy of Sciences, Vilnius, Lithuania.
- 1990 – 2000 Senior Research Fellow  
Department of Probability Theory, Institute of Mathematics and Informatics (IMI), Lithuanian Academy of Sciences, Vilnius, Lithuania.
- 1994 – 1996 Canada International Fellow  
Laboratory for Research in Statistics and Probability, Carleton University, Ottawa, Ontario, Canada.
- 1996 – 1999 Research Associate  
Laboratory for Research in Statistics and Probability, Carleton University, Ottawa, Ontario, Canada.
- 1999 – 2001 Assistant Professor  
Department of Statistics, University of Manitoba, Winnipeg, Manitoba, Canada.
- 2001 (July–August) Associate Professor  
Department of Statistics, University of Manitoba, Winnipeg, Manitoba, Canada.
- 2001 – [ongoing] Associate Professor  
Department of Statistical and Actuarial Sciences, Western University, London, Ontario, Canada.

### OTHER ACADEMIC AFFILIATIONS

- 1999 – [ongoing] External Research Member  
Laboratory for Research in Statistics and Probability, Ottawa, Ontario, Canada.
- 2004 – 2006 Adjunct Member of the Graduate Faculty  
College of Engineering and Science, Louisiana Tech University, Ruston, Louisiana, U.S.A.
- 2007 International Member  
Statistical Engineering Research Group, Institute of Information Sciences and Technology, Massey University, Palmerston North, New Zealand.
- 2017 – 2021<sup>2</sup> Associate Professor  
Department of Applied Mathematics, Western University, London, Ontario, Canada.
- 2017 – [ongoing] Programme Committee and Teaching Board Member  
PhD in Economics, Statistics and Data Science (ECOSTAT), Department of Economics, Management and Statistics, University of Milano-Bicocca, Milan, Lombardy, Italy.
- 2020 – 2023<sup>3</sup> Principal Scholar  
Risk and Insurance Studies Centre (RISC), York University, Toronto, Ontario, Canada.
- 2021 – 2024 Adjunct Professor (with graduate supervision rights)  
Department of Mathematics and Statistics, Faculty of Science, York University, Toronto, Ontario, Canada.
- 2023 – [ongoing] Member of the Board of Directors  
RISC Foundation. Legal title: Canada Not-for-profit Corporation 1530591-8.

### NON-ACADEMIC AFFILIATIONS AND DUTIES

For closely related work, see [Internships](#)

- 2011 – 2013 Vice-President (Strategic Development and Analytics)  
Global Property Directory System (GPDS). Legal title: 7812345 Canada Inc.
- 2012 – 2014 Member of the Board of Directors  
Middlesex Condominium Corporation No. 369, London, Ontario, Canada.
- 2013 – 2018 Chief Risk Officer (CRO)  
PC275 Realty (Pritchard & Crook Real Estate Brokerage Inc.), London, Ontario, Canada.
- 2014 Member of a Jury Panel  
Sheriff's Office, Superior Court of Justice, London, Ontario, Canada.

<sup>2</sup>Department of Applied Mathematics at Western University was dissolved in 2021.

<sup>3</sup>Risk and Insurance Studies Centre (RISC) ceased to exist in 2023 as an organized research unit at York University and became RISC Foundation incorporated under the Canada Not-for-profit Corporations Act.

- 2014 – 2017 Member of the Board of Directors  
Middlesex Condominium Corporation No. 369, London, Ontario, Canada.
- 2017 Member of a Jury Panel  
Sheriff's Office, Superior Court of Justice, London, Ontario, Canada.

#### SHORT-TERM (BUT NOT SHORTER THAN ONE MONTH) VISITING POSITIONS

Supported by host institutions via various awards, funds and grants, which I gratefully acknowledge

- 1992 – 1993 Researcher  
Centre for Research in “Discrete Structures in Mathematics” (SFB 343), University of Bielefeld, Bielefeld, Germany.
- 1994 (1 month) Researcher  
Centre for Mathematics and Computer Science (CWI), Amsterdam, Netherlands.
- 1997 (1 month) Researcher  
Centre for Mathematics and Computer Science (CWI), Amsterdam, Netherlands.
- 1999 (1 month) Researcher  
Centre for Mathematics and Computer Science (CWI), Amsterdam, Netherlands.
- 2001 (January–February) Researcher  
Centre for Mathematics and Computer Science (CWI), Amsterdam, Netherlands.  
(June) Professor  
Applied Mathematics Laboratory, University of Science and Technology of Lille, Villeneuve d’Ascq, France.
- 2002 (June–July) Guest Lecturer  
Bandung Institute of Technology (ITB), Bandung, Indonesia. (Under the auspices of the bi-national scientific cooperation program between Indonesia and the Netherlands.)
- 2003 (May–June) Professor  
Paul Painlevé Laboratory, University of Science and Technology of Lille, Villeneuve d’Ascq, France.
- 2004 (May) Research Fellow  
Department of Mathematics, School of Science and Technology, University Sussex, Falmer, U.K.  
(May–July) Researcher  
Centre for Mathematics and Computer Science (CWI), Amsterdam, Netherlands.  
(July–September) Academic and Honorary Teaching Fellow  
Institute of Information Sciences and Technology, Massey University, Palmerston North, New Zealand.
- 2005 (May–June) Professor  
Paul Painlevé Laboratory, University of Science and Technology of Lille, Villeneuve d’Ascq, France.
- 2006 (March–April) Researcher  
Centre for Mathematics and Computer Science (CWI), Amsterdam, Netherlands.  
(October–November) Researcher (International Visitor Research Fund Award).  
Institute of Information Sciences and Technology, Massey University, Palmerston North, New Zealand.
- 2007 (April–May) Researcher  
Actuarial Research Center (ARC), University of Haifa, Haifa, Israel.  
(June) Researcher  
Paul Painlevé Laboratory, University of Science and Technology of Lille, Villeneuve d’Ascq, France. (Under the auspices of the France–Canada Cooperation Program, Scientific Services, French Embassy, Ottawa, Canada.)
- 2010 (June–July) Researcher  
Institute of Fundamental Sciences–Statistics, Massey University, Palmerston North, New Zealand. (Supported by the Actuarial Foundation (TAF) of the Society of Actuaries (SOA), Schaumburg, Illinois, U.S.A.)

## Research publications

#### REFEREED JOURNAL PUBLICATIONS

[1988] [1989] [1990] [1991] [1993] [1994] [1995] [1996] [1997] [1998] [1999] [2001] [2002] [2003] [2004]  
[2005] [2006] [2007] [2008] [2009] [2010] [2011] [2012] [2013] [2014] [2015] [2016] [2017] [2018] [2019]  
[2020] [2021] [2022] [2023] [2024]

- (1) **Remark on the Cramér–von Mises–Smirnov test.**  
Bentkus, V. and Zitikis, R. (1988).  
*Litovskii Matematicheskii Sbornik*, 28 (1), 14–22; translated in: *Lithuanian Mathematical Journal*, 28 (1), 8–13.
- (2) **Asymptotic expansions in a local limit theorem for  $\omega_n^2$  statistics.**  
Zitikis, R. (1988).  
*Litovskii Matematicheskii Sbornik*, 28 (3), 461–474.

**1989** \_\_\_\_\_

- (3) **Asymptotic expansions for derivatives of the distribution function of the Anderson–Darling statistic.**  
Zitikis, R. (1989).  
*Litovskii Matematicheskii Sbornik*, 29 (1), 35–53.

**1990** \_\_\_\_\_

- (4) **Smoothness of distribution function of  $\mathcal{FL}$ -statistic. I**  
Zitikis, R. (1990).  
*Litovskii Matematicheskii Sbornik*, 30 (2), 233–246; translated in: *Lithuanian Mathematical Journal*, 30 (2), 97–106.
- (5) **Smoothness of distribution function of  $\mathcal{FL}$ -statistic. II**  
Zitikis, R. (1990).  
*Litovskii Matematicheskii Sbornik*, 30 (3), 500–512; translated in: *Lithuanian Mathematical Journal*, 30 (3), 231–240.
- (6) **Probabilities of large deviations for  $L$ -statistics.**  
Bentkus, V. and Zitikis, R. (1990).  
*Litovskii Matematicheskii Sbornik*, 30 (3), 479–488; translated in: *Lithuanian Mathematical Journal*, 30 (3), 215–222.
- (7) **Uniform limit theorem for densities of  $L$ -statistics.**  
Zitikis, R. (1990).  
*Litovskii Matematicheskii Sbornik*, 30 (4), 728–740; translated in: *Lithuanian Mathematical Journal*, 30 (4), 331–341.

**1991** \_\_\_\_\_

- (8) **Cramér type large deviations for a class of statistics.**  
Zitikis, R. (1991).  
*Litovskii Matematicheskii Sbornik*, 31 (2), 302–310; translated in: *Lithuanian Mathematical Journal*, 31 (2), 204–210.
- (9) **Asymptotic behaviour of linear combinations of functions of order statistics.**  
Norvaiša, R. and Zitikis, R. (1991).  
*Journal of Statistical Planning and Inference*, 28 (3), 305–317.

**1993** \_\_\_\_\_

- (10) **Asymptotic expansions in the integral and local limit theorems in Banach spaces with applications to  $\omega$ -statistics.**  
Bentkus, V., Götze, F. and Zitikis, R. (1993).  
*Journal of Theoretical Probability*, 6 (4), 727–780.

**1994** \_\_\_\_\_

- (11) **Lower estimates of the convergence rate for  $U$ -statistics.**  
Bentkus, V., Götze, F. and Zitikis, R. (1994).  
*Annals of Probability*, 22 (4), 1707–1714.

**1995** \_\_\_\_\_

- (12) **Edgeworth expansions and bootstrap for degenerate von Mises statistics.**  
Götze, F. and Zitikis, R. (1995).  
*Probability and Mathematical Statistics*, 15 (Jerzy Neyman’s Volume), 327–351.

**1996** \_\_\_\_\_

- (13) **Strassen’s LIL for the Lorenz curve.**  
Csörgő, M. and Zitikis, R. (1996).  
*Journal of Multivariate Analysis*, 59 (1), 1–12.
- (14) **Mean residual life processes.**  
Csörgő, M. and Zitikis, R. (1996).  
*Annals of Statistics*, 24 (4), 1717–1739.

**1997** \_\_\_\_\_

- (15) **On the rate of strong consistency of Lorenz curves.**  
Csörgő, M. and Zitikis, R. (1997).  
*Statistics and Probability Letters*, 34 (2), 113–121.

- (16) **On confidence bands for the Lorenz and Goldie curves.**  
Csörgő, M. and Zitikis, R. (1997).  
In: *Advances in the Theory and Practice of Statistics – A Volume in Honor of Samuel Kotz* (Eds.: N.L. Johnson and N. Balakrishnan), 261–281. Wiley, New York.

**1998** \_\_\_\_\_

- (17) **On the rate of strong consistency of total time on test statistic.**  
Csörgő, M. and Zitikis, R. (1998).  
*Journal of Multivariate Analysis*, 66 (1), 99–117.
- (18) **Asymptotic confidence bands for the Lorenz and Bonferroni curves based on the empirical Lorenz curve.**  
Csörgő, M., Gastwirth, J.L. and Zitikis, R. (1998).  
*Journal of Statistical Planning and Inference*, 74 (1), 65–91.
- (19) **The Vervaat process.**  
Zitikis, R. (1998).  
In: *Asymptotic Methods in Probability and Statistics – A Volume in Honour of Miklós Csörgő* (Ed. B. Szyszkowicz), 667–694. North-Holland, Amsterdam.

**1999** \_\_\_\_\_

- (20) **On the Vervaat and Vervaat-error processes.**  
Csörgő, M. and Zitikis, R. (1999).  
*Acta Applicandae Mathematicae* (Special issue on “Limit Theorems of Probability Theory in Honour of Vytautas Statulevičius”), 58 (1–3), 91–105.
- (21) **On estimation of Poisson intensity functions.**  
Helmers, R. and Zitikis, R. (1999).  
*Annals of the Institute of Statistical Mathematics*, 51 (2), 265–280.

**2001** \_\_\_\_\_

- (22) **The Vervaat process in  $L_p$ -spaces.**  
Csörgő, M. and Zitikis, R. (2001).  
*Journal of Multivariate Analysis*, 78 (1), 103–138.

**2002** \_\_\_\_\_

- (23) **Asymptotic distribution of the S-Gini index.**  
Zitikis, R. and Gastwirth, J.L. (2002).  
*Australian & New Zealand Journal of Statistics*, 44 (4), 439–446.
- (24) **Pointwise and uniform asymptotics of the Vervaat error process.**  
Csáki, E., Csörgő, M., Földes, A., Shi, Z. and Zitikis, R. (2002).  
*Journal of Theoretical Probability*, 15 (4), 845–875.
- (25) **Convergence of generalized Lorenz curves based on stationary ergodic random sequences with deterministic noise.**  
Davydov, Y. and Zitikis, R. (2002).  
*Statistics and Probability Letters*, 59 (4), 329–340.
- (26) **Large sample estimation of a family of economic inequality indices.**  
Zitikis, R. (2002).  
*Pakistan Journal of Statistics*, 18 (2; Special issue in honour of Dr. S. Ejaz Ahmad), 225–248.
- (27) **On the general Bahadur-Kiefer, quantile, and Vervaat processes: old and new.**  
Csörgő, M. and Zitikis, R. (2002).  
In: *Limit Theorems in Probability and Statistics*, Vol. I (Eds.: I. Berkes, E. Csáki, M. Csörgő), 389–426. János Bolyai Mathematical Society, Budapest.

**2003** \_\_\_\_\_

- (28) **Asymptotics of the  $L_p$ -norms of density estimators in the first order autoregressive models.**  
Horváth, L. and Zitikis, R. (2003).  
*Statistics and Probability Letters*, 65 (4), 331–342.
- (29) **Empirical estimation of risk measures and related quantities.**  
Jones, B.L. and Zitikis, R. (2003).  
*North American Actuarial Journal*, 7 (4), 44–54. Discussion by V. Brazauskas and T. Kaiser in *North American Actuarial Journal*, 8 (3; 2004) 114–117. Authors’ Reply in *North American Actuarial Journal*, 8 (3; 2004) 117–118.
- (30) **Generalized Lorenz curves and convexifications of stochastic processes.**  
Davydov, Y. and Zitikis, R. (2003).  
*Journal of Applied Probability*, 40 (4), 906–925.



- (31) **Asymptotic estimation of the  $E$ -Gini index.**  
Zitikis, R. (2003).  
*Econometric Theory*, 19 (4), 587–601.
- (32) **Consistent estimation of the intensity function of a cyclic Poisson process.**  
Helmers, R., Mangku, I.W. and Zitikis, R. (2003).  
*Journal of Multivariate Analysis*, 84 (1), 19–39.
- 2004** \_\_\_\_\_
- (33) **A robust heuristic estimator for the period of a Poisson intensity function.**  
Bebbington, M. and Zitikis, R. (2004).  
*Methodology and Computing in Applied Probability*, 6 (4), 441–462.
- (34) **Asymptotics of the  $L_p$ -norms of density estimators in the first order autoregressive models.**  
Horváth, L. and Zitikis, R. (2004).  
*Statistics and Probability Letters*, 66 (2), 91–103.
- (35) **The influence of deterministic noise on empirical measures generated by stationary processes.**  
Davydov, Y. and Zitikis, R. (2004).  
*Proceedings of the American Mathematical Society*, 132 (4), 1203–1210.
- (36) **Convex rearrangements of random elements.**  
Davydov, Y. and Zitikis, R. (2004).  
In: *Asymptotic Methods in Stochastics*, Festschrift for Miklós Csörgő (Eds.: L. Horváth and B. Szyszkowicz),  
*Fields Institute Communications*, Vol. 44, 141–171. American Mathematical Society, Providence, Rhode Island.
- 2005** \_\_\_\_\_
- (37) **An index of monotonicity and its estimation: a step beyond econometric applications of the Gini index.**  
Davydov, Y. and Zitikis, R. (2005).  
*Metron – International Journal of Statistics*, 63 (3; Special issue in Memory of Corrado Gini), 351–372.
- (38) **Estimating the turning points of failure rate and mean residual life functions.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2005).  
*Communications in Dependability and Quality Management*, 8, 11–15.
- (39) **Testing for the order of risk measures: an application of  $L$ -statistics in actuarial science.**  
Jones, B.L. and Zitikis, R. (2005).  
*Metron – International Journal of Statistics*, 63 (2), 193–211.
- (40) **Strong laws for generalized absolute Lorenz curves when data are stationary and ergodic sequences.**  
Helmers, R. and Zitikis, R. (2005).  
*Proceedings of the American Mathematical Society*, 133 (12), 3703–3712.
- (41) **Statistical properties of a kernel-type estimator of the intensity function of a cyclic Poisson process.**  
Helmers, R., Mangku, I.W. and Zitikis, R. (2005).  
*Journal of Multivariate Analysis*, 92 (1), 1–23.
- 2006** \_\_\_\_\_
- (42) **Gini indices as areas and covariances: what is the difference between the two representations?**  
Schechtman, E. and Zitikis, R. (2006).  
*Metron – International Journal of Statistics*, 54, 385–397.
- (43) **Sample and implied volatility in GARCH models.**  
Horváth, L., Kokoszka, P. and Zitikis, R. (2006).  
*Journal of Financial Econometrics*, 4, 617–635.
- (44) **Testing for stochastic dominance using the weighted McFadden-type statistic.**  
Horváth, L., Kokoszka, P. and Zitikis, R. (2006).  
*Journal of Econometrics*, 133 (1), 191–205.
- (45) **Useful periods for lifetime distributions with bathtub shaped hazard rate functions.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2006).  
*IEEE Transactions on Reliability*, 55 (2), 245–251.
- (46) **Testing goodness of fit based on densities of GARCH innovations.**  
Horváth, L. and Zitikis, R. (2006).  
*Econometric Theory*, 22 (3), 457–482.
- (47) **Testing hypotheses about the equality of several risk measure values with applications in insurance.**  
Jones, B.L., Puri, M.L. and Zitikis, R. (2006).  
*Insurance: Mathematics and Economics*, 38 (2), 253–270.

**2007** \_\_\_\_\_

- (48) **Estimating the renewal function when the second moment is infinite.**  
Bebbington, M., Davydov, Y. and Zitikis, R. (2007).  
*Stochastic Models*, 23 (1), 27–48.
- (49) **Optimum burn-in time for a bathtub shaped failure distribution.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*Methodology and Computing in Applied Probability*, 9 (1), 1–20.
- (50) **Modeling human mortality using mixtures of bathtub shaped failure distributions.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*Journal of Theoretical Biology*, 245 (3), 528–538. Addendum in *Journal of Theoretical Biology*, 249 (2), 409–410.
- (51) **Deterministic noises that can be statistically distinguished from the random ones.**  
Davydov, Y. and Zitikis, R. (2007).  
*Statistical Inference for Stochastic Processes*, 10 (2), 165–179.
- (52) **A flexible Weibull extension.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*Reliability Engineering & System Safety*, 92 (6), 719–726. Letter to the editor by S. Nadarajah in *Reliability Engineering & System Safety*, 92 (10), 1484. Reply to S. Nadarajah in *Reliability Engineering & System Safety*, 92 (10), 1485.
- (53) **Convex rearrangements, generalized Lorenz curves, and correlated Gaussian data.**  
Davydov, Y., Khoshnevisan, D., Shi, Z. and Zitikis, R. (2007).  
*Journal of Statistical Planning and Inference* (Special issue on “Nonparametric Statistics and Related Topics: In Honor of M.L. Puri”), 137 (3), 915–934.
- (54) **Risk measures, distortion parameters, and their empirical estimation.**  
Jones, B.L. and Zitikis, R. (2007).  
*Insurance: Mathematics and Economics*, 41 (2), 279–297.
- (55) **Bathtub-type curves in reliability and beyond.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*Australian & New Zealand Journal of Statistics*, 49 (3), 251–265.
- (56) **A non-parametric estimator for the doubly periodic Poisson intensity function.**  
Helmers, R., Mangku, I.W. and Zitikis, R. (2007).  
*Statistical Methodology*, 4 (4), 481–492.
- (57) **Reliability of modules with load-sharing components.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*Journal of Applied Mathematics and Decision Sciences* (Special issue on “Statistics and Applied Probability: A Tribute to Jeffrey J. Hunter” and edited by Graeme Charles Wake and Paul Cowpertwait), 2007 (Article ID 43565), 1–18.
- (58) **Nested  $L$ -statistics and their use in comparing the riskiness of portfolios.**  
Brazauskas, V., Jones, B.L., Puri, M.L. and Zitikis, R. (2007).  
*Scandinavian Actuarial Journal*, 2007 (3), 162–179.
- (59) **Robustification and performance evaluation of empirical risk measures and other vector-valued estimators.**  
Brazauskas, V., Jones, B.L. and Zitikis, R. (2007).  
*Metron – International Journal of Statistics*, 65 (2), 175–199.
- 2008**
- (60) **Reduction in mean residual life in the presence of a constant competing risk.**  
Bebbington, M., Lai, C.D. and Zitikis, R. (2008).  
*Applied Stochastic Models in Business and Industry*, 24 (1), 51–63.
- (61) **Weighted premium calculation principles.**  
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- (167) Weighted pricing functionals: a new method and its manifold implications.  
Furman, E. and Zitikis, R. (2010).  
In: Proceedings of the International Symposium on “*Stochastic Models in Reliability Engineering, Life Science and Operations Management*” (Eds.: I. Frenkel, I. Gertsbakh, L. Khvatskin, Z. Laslo, and A. Lisnianski), pp. 283–289. Shamoon College of Engineering (SCE), Beer Sheva, Israel, February 8–11, 2010.
- (168) Discrete bathtub distributions: mind the step function!  
Bebbington, M., Lai, C.D., Wellington, M. and Zitikis, R. (2010).  
In: *Advanced Reliability Modeling IV: Beyond the Traditional Reliability and Maintainability Approaches*. Proceedings of the 4th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (Eds.: S. Chukova, J. Hayward and T. Dohi), pp. 57–64. Wellington, New Zealand, December 2–4, 2010. McGraw-Hill, Taiwan.
- (169) Exporting reliability theory to the social sciences.  
Lai, C.D., Zitikis, R. and Bebbington, M. (2010).  
In: *Advanced Reliability Modeling IV: Beyond the Traditional Reliability and Maintainability Approaches*. Proceedings of the 4th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (Eds.: S. Chukova, J. Hayward and T. Dohi), pp. 401–408. Wellington, New Zealand, December 2–4, 2010. McGraw-Hill, Taiwan.

**2024** \_\_\_\_\_

- (170) A tweet data analysis for detecting emerging operational risks.  
Di Vincenzo D., Greselin, F., Piacenza, F. and Zitikis, R. (to appear).  
In: Proceedings of the 11th International Conference on “*Mathematical and Statistical Methods for Actuarial Sciences and Finance*” (MAF 2024). University of Le Havre Normandie, Le Havre Cedex, France, April 4–6, 2024. Springer, Berlin.

## DISCUSSIONS, EDITORIALS, LETTERS, BRIEFS

**2000** \_\_\_\_\_

- (171) **Review of “Stochastic Models in Reliability”** by T. Aven and U. Jensen (Springer, New York, 1999. xii+270 pp.)  
Zitikis, R. (2000).  
*Statistics & Decisions*, 18, 336–337.

**2004** \_\_\_\_\_

- (172) Reply to V. Brazauskas and T. Kaiser concerning their discussion of the paper “Empirical estimation of risk measures and related quantities.”  
Jones, B.L. and Zitikis, R. (2004).  
*North American Actuarial Journal*, 8 (July), 117–118.

**2007**

- (173) Reply to S. Nadarajah concerning “A flexible Weibull extension.”  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*Reliability Engineering & System Safety*, 92 (10), 1485.
- (174) Discussion of “An extreme value analysis of advanced age mortality data” by K.A. Watts, D.J. Dupuis and B.L. Jones.  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*North American Actuarial Journal*, 11 (3), 173–174.
- (175) Discussion of “An actuarial premium pricing model for nonnormal insurance and financial risks in incomplete markets” by Zinoviy Landsman and Michael Sherris.  
Furman, E. and Zitikis, R. (2007).  
*North American Actuarial Journal*, 11 (3), 174–176.
- (176) Addendum to “Modeling human mortality using mixtures of bathtub shaped failure distributions.”  
Bebbington, M., Lai, C.D. and Zitikis, R. (2007).  
*Journal of Theoretical Biology*, 249 (2), 409–410.

**2010**

- (177) Editorial of “Actuarial and Financial Risks: Models, Statistical Inference, and Case Studies.”  
Zitikis, R., Furman, E., Necir, A., Nešlehová, J. and Puri, M.L. (2010).  
*Journal of Probability and Statistics* (Special issue on “Actuarial and Financial Risks: Models, Statistical Inference, and Case Studies”), 2010, Article ID 392498, 3 pages.

**2014**

- (178) Research brief on “Income inequality in Canada and the mitigating influence of provincial tax policies: findings from the 2006 census.”  
Corbett, B.A., Greselin, F., Pasquazzi, L., Williams, R. and Zitikis, R. (2014).  
Research brief to the House of Commons Standing Committee on Finance, Ottawa, Ontario, Canada.  
FINA Committee related document: [Income Inequality in Canada](#).

**2017**

- (179) An adaptation of the classical CAPM to insurance: the weighted insurance pricing model.  
Furman, E. and Zitikis, R. (2017).  
Casualty Actuarial Society E-Forum, Spring 2017, 1–12.

**2019**

- (180) Editorial of “Risk, Ruin and Survival: Decision Making in Insurance and Finance.”  
Ren, J., Sendova, K. and Zitikis, R. (2019).  
*Risks* (Special issue on “Risk, Ruin and Survival: Decision Making in Insurance and Finance”), 7 (3), 1–7. (Article #96.)

## EDITED BOOKS

**2020**

- (181) *Risk, Ruin and Survival: Decision Making in Insurance and Finance*.  
Zitikis, R., Ren, J. and Sendova, K. (2020).  
Open-access book (212 pages) published by the Multidisciplinary Digital Publishing Institute (MDPI), Basel, Switzerland; ISBN 978-3-03928-516-7 (pbk); ISBN 978-3-03928-517-4 (pdf).

## MEDIA COVERAGE

These are interviews by others who mentioned my name, and I am very grateful to them for remembering me

**2013**

Measuring inequality beyond Gini: Ričardas Zitikis explores the promise of the Zenga index.  
Zimmer, M. (2013).  
Western Science News, Western University, London, Ontario, Canada.

**2017**

A new method for educational assessment, inspired by Big Data.  
Austen, A. and Rodrigues, M. (2017).  
Mitacs Newsroom: Blog (November 21, 2017).

**2019**

*Fifty years in the field of probability: A conversation with professor Vygantas Paulauskas.*  
 Bloznelis, M. and Račkauskas, A. (2019).  
*Lithuanian Mathematical Journal*, 59 (4), 425–436.

**2021**

*An interview with Ruodu Wang.*  
*Expanding Horizons* (November 2021).  
 Society of Actuaries (SOA), Schaumburg, Illinois, U.S.A.

**2023**

*New approach needed to manage systemic risks, such as pandemics, climate catastrophes, financial crises.*  
*News@York* (May 18, 2023).  
 York University Media Relations, York University, Toronto, Canada.

## Funding

### RESEARCH GRANTS

- 1994 – 1996 Canada International Fellowship.  
 – Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2000 – 2004 *Stochastic Processes with Applications in Statistics.*  
 – Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2004 – 2008 *Stochastic Processes with Applications in Econometrics and Actuarial Sciences.*  
 – Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2006 Research Fund Award  
 – Awarded by Massey University, Palmerston North, New Zealand.  
 – Research at the Institute of Information Sciences and Technology, Massey University, Palmerston North, New Zealand.
- 2007 *From Risk Measurement to Risk Management.*  
 – Awarded by the Zimmerman Foundation for the Study of Banking and Finance.  
 – Research at the University of Haifa, Israel.  
 – Team members: E. Furman, U. Makov, and R. Zitikis.
- 2007 Visitors Grant  
 – Awarded by the Caesarea Edmond Benjamin de Rothschild Foundation Institute for Interdisciplinary Applications of Computer Science.  
 – Research at the University of Haifa, Israel.  
 – Team members: E. Furman, U. Makov, and R. Zitikis.
- 2007 *Detecting Deterministic Signals in Noisy Environments.*  
 – Awarded by the France-Canada Cooperation Program, Scientific Services, French Embassy, Ottawa, Canada.  
 – Research at the University of Science and Technology of Lille, Villeneuve d’Ascq, France.  
 – Team members: Y. Davydov and R. Zitikis.
- 2007 – 2009 *Weighted Premium Calculation Principles and Risk Capital Allocations.*  
 – Awarded by the Committee on Knowledge Extension Research (CKER) of the Society of Actuaries (SOA) Research Institute, Schaumburg, Illinois, U.S.A.  
 – Team members: R. Zitikis (Principal Investigator) and E. Furman (Co-Investigator).
- 2008 – 2010 *Statistical Inference in Actuarial, Engineering, and Life Sciences.*  
 – Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2010 – 2011 *The Covariance Sign of Transformed Random Variables with Applications to Economics, Finance and Insurance.*  
 – Awarded by the Research Committee of Hong Kong Baptist University, Hong Kong.  
 – Team members: W.K. Wong (Principal Investigator), M. Egozcue (Co-Investigator), L. Fuentes García (Co-Investigator), and R. Zitikis (Co-Investigator).
- 2010 – 2012 *A Mathematical Model for Late-Life Mortality.*  
 – Awarded by the Committee on Knowledge Extension Research (CKER) of the Society of Actuaries (SOA) Research Institute, Schaumburg, Illinois, U.S.A.  
 – Team members: M. Bebbington (Principal Investigator), C.D. Lai (Co-Investigator), and R. Zitikis (Co-Investigator).
- 2010 – 2015 *Quantitative Management of Risks.*  
 – Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2011 – 2012 Visiting University Scholar Program Award.

- Awarded by the Office of the Vice-President (Research and International Relations), Western University, London, Ontario, Canada.
  - Team members: F. Greselin (University of Milano-Bicocca, Italy, and a recipient of the designation “Western Fellow” awarded by the Office of the Vice-President for Research and International Relations, UWO, Canada), and R. Zitikis (Principal Investigator).
- 2015 – 2016 *Dynamic Models for Risk Management: Big Data, Statistical Inference, and Decision Making*.
- Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2015 – 2016 *The Capital Asset Pricing Model: An Insurance Variant*.
- Awarded by the Casualty Actuarial Society (CAS), Arlington, Virginia, U.S.A.
  - Team members: E. Furman (Consultant) and R. Zitikis (Co-consultant).
- 2016 – 2017 *A New Method for Educational Assessment: Measuring Association via LOC Index*.
- Mitacs Globalink Partnership Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Hefei Gemei Culture and Education Technology Co. Ltd, Hefei, China.
  - Team members: J. Wu (Ph.D. Student Intern) and R. Zitikis (Academic Supervisor).
- 2016 – 2021 *From Data to Integrated Risk Management and Smart Living: Mathematical Modelling, Statistical Inference, and Decision Making*.
- Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2018 – 2019 *Financial Contagion Measures Based on Co-movements*.
- Mitacs Globalink Research Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), awarded for conducting research at the Central University of Finance and Economics (CUFE), Beijing, China.
  - Team members: N. Sun (Ph.D. Student Intern), J. Wu (Academic Supervisor at CUFE, Beijing, China), and R. Zitikis (Academic Supervisor at Western University, Canada).
- 2018 – 2020 *Risk Aggregation Beyond the Normal Limits*.
- Mitacs Accelerate Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Sun Life Financial.
  - Lead academic supervisors: E. Furman and R. Zitikis.
- 2019 *Bridging Natural and Machine Intelligence for Calculating Insurance Premiums*.
- Mitacs Globalink Research Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), awarded for conducting research at Central Michigan University (CMU), Michigan, U.S.A.
  - Team members: U. Karan (M.Sc. Student Intern), R.G.M. Samanthi (Academic Supervisor at CMU, Michigan, U.S.A), and R. Zitikis (Academic Supervisor at Western University, Canada).
- 2019 – 2020 *Price Elasticities and Promotion Cannibalization Effect on Promotion Activities*.
- Mitacs Accelerate Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Unilever Canada.
  - Team members: L. Chen (PhD Student at Western University and Intern at Unilever Canada) and R. Zitikis (Academic Supervisor).
- 2020 *Pricing Model from Econometric Perspective and Visualizing Promotion Cannibalization Effect on Promotion Activities*.
- Mitacs Accelerate Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Unilever Canada.
  - Team members: L. Chen (PhD Student at Western University and Intern at Unilever Canada) and R. Zitikis (Academic Supervisor).
- 2020 – 2021 *Demand Estimation in Consumer-Packaged Goods Market Using BLP Method*.
- Joint Mitacs Accelerate Award between the Southern Ontario Smart Computing Innovation Platform (SOSCIP) and the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Unilever Canada.
  - Team members: L. Chen (PhD Student at Western University and Intern at Unilever Canada) and R. Zitikis (Academic Principal Investigator).
- 2020 *From Data to Integrated Risk Management and Smart Living: Mathematical Modelling, Statistical Inference, and Decision Making*.
- COVID-19 supplement to the 2016–2021 grant under the same title.
  - Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2021 – 2022 *From Data to Integrated Risk Management and Smart Living: Mathematical Modelling, Statistical Inference, and Decision Making*.
- COVID-19 extension of the 2016–2021 grant under the same title.
  - Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2021 – 2022 *Risk Aggregation Beyond the Normal Limits*.

- An extension of the 2018–2020 Mitacs Accelerate Award under the same title, awarded by the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Sun Life Financial.
  - Lead academic supervisors: E. Furman and R. Zitikis.
- 2022 – 2024 *The State of the Art in Anomaly Detection and Model Construction, with the Focus on Natural Language Processing (NLP) in Actuarial Modelling.*
- Awarded by the Committee on Knowledge Extension Research (CKER) of the Society of Actuaries (SOA) Research Institute, Schaumburg, Illinois, U.S.A., and the Casualty Actuarial Society (CAS), Arlington, Virginia, U.S.A.
  - Team members: P. Gao, X. Wang, and R. Zitikis (Lead Researcher).
- 2022 – 2027 *Automated Statistical Techniques for Systematic Anomaly Detection in High Frequency Data.*
- Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada.
- 2023 – 2028 *New Order of Risk Management: Theory and Applications in the Era of Systemic Risk.*
- Awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada, and the national research organization Mathematics of Information Technology and Complex Systems (MITACS) of Canada, under the NSERC Alliance–Mitacs Accelerate program.
  - Grantee: E. Furman (York University). Co-grantees: J. Cao (York University), I. Ferrara (York University), H. Joe (University of British Columbia), X.S. Lin (University of Toronto), D. Matten (York University), S.M. Pesenti (University of Toronto), R.S. Rosenbaum (York University), F. Yang (University of Waterloo), and R. Zitikis (Western University).
  - Industry partners: Aviva Canada, CANNEX Financial Exchanges Limited, Great-West Lifeco, Sun Life Assurance Company of Canada, and Wawanesa Mutual Insurance Company.
- 2024 – 2025 *Predicting Classification Errors Using NLP-based Machine Learning Algorithms and Expert Opinions.*
- Awarded by the Academic Research Grant Program of the Canadian Institute of Actuaries (CIA), Ottawa, Ontario, Canada.
  - Team members: P. Gao, N. Sun, C. Yang, and R. Zitikis (Lead Researcher).

### TEACHING GRANTS

#### The University Students Council Teaching Honour Roll Award of Excellence for 2014–15, Western University

- 2013 Doctoral Supervision Internal Grant.
- Awarded by the School of Graduate and Postdoctoral Studies, Western University, London, Ontario, Canada.
- 2014 Doctoral Supervision Internal Grant.
- Awarded by the School of Graduate and Postdoctoral Studies, Western University, London, Ontario, Canada.
- 2014 – 2016 Western Science Incremental Funding Program.
- For supervising a large group of domestic graduate/doctoral students.
  - Awarded by the Faculty of Science, Western University, London, Ontario, Canada.
- 2015 Doctoral Supervision Internal Grant.
- Awarded by the School of Graduate and Postdoctoral Studies, Western University, London, Ontario, Canada.
- 2021 – 2022 *Design, Development, and Delivery of VR-Supported Online Course on the Economics of Insurance and Decision Making under Risk.*
- Awarded by eCampusOntario, in support of the Government of Ontario’s Virtual Learning Strategy (VLS).
  - Team members: T. Karagyozyova (Project Lead), I. Ferrara (Collaborator), E. Furman (Collaborator) and R. Zitikis (Collaborator).

### EQUIPMENT GRANTS

- 2000 Natural Sciences and Engineering Research Council (NSERC) of Canada. (Joint application with a number of colleagues.)
- 2005 Natural Sciences and Engineering Research Council (NSERC) of Canada. (Joint application with a number of colleagues.)



## Research presentations

### CONFERENCES, WORKSHOPS, SEMINARS

My participation at many of these events was possible due to generous support by host institutions and organizers, and I gratefully acknowledge this

- 1988 Seminar. Institute for Information Transmission Problems, Russian Academy of Sciences, Moscow, Russia.
- 1991 International seminar on Stability Problems for Stochastic Models. Suzdal, Russia.
- 1994 Workshop on Empirical Reliability and Change Point Analysis. Laboratory for Research in Statistics and Probability, Ottawa, Ontario, Canada.  
Seminar. Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands.  
Seminar. Laboratory for Research in Statistics and Probability, Carleton University, Ottawa, Ontario, Canada.
- 1995 Workshop on Empirical Reliability and Change Point Analysis. Laboratory for Research in Statistics and Probability, Ottawa, Ontario, Canada.
- 1996 Workshop on Empirical Reliability and Change Point Analysis. Laboratory for Research in Statistics and Probability, Ottawa, Ontario, Canada.  
Seminar. Laboratory for Research in Statistics and Probability, Carleton University, Ottawa, Ontario, Canada.
- 1997 International conference on Asymptotic Methods in Probability and Statistics in honour of Miklós Csörgő on the occasion of his 65th birthday. Carleton University, Ottawa, Ontario, Canada.  
Seminar. Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands.  
Seminar. Department of Mathematics, University of Groningen, Groningen, The Netherlands.
- 1998 Probability session of the Canadian Mathematical Society and the Fields Institute meeting. Kingston, Ontario, Canada.  
Seminar. Department of Mathematics and Statistics, York University, Toronto, Ontario, Canada.  
Seminar. Laboratory for Research in Statistics and Probability, Carleton University, Ottawa, Ontario, Canada.
- 1999 4th Hungarian colloquium on Limit Theorems of Probability and Statistics. Balatonlelle, Hungary.  
Seminar. Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands.
- 2000 1st international statistics workshop. University of Manitoba, Winnipeg, Manitoba, Canada.  
Seminar. Department of Statistics, University of Winnipeg, Winnipeg, Manitoba, Canada.  
Statistical showcase of the Statistical Association of Manitoba. Winnipeg, Manitoba, Canada.
- 2001 International symposium in honour of David Vere-Jones on the occasion of his 65th birthday. Victoria University of Wellington, Wellington, New Zealand.  
Statistics Odyssey of the Statistical Association of Manitoba, Winnipeg, Manitoba, Canada.  
Seminar. Department of Mathematical and Statistical Sciences, University of Alberta, Edmonton, Alberta, Canada.  
Seminar. Paul Painlevé Laboratory, University of Science and Technology of Lille, Villeneuve d'Ascq, France.  
Seminar. Department of Statistics and Actuarial Science, University of Waterloo, Waterloo, Ontario, Canada.  
Seminar. Institute of Information Sciences and Technology, Massey University, Palmerston North, New Zealand.  
Seminar. Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands.
- 2002 11th Indonesian mathematics conference. State University of Malang (UM), Indonesia.  
Workshop (jointly with R. Helmers and I.W. Mangku) on Computer Intensive Statistics under the auspices of the bi-national scientific cooperation program between Indonesia and the Netherlands. Bandung Institute of Technology (ITB), Bandung, Indonesia.  
International conference on New Results in Asymptotic Stochastics in honour of Miklós Csörgő on the occasion of his 70th birthday. Carleton University, Ottawa, Ontario, Canada.
- 2003 International conference on Point Processes—Theory and Applications in honor of David Brillinger. Banff International Research Station, Alberta, Canada.  
Seminar. Department of Applied Mathematics, Western University, London, Ontario, Canada.  
Seminar. Department of Mathematics and Statistics, University of Calgary, Calgary, Alberta, Canada.  
Seminar. Probability Laboratory, University of Paris VI, Paris, France.  
Seminar. Paul Painlevé Laboratory, University of Science and Technology of Lille, Villeneuve d'Ascq, France.  
Seminar. Department of Mathematics, University of Utah, Salt Lake City, U.S.A.



- 2004 International conference on Distribution Theory, Order Statistics and Inference in honor of Barry C. Arnold on the occasion of his 65th birthday. University of Cantabria, Santander, Spain.  
 International conference on Economic, Mathematical and Statistical Aspects of Modelling Financial Data. Graz University of Technology, Graz, Austria.  
 Joint Ottawa-Carleton colloquium. Carleton University, Ottawa, Ontario, Canada.  
 Seminar. Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands.  
 Seminar. Department of Mathematics, University of Sussex, Brighton, Sussex, U.K.
- 2005 EPAM symposium on Statistics and Applied Probability within the Extended Programme in Applied Mathematics (EPAM) between Indonesia and the Netherlands. Bandung Institute of Technology (ITB), Bandung, Indonesia.  
 Workshop (many lectures) on Statistical Inference in Econometrics. Department of Statistics, Faculty of Mathematics and Natural Sciences, Islamic University of Indonesia (UII), Yogyakarta, in cooperation with the Doctoral Program in Economics, Faculty of Economics, Islamic University of Indonesia (UII), Yogyakarta, Indonesia.  
 Workshop on Linear Analysis and Probability. Texas A&M University, College Station, Texas, U.S.A.  
 International symposium on Stochastic Models in Reliability, Safety, Security and Logistics (SMRSSL'05) dedicated to the memory of Prof. K. Kordonsky. Shamoon College of Engineering, Beer-Sheva, Israel.  
 Seminar. Department of Industrial Engineering and Management, Ben-Gurion University of the Negev, Beer-Sheva, Israel.  
 Seminar. Department of Mathematics and Statistics, McMaster University, Hamilton, Ontario, Canada.  
 Seminar. Department of Economics, Carleton University, Ottawa, Ontario, Canada.  
 Seminar. Laboratory for Research in Statistics and Probability, Carleton University, Ottawa, Ontario, Canada.  
 Seminar. Paul Painlevé Laboratory, University of Science and Technology of Lille, Villeneuve d'Ascq, France.  
 Seminar. Department of Economics, University of Leuven, Leuven, Belgium.  
 CRM-ISM-GERAD statistics colloquium. McGill University, Montreal, Quebec, Canada.
- 2006 International symposium in honour of Roelof Helmers. Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands.  
 Israel Statistical Association (ISA) annual meeting. Zichron-Ya'acov, Israel.  
 International workshop on Lorenz-Gini Type Asymptotic Methods in Statistics and their Applications. Laboratory for Research in Statistics and Probability, Carleton University, Ottawa, Ontario, Canada.  
 International conference on Advancing Health Equity. World Institute for Development Economics Research. United Nations University, Helsinki, Finland.  
 Meeting of Palmy Statisticians. AgResearch Ltd, Grasslands Research Centre, Palmerston North, and the Institute of Information Sciences and Technology, Massey University, Palmerston North, New Zealand.  
 Seminar. Department of Mathematical Sciences, Clemson University, Clemson, South Carolina, U.S.A.  
 Seminar. Department of Statistics, University of Haifa, Israel.  
 Seminar. Department of Industrial Engineering and Management, Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 2007 Israel Statistical Association (ISA) annual meeting. Shefayim, Israel.  
 International conference on Statistical Models for Financial Data (SMFD II). Graz University of Technology, Graz, Austria.  
 Session on Risk Measures in Actuarial Science at the Joint Statistical Meetings (JSM). Salt Lake City, Utah, U.S.A.  
 Seminar. College of Engineering and Science, Louisiana Tech University, Ruston, Louisiana, U.S.A.
- 2008 43rd Actuarial Research Conference (ARC). University of Regina, Saskatchewan, Canada.
- 2009 58th annual meeting of the Midwest Finance Association (MFA). Chicago, Illinois, U.S.A.  
 43rd annual conference of the Canadian Economics Association (CEA). University of Toronto, Ontario, Canada.  
 44th Actuarial Research Conference (ARC). University of Wisconsin in Madison, Wisconsin, U.S.A.  
 Actuarial Research Group (ARG) seminar. Department of Statistical and Actuarial Sciences, Western University, London, Ontario, Canada.
- 2010 International symposium on Stochastic Models in Reliability Engineering, Life Science and Operations Management (SMRLO'10). Shamoon College of Engineering (SCE), Beer-Sheva, Israel.  
 61st annual conference of the New Zealand Statistical Association held in conjunction with the Statistical Methodologies Symposium celebrating the work of Professor Chin-Diew Lai. Massey University, Palmerston North, New Zealand.

- Hydrology, Hydraulics and Water Resources in an Uncertain Environment (Water 2010) within the 10<sup>th</sup> international symposium on Stochastic Hydraulics (ISSH-2010) and 5<sup>th</sup> international conference on Water Resources and Environment Research (ICWRER-2010), Quebec City, Quebec, Canada.
- Workshop (six lectures) on Empirical Processes in Econometrics: A Practitioner's Viewpoint. School in Statistics and Mathematics Applied to Finance, University of Milano–Bicocca, Italy.
- 2011 45th annual conference of the Canadian Economics Association (CEA). University of Ottawa, Ontario, Canada.
- 2012 Barcelona international conference on Advances in Statistics (BAS2012). CosmoCaixa Barcelona, Catalonia, Spain.
- Conference on Advances in Interdisciplinary Statistics and Combinatorics. University of North Carolina at Greensboro, North Carolina, U.S.A.
- 2014 Conference on Advances in Interdisciplinary Statistics and Combinatorics. University of North Carolina at Greensboro, North Carolina, U.S.A.
- Workshop (four lectures) on Enterprise Risk Management, Regulation, and Governance delivered to a visiting Chinese delegation of certified public accountants and asset appraisers under the auspices of the Beijing Institute of Certified Public Accountants. London, Ontario, Canada.
- Lecture on Measuring Risk: Issues and Solutions delivered as a part of the seminar on Operational Risk and Risk Measurement. Ivey Tangerine Leadership Centre, Toronto, Ontario, Canada.
- Seminar. Department of Statistics and Quantitative Methods, University of Milano–Bicocca, Italy.
- 7th international conference of the European Research Consortium for Informatics and Mathematics (ERCIM) working group on Computational and Methodological Statistics (CMStatistics). University of Pisa, Italy.
- 2015 8th international conference of the European Research Consortium for Informatics and Mathematics (ERCIM) working group on Computational and Methodological Statistics (CMStatistics). University of London, U.K.
- 2016 Seminar. Quantact – Actuarial and Financial Mathematics Laboratory, Laval University, Quebec, Canada.
- 8th international workshop on Applied Probability (IWAP2016). Toronto, Ontario, Canada.
- International conference on Statistical Distributions and Applications. Niagara Falls, Canada.
- Ulam Seminar. Department of Mathematics, University of Colorado at Boulder, Colorado, U.S.A.
- Probability seminar. Department of Mathematics, University of Colorado at Boulder, Colorado, U.S.A.
- Annual meeting of the Casualty Actuarial Society (CAS). Orlando, Florida, U.S.A.
- Seminar. Department of Statistics and Actuarial Science, University of Waterloo, Waterloo, Ontario, Canada.
- 2017 Econometrics of Risk and Uncertainty – 34th meeting of the Canadian Econometric Study Group (CESG). Toronto, Ontario, Canada.
- 2018 Risk and Insurance Studies Centre (RISC) forum, scheduled as part of the Centre for Financial Industries. Fields Institute, Toronto, Ontario, Canada.
- 11th international conference of the European Research Consortium for Informatics and Mathematics (ERCIM) working group on Computational and Methodological Statistics (CMStatistics). University of Pisa, Italy.
- 2019 Quantitative Risk Management and Financial Technology – 1st Waterloo conference in Statistics, Actuarial Science and Finance (WatSAF1). University of Waterloo, Ontario, Canada.
- Seminar. Risk and Insurance Studies Centre (RISC) & Department of Mathematics and Statistics, York University, Toronto, Ontario, Canada.
- International conference on Statistical Distributions and Applications (ICOSDA 2019). Grand Rapids, Michigan, U.S.A.
- Actuarial seminar. Department of Mathematical Sciences, University of Wisconsin-Milwaukee, Wisconsin, U.S.A.
- Colloquium. Department of Mathematical Sciences, University of Wisconsin-Milwaukee, Wisconsin, U.S.A.
- Risk and Insurance Studies Centre (RISC) forum on Inclusive Insurance and Sustainable Development Goals, scheduled as part of the Fields Institute activities. Fields Institute, Toronto, Ontario, Canada.
- Risk and Insurance Day 2019. London School of Economics and Political Science, London, U.K.
- 12th international conference of the European Research Consortium for Informatics and Mathematics (ERCIM) working group on Computational and Methodological Statistics (CMStatistics). University of London, U.K.
- 2020 International conference on Distributions and Inequality Measures in Economics (DIME 2020). University of Milano–Bicocca, Italy.
- Risk Management and Actuarial Science seminar (via Zoom). University of Waterloo, Canada, and Tsinghua University, China.
- 2021 Industrial Mathematics and Statistics seminar (via Zoom). Purdue University, Indiana, U.S.A.

- Statistics and Bioinformatics Research Center (SBRC) seminar (via Zoom). Islamic University of Indonesia (UII), Yogyakarta, Indonesia.
- Actuarial seminar (via Zoom). Department of Mathematical Sciences, University of Wisconsin-Milwaukee, Wisconsin, U.S.A.
- Actuarial Science seminar (via Adobe Connect). Shahid Beheshti University, Tehran, Iran.
- 2022 Summer meeting of the Canadian Mathematical Society (via Zoom). Memorial University, St. John's, Newfoundland and Labrador, Canada.
- Colloquium (via Zoom). Department of Mathematics, Toronto Metropolitan University, Ontario, Canada.
- 2023 Session on Frontiers of Statistical Research on Actuarial Science and Risk Management at the 10th International Purdue Statistics Symposium on Demystifying Data Science via Statistics: Theory and Applications. Purdue University, Indiana, U.S.A.
- Session on Developments in the Measurement of Fairness: Applications to Economics and Health at the Joint Statistical Meetings (JSM). Toronto, Ontario, Canada.

## Service to profession

### FUNDING/GRANT REVIEWER

- AXA / Fonds AXA pour la Recherche, France  
2018–2019
- Banff International Research Station (BIRS) Workshop Program, Canada  
2021
- City University of New York (CUNY) Research Awards Program, U.S.A.  
1999–2001
- Czech Science Foundation (GAČR), Czech Republic  
2012–2014
- Fonds de recherche du Québec – Société et culture (FRQSC), Canada  
2012
- Israel Science Foundation (ISF), Israel  
2013
- Mathematics of Information Technology and Complex Systems (MITACS), Canada  
2020–2022
- National Science Foundation (NSF), U.S.A.  
2010–2012
- National Security Agency (NSA), U.S.A.  
2013
- Natural Sciences and Engineering Research Council (NSERC), Canada  
2002–2003 2003–2004 2004–2005 2005–2006  
2006–2007 2007–2008 2011–2012 2016–2017  
2018–2019 2022–2023 2023–2024
- Ohio University Research Council (OURC), U.S.A.  
2018
- Royal Society of Edinburgh (RSE) International Exchange Programme, U.K.  
2008

### REVIEWER OF ACADEMIC MATTERS

Requested by heads/chairs, deans, (vice-)presidents

- Academic programs  
– **Master Program in Statistics**, Islamic University of Indonesia, 2023
- Distinguished/endowed professorships, headships, senior awards, etc.  
– U.S.A., 2011, 2012, 2013
- Promotion and/or tenure  
– Israel, 2012, 2014, 2022

## PAST EDITORIAL WORK

**Journal of Probability and Statistics**

- Published by Hindawi Publishing Corporation
- Member of the Editorial Board (2008–2016)
- Lead Guest Editor (2009–2010) of the special issue on **Actuarial and Financial Risks: Models, Statistical Inference, and Case Studies**, co-edited jointly with E. Furman, A. Necir, J. Nešlehová, and M.L. Puri

**Journal of Statistics and Management Systems (JSMS)**

- Co-published by Taylor & Francis Group, and TARU Publications
- Associate Editor (2013–2017; renewed for 2018-2022)

**Silesian Statistical Review (Śląski Przegląd Statystyczny)**

- Journal of the Wrocław branch of the Polish Statistical Association
- Published by Wrocław University of Economics and Business, Poland
- Member of the Editorial Board (2016–2023)

## ONGOING EDITORIAL WORK

**Metron – International Journal of Statistics**

- Co-published by Springer, and the Dipartimento di Scienze Statistiche, Sapienza Università di Roma, Italy
- Associate Editor (2007–ongoing)

**Journal of Risk and Financial Management (JRFM)**

- Published by Multidisciplinary Digital Publishing Institute (MDPI)
- Member of the Editorial Board for section “Risk” (2019–ongoing)

**Journal of Statistical Theory and Practice (JSTP)**

- Published by Springer
- Associate Editor (2010–ongoing)

**Journal of Mathematical Finance (JMF)**

- Published by Scientific Research Publishing Inc
- Member of the Editorial Advisory Board (2011–ongoing)

**Risks**

- Published by Multidisciplinary Digital Publishing Institute (MDPI)
- Lead Guest Editor (2018–2019) of the special issue<sup>4</sup> on **Risk, Ruin and Survival: Decision Making in Insurance and Finance**, co-edited jointly with J. Ren and K. Sendova
- Member of the Editorial Board (2019–ongoing)
- Member of the Evaluation Committee for the 2019 Risks Best Paper Awards
- Member of the Evaluation Committee for the 2020 Risks Best Paper Awards

**Statistics & Applications (Statistica & Applicazioni)**

- Published by Vita e Pensiero, Milan, Italy
- Member of the Scientific Committee (2014–ongoing)

## CONFERENCE/COMPETITION ORGANIZER, CHAIR, JUDGE, DISCUSSANT

My participation at many of these events was possible due to generous support by host institutions, and I gratefully acknowledge this

- 2000 Organizer (jointly with L. Wang) of the 1st international statistics workshop. University of Manitoba, Winnipeg.
- 2001 Organizer (jointly with J. Brewster, J. Fu, and L. Wang) of the 2nd international statistics workshop. University of Manitoba, Winnipeg.
- 2002 Organizer (jointly with R. Helmers and I.W. Mangku) of the workshop on Computer-Intensive Statistics under the auspices of the bi-national scientific cooperation program between Indonesia and the Netherlands. Bandung Institute of Technology (ITB), Bandung, Indonesia.
- 2004 Chair of a session at the international conference on Distribution Theory, Order Statistics and Inference in honor of Barry C. Arnold on the occasion of his 65th birthday. Santander, Spain.
- 2005 Organizer and Chair of the session on Statistical Inference and Empirical Processes in Reliability at the international symposium on Stochastic Models in Reliability, Safety, Security and Logistics (SMRSSL'05) dedicated to the memory of Prof. K. Kordonsky. Shamon College of Engineering, Beer-Sheva, Israel.
- Organizer of the workshop on Statistical Inference in Econometrics. Department of Statistics. Faculty of Mathematics and Natural Sciences, Islamic University of Indonesia (UII), Yogyakarta, in cooperation with the Doctoral Program in Economics, Faculty of Economics, Islamic University of Indonesia (UII), Yogyakarta.

<sup>4</sup>This special issue is published as an open-access book (212 pages) by the Multidisciplinary Digital Publishing Institute (MDPI), Basel, Switzerland; ISBN 978-3-03928-516-7 (pbk); ISBN 978-3-03928-517-4 (pdf).

- 2007 Organizer of the topic-contributed session on Risk Measures in Actuarial Science at the 2007 Joint Statistical Meetings, Salt Lake City, Utah, U.S.A. Sponsored by sections on Nonparametric Statistics, Risk Analysis, and Business and Economics Statistics of the American Statistical Association.
- 2009 Discussant at the Midwest Finance Association (MFA) 58th annual meeting. Chicago, Illinois, U.S.A.  
Discussant at the Canadian Economics Association (CEA) 43rd annual conference. University of Toronto, Ontario, Canada.  
Moderator at the 44th Actuarial Research Conference (ARC). University of Wisconsin in Madison, Wisconsin, U.S.A.
- 2010 Organizer (jointly with Edward Furman) and Chair of the session on Measuring Insurance Risks at the international symposium on Stochastic Models in Reliability Engineering, Life Science and Operations Management (SMRLO'10). Shamoon College of Engineering (SCE), Beer-Sheva, Israel.  
Organizer and Chair of the Canadian Experimental and Behavioural Economics Research Group (CEBERG) session on Expected Utility: Mathematics and Philosophy at the Canadian Economics Association (CEA) 44th annual conference. Quebec City, Quebec, Canada.  
Chair of several sessions at the 61st annual conference of the New Zealand Statistical Association held in conjunction with the Statistical Methodologies Symposium celebrating the work of Professor Chin-Diew Lai. Massey University, Palmerston North, New Zealand.  
Member of the Organizing Committee of Hydrology, Hydraulics and Water Resources in an Uncertain Environment (Water 2010), 10<sup>th</sup> international symposium on Stochastic Hydraulics (ISSH-2010), and 5<sup>th</sup> international conference on Water Resources and Environment Research (ICWRER-2010). Quebec City, Quebec, Canada.  
Organizer (jointly with A. Necir) and Chair of the session on Risk Measures for Extreme Events at the international meeting on Hydrology, Hydraulics and Water Resources in an Uncertain Environment (Water 2010), 10<sup>th</sup> international symposium on Stochastic Hydraulics (ISSH-2010), and 5<sup>th</sup> international conference on Water Resources and Environment Research (ICWRER-2010). Quebec City, Quebec, Canada.
- 2011 Discussant of several papers at the Canadian Economics Association (CEA) 45th annual conference. University of Ottawa, Ontario, Canada.  
Organizer (with Francesca Greselin) and Chair of the session on New Trends in Measuring Inequality at the Canadian Economics Association (CEA) 45th annual conference. University of Ottawa, Ontario, Canada.  
Member of the Advisory Board of the international conference on Applied Mathematical Sciences (ICAPMS-2011). Gujarat University, Ahmedabad, India.
- 2012 Chair of a session at the Barcelona international conference on Advances in Statistics (BAS2012). CosmoCaixa Barcelona, Catalonia, Spain.  
Member of the International Advisory Committee of the international conference on Advances in Interdisciplinary Statistics and Combinatorics. University of North Carolina at Greensboro, North Carolina, U.S.A.  
Organizer and Chair of two academic sessions on Statistical Modeling and Inference in Economics and Insurance at the international conference on Advances in Interdisciplinary Statistics and Combinatorics. University of North Carolina at Greensboro, North Carolina, U.S.A.
- 2014 Member of the Scientific Program Committee of the Flint international conference on Flint: One City–One Hundred Years Under Variability. Kettering University, Flint, Michigan, U.S.A.  
Member of the International Advisory Committee of the international conference on Advances in Interdisciplinary Statistics and Combinatorics. University of North Carolina at Greensboro, North Carolina, U.S.A.  
Organizer and Chair of the session on Risk Analytics at the international conference on Advances in Interdisciplinary Statistics and Combinatorics. University of North Carolina at Greensboro, North Carolina, U.S.A.
- 2015 Member of the Judging Panel (Science of Information theme), Western Interdisciplinary Showcase, Western University, Canada
- 2018 Organizer (jointly with F. Greselin) of the invited session on Tinkering with Gini: Adaptations of the Old Idea to Present-day Realities at the 11th international conference of the European Research Consortium for Informatics and Mathematics (ERCIM) working group on Computational and Methodological Statistics (CMStatistics). University of Pisa, Italy.
- 2019 Member of the Scientific Program Committee of the workshop on Frontier Areas in Financial Analytics at the Centre for Quantitative Analysis and Modelling (Fields-CQAM). Fields Institute, Toronto, Ontario, Canada.  
Organizer (jointly with J. Ren) of the workshop on Financial Analytics for Property and Casualty Insurance within the interdisciplinary thematic program on Frontier Areas in Financial Analytics at the Centre for Quantitative Analysis and Modelling (Fields-CQAM). Fields Institute, Toronto, Ontario, Canada.  
Member of the Scientific Program Committee of the international conference on Statistical Distributions and Applications (ICOSDA 2019). Eberhard Conference Center, Grand Rapids, Michigan, U.S.A.

- Organizer of the topic-invited session on Risk Measures: Theory, Inference, and Applications at the international conference on Statistical Distributions and Applications (ICOSDA 2019). Eberhard Conference Center, Grand Rapids, Michigan, U.S.A.
- Organizer (jointly with D. Escobar) of the invited session on Risk Measures, Inference, and Applications at the 12th international conference of the European Research Consortium for Informatics and Mathematics (ERCIM) working group on Computational and Methodological Statistics (CMStatistics). University of London, U.K.
- 2020 Co-organizer (jointly with K. Goda, S. Li, J. Ren, and K. Sendova) of the 6th annual Workshop on Insurance Mathematics (WIM), Western University, London, Ontario, Canada.
- Chair of the plenary session on Inferential Techniques in Inequality Measurement at the international conference on Distributions and Inequality Measures in Economics (DIME 2020). University of Milano–Bicocca, Italy.
- 2021 Member of the Scientific Committee of the 1st International Conference on Mathematics and Applications (ICMA'2021), University of Blida 1, Blida, Algeria.
- 2022 Member of the Judging Panel (Junior Design and Mini Design categories), Western Engineering Competition (WEC), Western University, Canada
- 2023 Member of the Judging Panel (Innovative Design category), Western Engineering Competition (WEC), Western University, Canada

## Teaching: individual supervision

### UNDERGRADUATE STUDENTS

- 2006 – 2007 Anna Dinaburg
- 4<sup>th</sup> year final project “*Evaluating Statistical Properties of Overlapping Measures.*”
  - Defence at Ben-Gurion University of the Negev, Beer-Sheva, Israel.
  - Joint supervision with Edna Schechtman (Ben-Gurion University of the Negev).
  - In 2007 Anna started her employment within the Israel Defence Forces.
- 2006 – 2007 Elad Moshe
- 4<sup>th</sup> year final project “*Evaluating Statistical Properties of Overlapping Measures.*”
  - Defence at Ben-Gurion University of the Negev, Beer-Sheva, Israel.
  - Joint supervision with Edna Schechtman (Ben-Gurion University of the Negev).
  - In 2007 Elad started his employment within the Israel Defence Forces.
- 2015 – 2016 Xiao Hang (Helen) Dong
- Scholar’s Electives Program (2200E).
  - Final project “*Making Optimal Decisions under Uncertainty: Is the Current Outcome Better than the Unknown One?*”
  - Defence at Western University, London, Ontario, Canada.
- 2017 (May–August) Luke Helpard
- Natural Sciences and Engineering Research Council Undergraduate Student Research Award (NSERC USRA).
  - Project “*Statistical Insights into Military Recruitment, Performance, and Retention.*”
  - Defence at Western University, London, Ontario, Canada.
- 2020 (May–August) Ningsong Shen
- Natural Sciences and Engineering Research Council Undergraduate Student Research Award (NSERC USRA).
  - Project “*Risks, Classification, and Pattern Recognition.*”
  - Defence at Western University, London, Ontario, Canada.
- 2021 (May–August) Sophie Wu
- Western Undergraduate Student Research Internship (USRI).
  - Project “*Artificial Intelligence and Microcredit: Algorithmic Improvement of Financial Systems in Industrialising Economies.*”
  - Defence at Western University, London, Ontario, Canada.
- 2021 (May–August) Noah Laskey
- Undergraduate Research Assistantship.
  - Project “*Framing Effects, Their Analyses, and Making Decisions in STEM Education.*”
  - Defence at King’s University College, Western University, London, Ontario, Canada.
  - Joint supervision with Lori Murray (King’s University College, Western University).
- 2021 – 2022 Isabella Lu
- Scholar’s Electives Program.
  - Final project “*Detecting Systematic Anomalies: Examples, Techniques, and Decision Making.*”
  - Defence at Western University, London, Ontario, Canada.
- 2022 (January–March) Jason Li



- Undergraduate Research Assistantship within the program “Undergraduate Research Experience.”
  - Project “*Anomaly Detection in Engineering, Finance, and Related Fields: A Computer Science Student’s Perspective.*”
  - Defence at Western University, London, Ontario, Canada.
- 2022 (January–March) Meghan Kings
- Undergraduate Research Assistantship within the program “Undergraduate Research Experience.”
  - Project “*Anomaly Detection in Engineering, Finance, and Related Fields: An Environmental Engineering Student’s Perspective.*”
  - Defence at Western University, London, Ontario, Canada.
- 2024 (May–August) Johann Abraham
- Natural Sciences and Engineering Research Council Undergraduate Student Research Award (NSERC USRA).
  - Project “*Detecting Systematic Anomalies That Do Not Change the Regime of Genuine Signals.*”
  - Defence at Western University, London, Ontario, Canada.

#### MASTER’S STUDENTS

- 2001 – 2003 Mihaela Paun
- M.Sc. thesis “*Indices of Economic Inequality and their Empirical Estimation.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2003 Mihaela started her Ph.D. studies at Louisiana Tech University (further details under “doctoral students”).
- 2002 – 2003 Radu Constantinescu
- M.Sc. project “*Empirical Estimation of Risk Measures in Actuarial Science.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Bruce L. Jones (Western University).
  - In 2003 Radu started his employment at the insurance company *Allianz Group*.
- 2005 – 2007 Amit Shelef
- M.Sc. thesis “*Constructing Statistical Tests for Comparing Absolute Concentration Curves.*”
  - Defence at Ben-Gurion University of the Negev, Beer-Sheva, Israel.
  - Joint supervision with Edna Schechtman (Ben-Gurion University of the Negev).
  - In 2007 Amit started her Ph.D. studies at Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 2008 – 2009 Feng (Dio) Qiu
- M.Sc. project “*Weighted Premiums and CAPM.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Bruce L. Jones (Western University).
- 2008 – 2009 Ye (Raymond) Zhang
- M.Sc. project “*Conditional Tail Expectation, its Variations and Applications.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Jiandong Ren (Western University).
  - In 2009 Raymond started his Ph.D. studies at Western University (further details under “doctoral students”).
- 2011 – 2012 Wenwei (Rio) Su
- M.Sc. project “*Classification Methods, Algorithms, and their Comparison.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Zinovi Krougly (Western University).
- 2012 – 2013 Long Wen
- M.Sc. project “*The Determinants of Derivative Usage and Firm Value: The Case of Chinese Non-financial Companies.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2013 Long started his NSERC supported Research Assistant position at the Centre for Optimization and Decision Science, Thompson Rivers University, British Columbia.
  - In 2014 Long started his Ph.D. studies at the University of Nottingham, Ningbo Campus, China.
- 2012 – 2013 Jiang Wu
- M.Sc. project “*The Core-Periphery Model and the Increasing Returns Framework.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2013 Jiang started his Ph.D. studies at Western University (further details under “doctoral students”).
- 2013 – 2014 Boris Garbuzov
- M.Sc. project “*A Comparative Study of Clinical and Economic Efficiencies: A Glimpse of the Use of Anti-Myorelaxant Sugammadex in Canada, Russia, and Ukraine.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2014 Boris started his Ph.D. studies at the University of Toronto.
- 2013 – 2014 Yuxuan (Celia) Wu
- M.Sc. project “*Enterprise Risk Management: Recent Techniques and Case Studies.*”

- Defence at Western University, London, Ontario, Canada.
- 2013 – 2014 Yancheng Cai
  - M.Sc. project “*Co-monotonicity and Its Role in Insurance.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Jiandong Ren (Western University).
- 2014 – 2015 Shiqing Chen
  - M.Sc. project “*Mortality Modelling and Life Insurance: Frailty Models in Heterogeneous Populations with a Case Study.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2016 Shiqing started her employment at Canada Life Insurance Company, London, Ontario.
- 2014 – 2015 Kiran Raj Panta
  - M.Sc. project “*Survival Analysis Methods and Their Uses in Life and Non-Life Insurance: an Exploration of Their Pros and Cons with Illustrative Examples.*”
  - Defence at Western University, London, Ontario, Canada.
- 2015 – 2016 Ren (Frank) Fu
  - M.Sc. project “*Customized Bundling Strategies for Information Goods: Classification, Examples, and Modelling.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2016 Frank started his employment at PureFacts Financial Solutions, Toronto, Ontario, Canada.
- 2016 – 2017 Lingzhi Chen
  - M.Sc. project “*Measuring and Comparing Student Performance: A New Technique for Assessing Associations.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2017 Lingzhi started her Ph.D. studies at Western University (further details under “doctoral students”).
- 2016 – 2017 Ang Li
  - M.Sc. project “*Pricing Insurance Products Under the Uncertainty of Costs and Demand.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Jiandong Ren (Western University).
  - In 2017 Ang started his Ph.D. studies at Western University (further details under “doctoral students”).
- 2017 – 2018 Hao Liu
  - M.Sc. project “*Stochastic Volatility Modeling and Option Pricing in a LIBOR Market Model.*”
  - Defence at Western University, London, Ontario, Canada.
- 2017 – 2018 Abbas Dadashi
  - M.Sc. project “*Dynamic Market-risk Measurement of Multi-stock Portfolios Using Multivariate Time Series Analysis.*”
  - Defence at Western University, London, Ontario, Canada.
- 2017 – 2018 Farzaneh Rahmdel
  - M.Sc. project “*Exposure at Default Model in Credit Risk.*”
  - Defence at Western University, London, Ontario, Canada.
- 2017 – 2018 Fatemeh Ferdosian
  - M.Sc. project “*Measuring Risk in Chemical Processes: Factors, Methods, and Decision Making.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2018 Fatemeh started her employment as a Research Scientist at DuPont Canada, Kingston, Ontario, Canada.
- 2018 – 2019 Yulin Wang
  - M.Sc. project “*Momentum Trading Strategy and Time Series Prediction of Stock Market.*”
  - Defence at Western University, London, Ontario, Canada.
- 2018 – 2019 Utsa Karan
  - M.Sc. project “*InsurTech: Bridging Natural and Machine Intelligence for Calculating Insurance Premiums.*”
  - Defence at Western University, London, Ontario, Canada.
  - In 2019 Utsa started her employment as a Manager of Data Analytics at TVOntario (TVO), Toronto, Ontario, Canada.
- 2019 – 2020 Yue Gu
  - M.Sc. project “*Assessing Financial Risks Associated with Health Insurance and Actual Health-related Costs.*”
  - Defence at Western University, London, Ontario, Canada.
- 2019 – 2020 Reza Mosayebi Kulluje
  - M.Sc. project “*Empirical Assessment of GARCH and Deep Learning Option Pricing Methods.*”
  - Defence at Western University, London, Ontario, Canada.
- 2019 – 2020 Dongfang Zhao

- M.Sc. project “*A Statistical Analysis of the 2020 U.S. Stock Market Fall Using Historical Financial Crisis Period Data and Time Series Techniques.*”
- Defence at Western University, London, Ontario, Canada.
- 2020 – 2021 Mohsen Mollahajiaghaei
  - M.Sc. project “*Collective Behaviour of Financial Markets.*”
  - Defence at Western University, London, Ontario, Canada.
  - Immediately after the defence, Mohsen joined Huron University College at Western University as an Assistant Professor of Mathematics.
- 2020 – 2021 Neal Jackett
  - M.Sc. project “*Examining the Utility of Tree-Based Regression Techniques on House Price Estimation.*”
  - Defence at Western University, London, Ontario, Canada.
  - Immediately after the defence, Neal joined the University of Lethbridge, Alberta, as an instructor in the Department of Mathematics and Computer Science.
- 2020 – 2021 Jingshi Luo
  - M.Sc. thesis “*Credit Risk Measurement and Application Based on BP Neural Networks.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Xingfu Zou (Western University).
- 2021 – 2022 Sara Ansari
  - M.Sc. project “*Anomaly Detection in Financial Markets.*”
  - Defence at Western University, London, Ontario, Canada.
- 2021 – 2022 Xuefeng Wang
  - M.Sc. project “*Applications of Natural Language Processing (NLP) in Insurance.*”
  - Defence at Western University, London, Ontario, Canada.
  - After graduation, Xuefeng joined Department of Financial Risk Analytics and Reporting, Canada Life, Toronto, Ontario, Canada.
- 2022 – 2023 Zhiwen Dong
  - M.Sc. project “*A Monte Carlo Based Method for Estimating the Present Value of Annuities with Interest Rates Driven by Stochastic Processes.*”
  - Defence at Western University, London, Ontario, Canada.
- 2022 – 2023 Karzan Saeedi
  - M.Sc. project “*The Euler-based Capital Allocation Rule and its Compatibility with RORAC.*”
  - Defence at Western University, London, Ontario, Canada.
- 2022 – 2023 Azar Eftekhari Targhi
  - M.Sc. project “*An Application and Assessment of Multivariate GARCH Estimation of CoVaR for Systemic Risk Measurement.*”
  - Defence at Western University, London, Ontario, Canada.
- 2022 – [ongoing] Rishigesh Patgunarajah
  - M.Sc. thesis
  - Defence at York University, Toronto, Ontario, Canada.
  - Joint supervision with Edward Furman (York University).
- 2023 – [ongoing] Aleksandr Chen
  - M.Sc. project
  - Defence at Western University, London, Ontario, Canada.

#### DOCTORAL STUDENTS

- 2003 – 2006 Mihaela Paun
  - Ph.D. thesis “*Measuring Inequality: Statistical Inference with Applications.*”
  - Defence at Louisiana Tech University, Ruston, Louisiana, U.S.A.
  - Joint supervision with Raja Nassar (Louisiana Tech University).
  - In 2006 Mihaela started her employment as an Assistant Professor at Louisiana Tech University, U.S.A.
  - In 2017 Mihaela became Full Professor of Applied Statistics in the Faculty of Administration and Business at the University of Bucharest, Romania, with habilitation in Cybernetics and Statistics at the Economic Cybernetics and Statistics Doctoral School of the Bucharest University of Economic Studies, Bucharest, Romania.
- 2004 – 2008 Nao Mimoto
  - Ph.D. thesis “*Statistical Inference for Densities and Related Indices.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Lajos Horváth (University of Utah, Salt Lake City).
  - In 2008 Nao joined Department of Statistics and Probability at Michigan State University, East Lansing, as a Visiting Assistant Professor.
  - In 2018, Nao became a tenured Associate Professor at the University of Akron, Ohio, U.S.A.

- 2009 – 2014 Ye (Raymond) Zhang
- Ph.D. thesis “*Decision Theory Based Models in Insurance and Beyond.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Jiandong Ren (Western University).
  - In 2014 Raymond joined the Department of Statistics at Miami University, Oxford, Ohio, as a Visiting Assistant Professor, and in 2015 joined Arizona State University (ASU), Tempe, U.S.A. In 2022, Raymond became the recipient of the ASU Charles Wexler Teaching Award.
- 2010 – 2013 Martín Egozcue
- Ph.D. thesis “*Essays on Behavioral Decision Making.*”
  - Defence at the University of the Republic, Montevideo, Uruguay.
  - Joint supervision with Jorge Ponce (University of the Republic and the Central Bank of Uruguay).
  - Martín works as Financial Manager at Norte Construcciones S.A., Punta del Este, Uruguay, and also teaches at various universities in Uruguay.
- 2011 – 2015 Danang Teguh Qoyyimi
- Ph.D. thesis “*A Novel Method for Assessing Co-Monotonicity: an Interplay between Mathematics and Statistics with Applications.*”
  - Defence at Western University, London, Ontario, Canada.
  - Danang’s PhD study was supported by the Directorate General of Human Resources for Science, Technology, and Higher Education of Indonesia.
  - In 2016, Danang resumed his permanent employment at Gadjah Mada University (UGM), Yogyakarta, Indonesia, where he had been employed since 2008.
- 2013 – 2017 Jiang Wu
- Ph.D. thesis “*Statistical Modelling, Optimal Strategies and Decisions in Two-Period Economies.*”
  - Defence at Western University, London, Ontario, Canada.
  - Immediately after the defence, Jiang joined the Arizona State University’s School of Sustainability as a Visiting Scholar, and afterward resumed his tenured employment (promoted to Associate Professor in 2019) at the Central University of Finance and Economics (CUFE), Beijing, China.
- 2017 – 2021 Lingzhi Chen
- Ph.D. thesis “*Making Sense of Noisy Data: Theory and Applications.*”
  - Defence at Western University, London, Ontario, Canada.
  - Immediately after the defence, Lingzhi joined the Canadian Imperial Bank of Commerce (CIBC) as an Associate in the Capital Market Risk Management department. In 2022, Lingzhi was promoted to Senior Quantitative Analyst.
- 2017 – 2021 Ang Li
- Ph.D. thesis “*Compound Sums, Their Distributions, and Actuarial Pricing.*”
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Jiandong Ren (Western University).
- 2018 – 2022 Ning Sun
- Ph.D. thesis “*Copulas, Maximal Dependence, and Anomaly Detection in Bi-variate Time Series.*”
  - Defence at Western University, London, Ontario, Canada.
- 2018 – 2024 Fabio Piacenza
- Ph.D. thesis “*Holistic Approach to Operational Risk: Issues, Solutions, and Decision Making.*”
  - Defence at the University of Milano-Bicocca, Milan, Italy.
  - Joint supervision with Francesca Greselin (University of Milano-Bicocca).
  - Fabio studied and completed his Ph.D. thesis at the University of Milano-Bicocca while working as a Senior Quantitative Analyst in the Operational Risk Analytics and Oversight unit of UniCredit, Milan, Italy.
- 2021 – [ongoing] Peiheng Gao
- Ph.D. thesis
  - Defence at Western University, London, Ontario, Canada.
- 2022 – [ongoing] Saman Ebrahimpour
- Ph.D. thesis
  - Defence at Western University, London, Ontario, Canada.
- 2022 – [ongoing] Rika Fitriani
- Ph.D. thesis
  - Defence at Western University, London, Ontario, Canada.
  - Rika’s PhD study is supported by the Ministry of Education, Culture, Research, and Technology of Indonesia.
- 2023 – [ongoing] Neslihan Serra Deşdemir
- Ph.D. thesis
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Edward Furman (York University).

- Serra’s PhD study is supported by the NSERC Alliance–Mitacs Accelerate grant entitled New Order of Risk Management (NORM): Theory and Applications in the Era of Systemic Risk.
- 2024 – [ongoing] Mengqi (Jack) Wang
  - Ph.D. thesis
  - Defence at Western University, London, Ontario, Canada.
  - Joint supervision with Edward Furman (York University).
  - Jack’s PhD study is supported by the NSERC Alliance–Mitacs Accelerate grant entitled New Order of Risk Management (NORM): Theory and Applications in the Era of Systemic Risk.

#### POST-DOCTORAL FELLOWS

- 2008 (May – August) Dr. Nao Mimoto
  - Appointment at Western University, London, Ontario, Canada.
  - Subsequently, Nao joined the Department of Statistics and Probability at Michigan State University, East Lansing, U.S.A., as a Visiting Assistant Professor.
  - In 2018, Nao became a tenured Associate Professor at the University of Akron, Ohio, U.S.A.
- 2009 (May – August) Dr. Amin Hassan Zadeh
  - Appointment at Western University, London, Ontario, Canada.
  - Joint supervision with several colleagues.
  - Subsequently, Amin joined the Department of Statistics at Tarbiat Modares University, Tehran, Iran, as an Assistant Professor.

#### RESEARCH ASSOCIATES

- 2013 – 2014 Dr. Yijuan Ge
  - Project “*Social Media, Big Data, and Business Management.*”
  - Appointment at Western University, London, Ontario, Canada.
  - Yijuan obtained her Ph.D. (Communication and Media Studies) in 2013 at the Graduate School of the Chinese Academy of Social Sciences, Beijing, China.
  - In September 2014, Yijuan started her Ph.D. (Education Studies) at the Faculty of Education, Western University.
- 2018 – 2019 Dr. Jiang Wu
  - Project “*Financial Contagion Measures Based on Co-movements.*”
  - Appointment at Western University, London, Ontario, Canada.
  - In 2019, Jiang was promoted to Associate Professor at the Central University of Finance and Economics (CUFE), Beijing, China.
- 2020 – 2021 Dr. Chen Yang
  - Project “*Detecting Risks and Assessing the Strength of Their Co-movements.*”
  - Appointment at Western University, London, Ontario, Canada.
  - Chen holds a PhD in Actuarial Science, is an Associate of the Society of Actuaries (ASA), and taught for several years at the Economics and Management School of Wuhan University, Wuhan, Hubei, China.
  - In 2022, Chen started his employment as a biostatistician at Icahn School of Medicine at Mount Sinai, New York, NY, U.S.A.

#### INTERNSHIPS AT COMPANIES

- 2018 – 2020 Sun Life Financial, Toronto, Ontario, under the title “Risk Aggregation Beyond the Normal Limits.”
  - Interns
    - \* Lingzhi Chen, 2018 (September – December)
    - \* Zhe Li, 2018 (September – December)
    - \* Yang Miao, 2019 (January – April)
    - \* Hoora Taher-Nokande, 2019 (May – August)
    - \* Shanshan Liu, 2019 (September – December)
    - \* Bowei Zhang, 2019 (September – December)
    - \* Yuyang Zhang, 2020 (January – April)
    - \* Pavle Curcin, 2020 (January – April)
    - \* Pavle Curcin, 2020 (May – August)
    - \* Aiko Kulzhabayeva, 2020 (September – December)
  - Joint supervision with Edward Furman (York University, Toronto).
  - Supported by a Mitacs Accelerate Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Sun Life Financial.
- 2019 – 2020 Unilever Canada, Toronto, Ontario, under the title “Price Elasticities and Promotion Cannibalization Effect on Promotion Activities.”
  - Intern

- \* Lingzhi Chen, 2019 (May – September)
- \* Lingzhi Chen, 2019 (October) – 2020 (January)
- \* Lingzhi Chen, 2020 (February – May)
- Supported by a Mitacs Accelerate Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Unilever Canada.
- 2020 Unilever Canada, Toronto, Ontario, under the title “Pricing Model from Econometric Perspective and Visualizing Promotion Cannibalization Effect on Promotion Activities.”
- Intern
  - \* Lingzhi Chen, 2020 (June – September)
  - Supported by a Mitacs Accelerate Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Unilever Canada.
- 2020 – 2021 Unilever Canada, Toronto, Ontario, under the title “Demand Estimation in Consumer-Packaged Goods Market Using BLP Method.”
- Intern
  - \* Lingzhi Chen, 2020 (October) – 2021 (January)
  - Supported by a joint Mitacs Accelerate Award between the Southern Ontario Smart Computing Innovation Platform (SOSCIP) and the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Unilever Canada.
- 2021 – 2022 Sun Life Financial, Toronto, Ontario, under the title “Risk Aggregation Beyond the Normal Limits.” (An extension of the 2018-2020 Mitacs Accelerate Award under the same title.)
- Interns
  - \* Hamed Helali, 2021 (January – April)
  - \* Pouya Sharifi, 2021 (January – April)
  - \* Seyed Mostafa Hosseinian, 2021 (May – September)
  - \* Pouya Sharifi, 2021 (May – September)
  - \* Mohamed Hamdouni, 2021 (September – December)
  - \* Pouya Sharifi, 2021 (September) – 2022 (January)
  - Joint supervision with Edward Furman (York University, Toronto).
  - Supported by a Mitacs Accelerate Award from the Canadian national research organization for Mathematics of Information Technology and Complex Systems (MITACS), in partnership with Sun Life Financial.
- 2023 Sun Life Canada, Toronto, Ontario, under the title “New Order of Risk Management: Theory and Applications in the Era of Systemic Risk (NORM).”
- Intern
  - \* Sara Ansari, 2023 (March – June)
  - \* Sara Ansari, 2023 (July – October)
  - Supported by the NSERC Alliance–MITACS Accelerate grant entitled “New Order of Risk Management: Theory and Applications in the Era of Systemic Risk” from the Natural Sciences and Engineering Research Council (NSERC) of Canada, and the national research organization Mathematics of Information Technology and Complex Systems (MITACS) of Canada, in partnership with Sun Life Canada.

## Teaching: courses

The University Students Council Teaching Honour Roll Award of Excellence for 2014–15, Western University

### UNDERGRADUATE COURSES

*Massey University, Palmerston North, New Zealand.*

Principles of Statistics (161.100)  
July–September, 2004.

*University of Manitoba, Winnipeg, Manitoba, Canada.*

Basic Statistical Analysis I (5.100)  
1999–2000 (A-Term) 1999–2000 (B-Term) 2000–2001 (A-Term)

Basic Statistical Analysis II (5.200)  
2000–2001 (B-Term)

Introduction to Statistical Inference (5.414)  
1999–2000 (A-Term) 2000–2001 (A-Term)

Mathematical Probability (5.462)  
2000–2001 (B-Term)



*Western University, London, Ontario, Canada.*

Applied Probability and Statistics for Engineers (SS.2141)  
 2015–2016 (A-Term) 2016–2017 (A-Term) 2021–2022 (A-Term)  
 2022–2023 (A-Term) 2023–2024 (A-Term)

Applied Statistics and Data Analysis for Engineers (SS.2143)  
 2021–2022 (B-Term) 2022–2023 (B-Term) 2023–2024 (B-Term)

Intermediate Probability (SS.3657)  
 2020–2021 (A-Term)

Introduction to Statistics (SS.1024)  
 2017–2018 (A-Term) 2020–2021 (A-Term)

Loss Models II (previously AS.442; currently AS.4824)  
 2007–2008 (B-Term) 2010–2011 (A-Term)

Methods of Statistical Analysis (SS.222)  
 2001–2002 (A-Term) 2001–2002 (B-Term) 2002–2003 (A-Term)  
 2002–2003 (B-Term) 2003–2004 (A-Term) 2003–2004 (B-Term)

Statistical Concepts (SS.1023)  
 2021–2022 (B-Term) 2022–2023 (A-Term)

Statistical Methods (SS.137)  
 2004–2005 (A-Term) 2005–2006 (A-Term)

Statistics for Health (SS.2037)  
 2021–2022 (B-Term) 2022–2023 (A-Term)

Statistics for Sciences (SS.2122)  
 2009–2010 (A-Term) 2009–2010 (B-Term)

Stochastic Processes (SS.452)  
 2001–2002 (B-Term) 2002–2003 (B-Term) 2003–2004 (B-Term)  
 2004–2005 (B-Term) 2005–2006 (B-Term)

Time Series (previously SS.361; currently SS.4861)  
 2004–2005 (A-Term) 2014–2015 (B-Term) 2015–2016 (B-Term)  
 2016–2017 (B-Term) 2017–2018 (B-Term) 2018–2019 (B-Term)  
 2019–2020 (B-Term) 2020–2021 (B-Term) 2023–2024 (B-Term)

## GRADUATE COURSES

*University of Manitoba, Winnipeg, Manitoba, Canada.*

Advanced Theory of Probability (5.706)  
 2000–2001 (B-Term)

Advanced Statistical Inference (5.708)  
 1999–2000 (B-Term)

Seminar in Statistics II (5.723)  
 1999–2000 (B-Term)

*Western University, London, Ontario, Canada.*

Advanced Stochastic Modelling (SS.725)  
 2001–2002 (B-Term).

Asymptotic Methods in Statistical and Actuarial Sciences (previously SS.709; currently SS.9909)  
 2002–2003 (B-Term) 2003–2004 (B-Term) 2004–2005 (B-Term)  
 2005–2006 (B-Term) 2007–2008 (A-Term) 2008–2009 (A-Term)  
 2010–2011 (B-Term)

Decision Making and Object Oriented Programming (AS.9903)  
 2012–2013 (B-Term)

Decision Theory in Insurance and Finance (AS.9956)  
 2011–2012 (A-Term) 2019–2020 (B-Term)

Enterprise Risk Management (AS.9056)  
 2013–2014 (A-Term)

Loss Models I (AS.9424)  
 2011–2012 (B-Term)

Probability and Statistics I (AS.9857)  
 2010–2011 (A-Term).

Risk Measures and Dependence (AS.9912)  
 2008–2009 (A-Term) 2009–2010 (A-Term) 2010–2011 (B-Term)  
 2011–2012 (B-Term) 2012–2013 (B-Term) 2013–2014 (B-Term)  
 2014–2015 (A-Term) 2016–2017 (B-Term)

Probabilistic Machine Learning (SS.9697)  
 2019–2019 (L-Term) 2022–2023 (A-Term)

Statistical Methods for Finance and Insurance (FM.9512)  
 2017–2018 (B-Term) 2018–2019 (A-Term)

Stochastic Processes (SS.537)  
 2001–2002 (B-Term) 2002–2003 (B-Term) 2003–2004 (B-Term)  
 2004–2005 (B-Term) 2005–2006 (B-Term)

Stochastic Processes with Applications in Finance and Actuarial Science (previously AS.9990; currently FM.9590)  
 2012–2013 (A-Term) 2013–2014 (A-Term) 2014–2015 (A-Term)  
 2015–2016 (A-Term) 2019–2020 (A-Term)

Time Series (SS.9861)  
 2014–2015 (B-Term) 2015–2016 (B-Term) 2016–2017 (B-Term)  
 2017–2018 (B-Term) 2018–2019 (B-Term) 2019–2020 (B-Term)  
 2020–2021 (B-Term) 2023–2024 (B-Term)

Theory of Statistical Inference (previously SS.530; currently SS.9030)  
 2005–2006 (A-Term) 2007–2008 (B-Term) 2008–2009 (B-Term)  
 2011–2012 (B-Term) 2018–2019 (B-Term) 2019–2020 (B-Term)

Weather Derivatives: Statistical and Financial Foundations (AS.9958)  
 2012–2013 (A-Term)

## Thesis examination committees

### MASTER'S (SCIENCE, ARTS) THESES

- 2010 Examination Chair. Candidate: Y. Wang. Supervisor: H.S. Sendov. Defence at Western University, London, Ontario, Canada.
- 2014 Examination Chair. Candidate: A. Morin. Supervisor: D. Woolford. Defence at Western University, London, Ontario, Canada.
- 2018 University Examiner. Candidate: M.E. Johnston. Supervisor: Z. Zhang. Defence at Western University, London, Ontario, Canada.
- 2019 Program Examiner. Candidate: J. Qiu. Supervisor: J. Ren. Defence at Western University, London, Ontario, Canada.  
 Examination Chair. Candidate: Y. Zang. Supervisor: S.B. Provost. Defence at Western University, London, Ontario, Canada.
- 2020 Program Examiner. Candidate: F. Dikic. Supervisor: S. Li. Defence at Western University, London, Ontario, Canada.
- 2021 Program Examiner. Candidate: X. Ye. Supervisors: M. Escobar-Anel and L. Stentoft. Defence at Western University, London, Ontario, Canada.

### PH.D. MID-STUDY PROPOSALS

- 2013 Examination Chair. Candidate: Z. Li. Supervisor: K.P. Sendova. Defence at Western University, London, Ontario, Canada.  
 Program Examiner. Candidate: S. Shan. Supervisor: H.S. Sendov. Defence at Western University, London, Ontario, Canada.
- 2014 Program Examiner. Candidate: Y.N. Zhang. Supervisor: B.L. Jones. Defence at Western University, London, Ontario, Canada.
- 2016 Program Examiner. Candidate: J.S.J. Kang. Supervisors: S.B. Provost and J. Ren. Defence at Western University, London, Ontario, Canada.  
 Program Examiner. Candidate: T. Jiang. Supervisor: H.S. Sendov. Defence at Western University, London, Ontario, Canada.
- 2017 Examination Chair. Candidate: D. Becker. Supervisors: J. Braun, C. Dean, and D. Woolford. Defence at Western University, London, Ontario, Canada.

- Examination Chair. Candidate: W. Avusuglo. Supervisors: M. Reesor and A. Metzler. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: S. Soleymani. Supervisor: A.I. McLeod. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: R. Zhang. Supervisor: K.P. Sendova. Defence at Western University, London, Ontario, Canada.
- 2018 Examination Chair. Candidate: W. Jiang. Supervisors: J. Ren and H.P. Hong. Defence at Western University, London, Ontario, Canada.
- University Examiner. Candidate: A. Uvarov. Supervisor: G-Y. Zou. Defence at Western University, London, Ontario, Canada.
- 2020 Program Examiner. Candidate: J. Chen. Supervisor: M. Davison. Defence at Western University, London, Ontario, Canada.
- 2021 University Examiner. Candidate: C-C. Yu. Supervisors: Y-H. Choi and G-Y. Zou. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: J. Xiao. Supervisor: H.S. Sendov. Defence at Western University, London, Ontario, Canada.
- 2023 Examination Chair. Candidate: Y. Chen. Supervisor: R.S. Mamon. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: D. Gao. Supervisor: J. Ren. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: P. Faroughi. Supervisors: S. Li and J. Ren. Defence at Western University, London, Ontario, Canada.

#### PH.D. THESES

- 1999 Program Examiner. Candidate: M. Orasch. Supervisor: M. Csörgő. Defence at Carleton University, Ottawa, Ontario, Canada.
- 2000 Examination Chair. Candidate: M. Liang. Supervisor: N.S. Mendelsohn. Defence at the University of Manitoba, Winnipeg, Manitoba, Canada.
- 2001 External Examiner. Candidate: W.I. Mangku. Supervisor: R. Helmers. Defence at the University of Amsterdam, The Netherlands.
- 2003 Program Examiner. Candidate: H. Khan. Supervisors: M.S. Haq and S.B. Provost. Defence at Western University, London, Ontario, Canada.
- University Examiner. Candidate: A. Paun. Supervisor: S. Yu. Defence at Western University, London, Ontario, Canada.
- 2005 Program Examiner. Candidate: D. Sanjel. Supervisors: I.B. MacNeill and S.B. Provost. Defence at Western University, London, Ontario, Canada.
- External Examiner. Candidate: Y. Lu. Supervisor: J. Garrido. Defence at Concordia University, Montreal, Quebec, Canada.
- University Examiner. Candidate: M. Voia. Supervisor: C. Robinson. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: F. Zhang. Supervisor: R.J. Puddephatt. Defence at Western University, London, Ontario, Canada.
- 2006 Examination Chair. Candidate: L.E. Millon. Supervisors: W. Wan and J. Hutter. Defence at Western University, London, Ontario, Canada.
- 2007 Examination Chair. Candidate: I.S. Young. Supervisor: M.A. Kerr. Defence at Western University, London, Ontario, Canada.
- External Examiner. Candidate: J. Cho. Supervisor: B. Levit. Defence at Queen's University, Kingston, Ontario, Canada.
- Examination Chair. Candidate: B. Chen. Supervisor: Y. Huang. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: D. Haile. Supervisor: H. Rasmussen. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: J. Jagadeesan. Supervisor: R. Patel. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: A. Shakoori. Supervisors: R.M. Corless and D. Aruliah. Defence at Western University, London, Ontario, Canada.

- Examination Chair. Candidate: M. Mendelsohn. Supervisors: T.J. Overend and R.J. Petrella. Defence at Western University, London, Ontario, Canada.
- 2008 University Examiner. Candidate: C. Bennett. Supervisor: J. Knight. Defence at Western University, London, Ontario, Canada.
- 2009 Program Examiner. Candidate: M. Jiang. Supervisor: S.B. Provost. Defence at Western University, London, Ontario, Canada.
- 2011 Program Examiner. Candidate: I. Mabrouk. Supervisor: S.B. Provost. Defence at Western University, London, Ontario, Canada.
- 2012 External Examiner/Evaluator. Candidate: S.T. Dara. Supervisor: M. Ahmad. Defence at the National College of Business Administration and Economics, Lahore, Pakistan.
- 2013 Examination Chair. Candidate: Y. Hosein. Supervisor: C.E. Dunning. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: Y. Li. Supervisor: X. Sun. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: A.M.K. Hafiz. Supervisors: R. Tutunea-Fatan and E. Bordatchev. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: N. Ahmad. Supervisor: R. Baddour. Defence at Western University, London, Ontario, Canada.
- External Examiner/Evaluator. Candidate: A. Shelef. Supervisors: E. Schechtman and S. Yitzhaki. The Kreitman School of Advanced Graduate Studies, Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- Program Examiner. Candidate: S.Z. Sheng. Supervisor: S.B. Provost. Defence at Western University, London, Ontario, Canada.
- 2014 Program Examiner. Candidate: T. Jin. Supervisor: J. Ren. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: Z. Li. Supervisor: K.P. Sendova. Defence at Western University, London, Ontario, Canada.
- 2015 Examination Chair. Candidate: M.A. Owrangi. Supervisors: S. Simonovic and R. Lannigan. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: F.C.F. Alsubaei. Supervisor: A. El Damatty. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: S. Li. Supervisor: H. Hong. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: C. Yang. Supervisor: K.P. Sendova. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: S. Shan. Supervisor: H.S. Sendov. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: G.D.G. Langohr. Supervisor: J.A. Johnson. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: M. Kalil. Supervisor: A. Shami. Defence at Western University, London, Ontario, Canada.
- 2016 Examination Chair. Candidate: L. McCorquodale. Supervisor: S. DeLuca. Defence at Western University, London, Ontario, Canada.
- 2017 Examination Chair. Candidate: S.V.M. Mackrell. Supervisor: E. Hayden. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: K. Nicholson. Supervisors: A. Thind and A. Terry. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: T. Jiang. Supervisor: H.S. Sendov. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: D. McKee. Supervisor: R. Heydon. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: J.S. Munizzi. Supervisors: L. Hodgetts and F. Longstaffe. Defence at Western University, London, Ontario, Canada.
- 2018 Program Examiner. Candidate: H. Zareamoghaddam. Supervisors: S.B. Provost and S.E. Ahmed. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: J.R. Stinziano. Supervisor: D. Way. Defence at Western University, London, Ontario, Canada.

- Examination Chair. Candidate: K.M. Macpherson. Supervisor: W. Roberts. Defence at Western University, London, Ontario, Canada.
- University Examiner. Candidate: G. Gryniv. Supervisors: L. Stentoft and T.G. Conley. Defence at Western University, London, Ontario, Canada.
- 2019 Program Examiner. Candidate: S.J. Kang. Supervisors: S.B. Provost and J. Ren. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: N. Samei. Supervisor: R. Solis-Oba. Defence at Western University, London, Ontario, Canada.
- External Examiner/Evaluator. Candidate: D. Escobar. Supervisor: G. Pflug. Defence at the University of Vienna, Vienna, Austria.
- External Examiner. Candidate: Y. Kye. Supervisor: E. Furman. Defence at York University, Toronto, Ontario, Canada.
- University Examiner. Candidate: A. Uvarov. Supervisor: G.Y. Zou. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: Y.S. Chan. Supervisor: R.M. Corless. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: R. Zhang. Supervisor: K. Sendova. Defence at Western University, London, Ontario, Canada.
- 2021 Examination Chair. Candidate: B. Wilk. Supervisors: F. Prato and J. Thiessen. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: D. Guy. Supervisor: G. Rodrigues. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: D. Palidis. Supervisor: P. Gribble. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: F. Naranjo. Supervisors: F. Johnson and L. Menor. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: J. Chen. Supervisors: M. Davison and M. Escobar-Anel. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: J. Klassen. Supervisor: S. Stewart. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: G. Huppé. Supervisor: G. Rowe. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: A. Li. Supervisor: X. Zou. Defence at Western University, London, Ontario, Canada.
- Examination Chair. Candidate: S. Goertz. Supervisor: J. Davies. Defence at Western University, London, Ontario, Canada.
- University Examiner. Candidate: D.R. Huddleston. Supervisor: T.Y. Chung. Defence at Western University, London, Ontario, Canada.
- 2022 Program Examiner. Candidate: Y.M. Kobara. Supervisors: D.A. Stanford, C.P.E. de Souza, and F.F. Rodrigues. Defence at Western University, London, Ontario, Canada.
- 2023 Program Examiner. Candidate: Y. Li. Supervisor: R.S. Mamon. Defence at Western University, London, Ontario, Canada.
- External Examiner. Candidate: N. Mohammed. Supervisor: E. Furman. Defence at York University, Toronto, Ontario, Canada.
- University Examiner. Candidate: E. Smith. Supervisors: G.Y. Zou and V. Jairath. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: P. Faroughi. Supervisors: S. Li and J. Ren. Defence at Western University, London, Ontario, Canada.
- External Examiner. Candidate: J. Miles. Supervisor: A. Kuznetsov. Defence at York University, Toronto, Ontario, Canada.
- University Examiner. Candidate: T. Cheng. Supervisor: X. Zou. Defence at Western University, London, Ontario, Canada.
- Program Examiner. Candidate: Y. Chen. Supervisors: R.S. Mamon and H. Yu. Defence at Western University, London, Ontario, Canada.

## Administrative duties

### DEPARTMENT COMMITTEES

*Department of Economics, Management and Statistics (DEMS), University of Milano-Bicocca, Milan, Italy.*

#### PhD in Economics, Statistics and Data Science (ECOSTAT) Programme Committee<sup>5</sup>

2017–2018 (Member) 2018–2019 (Member) 2019–2020 (Member)  
2020–2021 (Member) 2021–2022 (Member) 2022–2023 (Member)  
2023–2024 (Member) 2024–2025 (Member)

*Department of Statistics, University of Manitoba, Canada.*

#### Graduate

1999–2000 (Member)

#### Scholarships and Awards

1999–2000 (Member)

#### Course “Basic Statistical Analysis”

1999–2000 (Member)

#### Seminar

1999–2000 (Chair) 2000–2001 (Chair)

#### Research

2000–2001 (Member)

#### Undergraduate

2000–2001 (Member)

*Department of Statistical and Actuarial Sciences, Western University, Canada.*

#### Actuarial Professional Development

2012–2013 (Member) 2013–2014 (Member)

#### Appointments

2003–2004 (Member) 2022–2023 (Alternate)

#### Colloquium

2001–2002 (Chair) 2002–2003 (Member) 2003–2004 (Member)  
2017–2018 (Chair) 2021–2022 (Chair)

#### Computing

2011–2012 (Member)

#### Convocation

2016–2017 (Member) 2017–2018 (Chair) 2018–2019 (Chair)  
2019–2020 (Chair) 2020–2021 (Chair) 2021–2022 (Chair)  
2022–2023 (Chair)

#### Course “Introduction to Statistics”

2020–2021 (Coordinator)

#### Course “Methods of Statistical Analysis”

2002–2003 (Coordinator) 2003–2004 (Coordinator)

#### Graduate

2004–2005 (Member) 2005–2006 (Member) 2018–2019 (Member)  
2020–2021 (Member) 2021–2022 (Member) 2022–2023 (Member)  
2023–2024 (Member)

#### Internship Liaison

2019–2020 (Member) 2020–2021 (Member)

#### Library Acquisitions

2011–2012 (Member) 2016–2017 (Member) 2017–2018 (Chair)  
2019–2020 (Chair) 2020–2021 (Chair) 2021–2022 (Chair)

#### Munich Re Cup<sup>6</sup>

2019–2020 (Coach) 2020–2021 (Coach) 2021–2022 (Coach; 2<sup>nd</sup> place)  
2022–2023 (Coach; Finalist)

<sup>5</sup>It is the executive and decision-making board of the Programme

<sup>6</sup>Munich Re Cup is the premier actuarial case competition open to students in Canada and the United States.



Outreach  
 2019–2020 (Member)    2020–2021 (Member)    2021–2022 (Member)  
 2022–2023 (Member)    2023–2024 (Member)  
 Research  
 2004–2005 (Member)    2005–2006 (Member)    2007–2008 (Member)  
 2008–2009 (Chair)    2009–2010 (Chair)  
 Social  
 2020–2021 (Member)    2021–2022 (Member)  
 Western Field's Seminar Series  
 2002–2003 (Member)    2003–2004 (Member)  
 Workload  
 2003–2004 (Member)    2022–2023 (Member)    2023–2024 (Member)

#### SUB-FACULTY COMMITTEES

*School of Mathematical and Statistical Sciences, Western University, Canada.*

Calculus 1000 Redesign  
 2017–2018 (Member)    2018–2019 (Member)  
 Colloquium  
 2017–2018 (Member)    2018–2019 (Member)  
 Fields Institute Liaison  
 2018–2019 (Member)    2019–2020 (Member)    2020–2021 (Member)  
 2021–2022 (Member)  
 Library  
 2017–2018 (Member)  
 Research Advisory  
 2021–2022 (Member)

#### FACULTY COMMITTEES

*Faculty of Science, Western University, Canada.*

Nominating  
 2020–2021 (Member)  
 NSERC of Canada Undergraduate Research Awards  
 2003–2004 (Department Representative)  
 Ontario Graduate Scholarships in Science and Technology Ranking  
 2005 (Member)

*Faculty of Social Science, Western University, Canada.*

Faculty Council  
 2011–2012 (Faculty of Science Dean's Appointed Representative)

*Schulich School of Medicine and Dentistry, Western University, Canada.*

Dentistry Admissions  
 2023–2024 (Member)    2024–2025 (Member)    2025–2026 (Member)

#### UNIVERSITY COMMITTEES

*Risk and Insurance Studies Centre (RISC), York University, Toronto, Ontario, Canada.*

RISC Executive  
 2021–2022 (Member)    2022–2023 (Member)  
 Hiring  
 2018–2019 (Member)    2019–2020 (Member)    2020–2021 (Member)  
 2021–2022 (Member)  
 RISC Student Research Competition  
 2020–2021 (Chair)    2021–2022 (Judge)    2022–2023 (Judge)

*University of Milano-Bicocca, Milan, Italy.*

**Economics, Statistics, and Data Science (ECOSTAT) PhD Teaching Board**  
 2019–2020 (Member)    2020–2021 (Member)    2021–2022 (Member)  
 2022–2023 (Member)    2023–2024 (Member)    2024–2025 (Member)

*University Senate, Western University, Canada.*

2019–2020

- Nominated by the School of Graduate and Postdoctoral Studies (SGPS)
- Faculty of Science Elected Member (representative from SGPS)

#### CORPORATE COMMITTEES

*RISC Foundation.* <sup>7</sup>

Board of Directors  
2023–2024 (Member)

NORM<sup>8</sup> Executive  
2023–2024 (Member)

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<sup>7</sup>Risk and Insurance Studies Centre (RISC) Foundation incorporated under the Canada Not-for-profit Corporations Act.

<sup>8</sup>NORM is a multimillion dollar NSERC Alliance–Mitacs Accelerate grant entitled New Order of Risk Management: Theory and Applications in the Era of Systemic Risk.