CURRICULUM VITAE

Jeffrey S. Rosenthal

(Last updated April 19, 2024.)

BIOGRAPHICAL INFORMATION:

Personal:

Born:	October 13, 1967.
	Scarborough, Ontario, Canada.
Address:	Department of Statistical Sciences
	University of Toronto
	700 University Avenue, 9th Floor
	Toronto, Ontario
	Canada M5G 1X6
	Telephone: (416) 978-4594.
	E-mail: `jeff@math.toronto.edu`
	Web page: `http://probability.ca/jeff/`

Degrees:

B.Sc. (math, physics, comp. sci.), University of Toronto, June 1988.
A.M. (mathematics), Harvard University, March 1990.
Ph.D. (mathematics), Harvard University, June 1992.

Ph.D. Thesis:	*Rates of convergence for Gibbs sampler and other Markov chains*
Ph.D. Supervisor:	Dr. Persi Diaconis.

Employment:

1992 – 1993	Assistant Professor, University of Minnesota.
1993 – 1997	Assistant Professor, University of Toronto.
1997 – 2000	Associate Professor, University of Toronto.

2000 – present　　　Professor, University of Toronto.

Primary Research Interests:

Probability Theory

Statistical Computation

Markov Chain Monte Carlo (MCMC) Algorithms

Interdisciplinary Applications of Statistics

Honours:

University of Toronto undergraduate scholarships: J.W. Billes Open (four years), Reuben Wells Leonard, others	1984 – 88
Faculty Scholar (undergraduate), University of Toronto	1985, 86, 87, 88
Harvard University Teaching Award	1991
Dean's Excellence Awards, University of Toronto	1994, 96, 97
Appointment to Graduate School Faculty	1994
Cross-appointment (status only) to Department of Mathematics, University of Toronto	1994
Granted tenure, University of Toronto	1997
Arts and Science Outstanding Teaching Award	1998
Premier's Research Excellence Award	2000
Elected IMS Fellow	2005
National bestselling author	2005
CRM-SSC Prize	2006
Gentry Lecturer, Wake Forest University	2007
Pierre Robillard Award (supervisor)	2007
Distinguished Lecturer in Statistics, Dalhousie	2007
COPSS Presidents' Award	2007
Plenary Speaker, MCQMC Conference, Montreal	2008

Keynote Speaker, ISBA Conference, Australia	2008
Opening Plenary Speaker, Journées de Statistique, Bordeaux	2009
PIMS-SFU Distinguished Chair	2009
Inaugural David K. Pickard Memorial Lecturer, Harvard	2010
Opening plenary speaker, "MCMSki III", Utah	2011
Seymour Geisser Distinguished Lecturer, Minnesota	2011–12
University College Alumnus of Influence	2012
Fellow of the Royal Society of Canada	2012
Statistical Society of Canada Gold Medal*	2013
CRM Distinguished Lecturer, University of Ottawa	2015
Listed in *Canadian Who's Who*	2015
AMSI/SSA Lecturer, Australia	2016
Constance van Eeden Lecturer, UBC	2017
Alan B. Pritsker Distinguished Lecturer, Purdue	2017
Warwick Public Lecturer in Mathematics and Statistics	2017
Appointed a PI at Fujitsu Co-Creation Lab	2019
President's Impact Award, U of T	2019
Canadian Journal of Statistics best paper award	2019
Appointed a Vector Institute Faculty Affiliate	2019
Rustagi Memorial Lecturer, Ohio State University	2020
SSC Presidential Invited Address	2021
Wired 'Tech Support' Interview (over 1.9 million views)	2022
Keynote presenter at New England Statistics Symposium	2023
David Sprott Distinguished Lecturer, Waterloo	2023

---

* Apparently the youngest recipient to date.

Professional Affiliations and Activities:

Society of Actuaries, Examinations 100 and 110 completed   1990

Institute of Mathematical Statistics, member   1993 – present

Session organizer, ISBA Regional Meeting, Toronto   1994

Session chair, ASA-IMS-IBS-SSC Joint Meetings, Chicago   1996

Visiting Member, Fields Institute   1998 – 1999

Co-organizer, Workshop on Monte Carlo, Fields Institute   Oct. 19–23, 1998

Statistical Society of Canada, member   2000 – present

Session organizer, SSC Annual Meeting, Ottawa   2000

Editorial Board, *Applied Stochastic Models
in Business and Industry*   2001, 2002

Free Software Foundation, associate member   2003 – present

R Foundation for Statistical Computing, member   2003 – present

Local organizer, Probability Workshop, Toronto   2004

Session organizer, ASA-IMS Joint Meetings, Toronto   2004

Associate Editor, *Canadian Journal of Statistics*   2007 – 2009

Associate Editor, *Electronic Journal of Statistics*   2007 – 2009

Session organizer, SSC Annual Meeting, Ottawa   2008

Session co-organizer, MCQMC Conference, Montreal   2008

Co-organizer, Monte Carlo Workshop, BIRS, Banff   2012

Scientific Committee, MCMSki IV, Chamonix, France   2013–4

Other Work Experience:

Frequent public speaker and media commentator.

Experienced computer programmer and GNU/Linux/Unix sysadmin.

Occasional paid consultant to various companies/researchers/lawyers.

Occasional expert witness at trials.

Occasional paid musical performer.

Languages spoken:

English, French.

ACADEMIC HISTORY:

Research Funding Awards:

NSERC undergraduate summer research awards	1987, 1988
Sloan Foundation doctoral dissertation fellowship	1991
NSERC postdoctoral fellowship	1992
NSF summer salary supplement (US$14,420)	1993
Connaught start-up grant ($6,000)	1993
NSERC research grant ($18,000 per annum)	1993–6
EPSRC travel award (£1,000) via G.O. Roberts	1994
NSERC research grant ($24,400 – $28,182 per annum)	1996–00
EPSRC travel award (£3,000) via G.O. Roberts	1995
Scotia-McLeod research contracts ($38,220)	1999.
NSERC research grant ($35,000 per annum)	2000–05 (def. 2006)
Premier's Research Excellence Award ($100,000)	2000
MITACS grant on Data Mining (co-investigator, $260,000)	2002
Research grant from Ontario Ministry of Child and Youth Services (co-investigator, $76,000)	2006–10
NSERC research grant ($37,000 per annum)	2006–11 (def. 2012)
NSERC research grant ($35,000 per annum)	2012–17 (def. 2018, 2019)
Fujitsu research grant ($50,000)	2018
Fujitsu research grant ($50,000)	2019
Fujitsu research grant ($50,000)	2020
Fujitsu research grant ($71,000)	2021
NSERC research grant ($53,000 per annum)	2019–24 (def. 25)

CANSSI CRRP Project funding ($6,850, with P. Brown) 2020–21

Patents Awarded:

1) "Optimization via Rejection-Free Partial Neighbor Search". Joint with S. Chen and A. Sheikholeslami. In collaboration with Fujitsu Corporation. Confidential Invention Disclosure filed November 2021. Japanese and U.S. patents being filed.

2) "Sampling via Rejection-Free Partial Neighbor Search". Joint with S. Chen and A. Sheikholeslami. In collaboration with Fujitsu Corporation. Confidential Invention Disclosure filed August 2022. Japanese and U.S. patents being filed.

SCHOLARLY & PROFESSIONAL WORK*:

Refereed Journal Publications:

1) M.D. Choi, J.S. Rosenthal, and P. Rosenthal (August 1989), "Linear-Algebraic Results Associated with Antiferromagnetic Heisenberg Chains". *SIAM Journal of Matrix Analysis and Applications* **14**, No. **3** (1993), 830–852.

2) J.S. Rosenthal (April 1992), "Random Rotations: Characters and Random Walks on $SO(N)$". *Annals of Probability*, Vol. **22**, No. **1** (1994), 398–423.

3) J.S. Rosenthal (April 1992), "Random Walks on Discrete and Continuous Circles". *Journal of Applied Probability* **30** (1993), 780–789.

4) J.S. Rosenthal (April 1992), "Rates of Convergence for Data Augmentation on Finite Sample Spaces". *Annals of Applied Probability* **3** (1993), 819–839.

5) J.S. Rosenthal (April 1992), "Rates of Convergence for Gibbs Sampling for Variance Components Models". *Annals of Statistics* **23** (1995), 740–761.

6) J.S. Rosenthal (November 1992), "On Duality of Probabilities for Card-dealing". *Proceedings of the American Mathematical Society*, Vol. **123** No. **2** (1995), 559–561.

---

* Multiple authors are listed alphabetically thoughout, except those marked [N-A]. Dates in parentheses refer to original submission of manuscript.

7) J.S. Rosenthal (November 1992), "On Generalizing the Cut-off Phenomenon for Random Walks on Groups". *Advances in Applied Mathematics* **16** (1995), 306–320.

8) J.R. Hoffman and J.S. Rosenthal (March 1993), "Convergence of Independent Particle Systems". *Stochastic Processes and their Applications* **56** (1995), 295–305.

9) J.S. Rosenthal (April 1993), "Active-Learning Strategies in Advanced Mathematics Classes". *Studies in Higher Education*, Vol. **20** No. **2** (1995), 223–228.

10) J.S. Rosenthal (September 1993), "Minorization Conditions and Convergence Rates for Markov Chain Monte Carlo". *Journal of the American Statistical Association* **90** (1995), 558–566.

11) J.S. Rosenthal (December 1993), "Convergence rates of Markov chains". *SIAM Review* **37** (1995), 387–405.

12) J.R. Baxter and J.S. Rosenthal (January 1994), "Rates of convergence for everywhere-positive Markov chains". *Statistics and Probability Letters* **22** (1995), 333–338.

13) J.S. Rosenthal (May 1994), "Analysis of the Gibbs Sampler for a model related to James-Stein Estimators". *Statistics and Computing* **6** (1996), 269–275.

14) G.O. Roberts and J.S. Rosenthal (November 1994), "Shift-coupling and convergence rates of ergodic averages". *Communications in Statistics – Stochastic Models*, Vol. **13**, No. **1** (1997), 147–165.

15) J.S. Rosenthal (November 1994), "Markov chain convergence: from finite to infinite". *Stochastic Processes and their Applications* **62** (1996), 55–72.

16) G.O. Roberts and J.S. Rosenthal (June 1995), "Optimal scaling of discrete approximations to Langevin diffusions". *Journal of the Royal Statistical Society, Series B* **60** (1998), 255–268.

17) J.S. Rosenthal (June 1995), "Faithful couplings of Markov chains: now equals forever". *Advances in Applied Mathematics* **18** (1997), 372–381.

18) G.O. Roberts, J.S. Rosenthal, and P.O. Schwartz (November 1995), "Convergence properties of perturbed Markov chains". *Journal of Applied Probability* **35** (1998), 1–11.

19) G.O. Roberts and J.S. Rosenthal (January 1996), "Quantitative bounds for convergence rates of continuous time Markov processes". *Electronic Journal of Probability* **1** (1996), Paper no. 9, 1–21.

20) M.K. Cowles and J.S. Rosenthal (May 1996), "A simulation approach to convergence rates for Markov chain Monte Carlo algorithms". *Statistics and Computing* **8** (1998), 115–124.

21) G.O. Roberts and J.S. Rosenthal (August 1996), "Geometric ergodicity and hybrid Markov chains". *Electronic Communications in Probability* **2** (1997), Paper no. 2, 13–25.

22) G.O. Roberts and J.S. Rosenthal (January 1997), "Two convergence properties of hybrid samplers". *Annals of Applied Probability* **8** (1998), 397–407.

23) G.O. Roberts and J.S. Rosenthal (February 1997), "Markov chain Monte Carlo: Some practical implications of theoretical results" (with discussion). *Canadian Journal of Statistics* **26** (1998), 5–31.

24) J.S. Rosenthal and P.O. Schwartz (May 1997), "Gambling systems and multiplication-invariant measures". *Advances in Applied Mathematics* **22** (1999), 303–311.

25) G.O. Roberts and J.S. Rosenthal (June 1997), "On convergence rates of Gibbs samplers for uniform distributions". *Annals of Applied Probability* **8** (1998), 1291–1302.

26) G.O. Roberts and J.S. Rosenthal (July 1997), "Convergence of slice sampler Markov chains". *Journal of the Royal Statistical Society, Series B* **61** (1999), 643–660.

27) M.K. Cowles, G.O. Roberts, and J.S. Rosenthal (December 1997), "Possible biases induced by MCMC convergence diagnostics". *Journal of Statistical Computation and Simulation* **64** (1999), 87–104.

28) S. Petrone, G.O. Roberts, and J.S. Rosenthal (May 1998), "A note on convergence rates of Gibbs sampling for nonparametric mixtures". *Far East Journal of Theoretical Statistics* **3** (1999), 213–225.

29) D.J. Murdoch and J.S. Rosenthal (May 1998), "Efficient use of exact samples". *Statistics and Computing* **10** (2000), 237–243.

30) M.J. Osborne, J.S. Rosenthal, and M.A. Turner (May 1998), "Meetings with costly participation". *American Economic Review* **90** (2000), 927–943. [See also the "Reply", *American Economic Review* **95** (2005), 1351–1354.]

31) R. Pemantle and J.S. Rosenthal (August 1998), "Moment conditions for a sequence with negative drift to be uniformly bounded in L^r". *Stochastic Processes and their Applications* **82** (1999), 143–155.

32) G.O. Roberts and J.S. Rosenthal (November 1998), "Markov chains and de-initialising processes". *Scandinavian Journal of Statistics* **28** (2001), 489–504.

33) J.S. Rosenthal (March 1999), "Parallel computing and Monte Carlo algorithms". *Far East Journal of Theoretical Statistics* **4** (2000), 207–236.

34) J.S. Rosenthal (March 1999), "A review of asymptotic convergence for general state space Markov chains". *Far East Journal of Theoretical Statistics* **5** (2001), 37–50.

35) J.A. Fill, M. Machida, D.J. Murdoch, and J.S. Rosenthal (April 1999), "Extension of Fill's perfect rejection sampling algorithm to general chains". *Random Structures and Algorithms* **17** (2000), 290–316.

36) G.O. Roberts and J.S. Rosenthal (May 1999), "The polar slice sampler". *Stochastic Models* **18** (2002), 257–280.

37) G.O. Roberts and J.S. Rosenthal (September 1999), "Bayesian models with infinite hierarchies". *Bernoulli* **7** (2001), 453–471.

38) R.B. Israel, J.S. Rosenthal, and J.Z. Wei (December 1999), "Finding generators for Markov chains via empirical transition matrices, with applications to credit ratings". *Mathematical Finance* **11** (2000), 245–265.

39) G.O. Roberts and J.S. Rosenthal (April 2000), "Small and Pseudo-Small Sets for Markov Chains". *Stochastic Models* **17** (2001), 121–145.

40) L. Breyer, G.O. Roberts, and J.S. Rosenthal (August 2000), "A note on geometric ergodicity and floating-point roundoff error". *Statistics and Probability Letters* **53** (2001), 123–127.

41) J.J. Lu, J.S. Rosenthal, and A.E. Shaffer (September 2000), "A case study in the meta-reasoning procedure ND". *Journal of Experimental and Theoretical Artificial Intelligence* **15** (2003), 47–71.

42) M.J. Gordon and J.S. Rosenthal (October 2000), "Capitalism's Growth Imperative". *Cambridge Journal of Economics* **27** (2003), 25–48.

43) G.O. Roberts and J.S. Rosenthal (May 2001), "One-shot coupling for certain stochastic recursive sequences." *Stochastic Processes and their Applications* **99** (2002), 195–208.

44) G.O. Roberts and J.S. Rosenthal (July 2001), "Combinatorial identities associated with CFTP". *Far East Journal of Mathematical Sciences* **13**(3) (2004), 391–404.

45) G.O. Roberts and J.S. Rosenthal (September 2001), "Optimal scaling for various Metropolis-Hastings algorithms". *Statistical Science* **16** (2001), 351–367.

46) J.S. Rosenthal (October 2001), "Asymptotic Variance and Convergence Rates of Nearly-Periodic MCMC Algorithms". *Journal of the American Statistical Association* **98** (2003), 169–177.

47) J.P. Hobert, G.L. Jones, B. Presnell, and J.S. Rosenthal (October 2001), "On the Applicability of Regenerative Simulation in Markov Chain Monte Carlo". *Biometrika* **89** (2002), 731–743.

48) G. Fort, E. Moulines, G.O. Roberts, and J.S. Rosenthal (November 2001), "On the geometric ergodicity of hybrid samplers". *Journal of Applied Probability* **40** (2003), 123–146.

49) A. Borodin, G.O. Roberts, J.S. Rosenthal, and P. Tsaparas (November 2001), "Link Analysis Ranking: Algorithms, Theory, and Experiments". ACM Transactions on Internet Technology (TOIT) **5(1)** (2005), 231–297.

50) J.S. Rosenthal (February 2002), "Quantitative convergence rates of Markov chains: A simple account". *Electronic Communications in Probability* **7** (2002), No. 13, 123–128.

51) T. Duchesne and J.S. Rosenthal (February 2002), "On the Collapsibility of Lifetime Regression Models". *Advances in Applied Probability* **35** (2003), 755–772.

52) R. Douc, E. Moulines, and J.S. Rosenthal (March 2002), "Quantitative bounds on convergence of time-inhomogeneous Markov chains". *Annals of Applied Probability* **14**, (2004), 1643–1665.

53) J.S. Rosenthal (April 2002), "Geometric Convergence Rates for Time-Sampled Markov Chains". *Journal of Theoretical Probability* **16** (2003), 671–688.

54) A. Feuerverger and J.S. Rosenthal (April 2002), "Achieving Limiting Distributions for Markov Chains Using Back Buttons". *Statistics and Computing* **14** (2004), 131–141.

55) S.P. Brooks, Y. Fan, and J.S. Rosenthal (May 2002), "Perfect Forward Simulation via Simulated Tempering". *Communications in Statistics – Simulation and Computation* **35(3)** (2006), 683–713.

56) G.O. Roberts and J.S. Rosenthal (January 2003), "Downweighting Tightly Knit Communities in World Wide Web Rankings". *Advances and Applications in Statistics* **3** (2003), 199–216.

57) O.F. Christensen, G.O. Roberts, and J.S. Rosenthal (January 2003), "Scaling Limits for the Transient Phase of Local Metropolis-Hastings Algorithms". *Journal of the Royal Statistical Society, Series B* **67** (2005), 253–268.

58) Y. Atchadé and J.S. Rosenthal (July 2003), "On Adaptive Markov Chain Monte Carlo Algorithms". *Bernoulli* **11(5)** (2005), 815–828.

59) G.O. Roberts and J.S. Rosenthal (March 2004), "General state space Markov chains and MCMC algorithms". *Probability Surveys* **1** (2004), 20–71.

60) G.O. Roberts and J.S. Rosenthal (December 2004), "Harris Recurrence of Metropolis-Within-Gibbs and Trans-Dimensional Markov Chains". *Annals of Applied Probability* **16** (2006), 2123–2139.

61) G.O. Roberts and J.S. Rosenthal (March 2005), "Coupling and Ergodicity of Adaptive MCMC". *Journal of Applied Probability* **44** (2007), 458–475.

62) D.M. Day, I. Bevc, T. Duchesne, J.S. Rosenthal, L. Rossman, and F. Theodor (July 2005) [N-A], "Comparison of Adult Offense Prediction Methods based on Juvenile Offense Trajectories using Cross-Validation". *Advances and Applications in Statistics* **7** (2007), 1–46.

63) G.O. Roberts, J.S. Rosenthal, J. Segers, and B. Sousa (September 2006), "Extremal Indices, Geometric Ergodicity of Markov Chains, and MCMC". *Extremes* **9** (2006), 213–229.

64) G.O. Roberts and J.S. Rosenthal (September 2006), "Examples of Adaptive MCMC". *Journal of Computational and Graphical Statistics* **18(2)** (2009), 349–367.

65) G.O. Roberts and J.S. Rosenthal (September 2006), "Variance Bounding Markov Chains". *Annals of Applied Probability* **18(3)** (2008), 1201–1214.

66) J.S. Rosenthal (February 2007), "AMCMC: An R interface for adaptive MCMC". *Computational Statistics and Data Analysis* **51** (2007), 5467–5470. [Related software available at probability.ca/amcmc, last updated March 2009.]

67) J.P. Hobert and J.S. Rosenthal (February 2007), "Norm Comparisons for Data Augmentation". *Advances and Applications in Statistics* **7** (2007), 291–302.

68) J.S. Rosenthal (February 2007), "Waiting time correlations on disorderly streetcar routes". *International Journal of Pure and Applied Mathematical Sciences*, to appear. (Accepted May 2008.)

69) M. Bédard and J.S. Rosenthal (July 2007), "Optimal scaling of Metropolis algorithms: heading toward general target distributions." *Canadian Journal of Statistics* **36(4)** (2008), 483–503.

70) O. Häggström and J.S. Rosenthal (September 2007), "On Variance Conditions for Markov Chain CLTs". *Electronic Communications in Probability* **12** (2007), 454–464.

71) J.S. Rosenthal (June 2008), "Optimising Monte Carlo Search Strategies for Automated Pattern Detection". *Far East Journal of Mathematical Sciences* **32(3)** (2009), 311–328.

72) R.V. Craiu, J.S. Rosenthal, and Chao Yang (July 2008), "Learn From Thy Neighbor: Parallel-Chain and Regional Adaptive MCMC". *Journal of the American Statistical Association* **488** (2009), 1454–1466.

73) Y. Bai, G.O. Roberts, and J.S. Rosenthal (July 2008; major revision July 2010), "On the Containment Condition for Adaptive Markov Chain Monte Carlo Algorithms". *Advances and Applications in Statistics* **21(1)** (2011), 1–54.

74) J.S. Rosenthal (August 2008), "A mathematical analysis of the Sleeping Beauty problem". *The Mathematical Intelligencer* **31(3)** (2009), 32–37.

75) G.O. Roberts and J.S. Rosenthal (September 2008), "Quantitative Non-Geometric Convergence Bounds for Independence Samplers". *Methodology and Computing in Applied Probability* **13(2)** (2011), 391–403.

76) Y. Atchadé, G.O. Roberts, and J.S. Rosenthal (July 2009), "Towards Optimal Scaling of Metropolis-Coupled Markov Chain Monte Carlo". *Statistics and Computing* **21(4)** (2011), 555–568.

77) M.A. Proschan and J.S. Rosenthal (September 2009), "Beyond the Quintessential Quincunx". *The American Statistician* **64(1)** (2010), 78–82.

78) J.S. Rosenthal and A.H. Yoon (December 2009), "Detecting Multiple Authorship of United States Supreme Court Legal Decisions Using Function Words." *Annals of Applied Statistics* **5(1)** (2011), 283–308.

79) A.K. Ward, D.M. Day, I. Bevc, Y. Sun, J.S. Rosenthal, and T. Duchesne (January 2010) [N-A], "Criminal Trajectories and Risk Factors in a Canadian Sample of Offenders". *Criminal Justice and Behavior* **37(11)** (2010), 1278–1300.

80) J. Chen and J.S. Rosenthal (May 2010), "Decrypting Classical Cipher Text Using Markov Chain Monte Carlo". *Statistics and Computing* **22(2)** (2011), 397–413.

81) M.A. Turner, J.S. Rosenthal, J. Chen, and C. Hao (May 2010) [N-A], "Adaption to Climate Change: Evidence from 18th and 19th Century Iceland". *Advances and Applications in Statistics* **28(2)** (2012), 77–108.

82) J.S. Rosenthal and A.H. Yoon (August 2010), "Judicial Ghostwriting: Authorship on the U.S. Supreme Court". *Cornell Law Review* **96** (2011), 1307–1343. (Discussed in the *New York Times* article "Justices Are Long on Words but Short on Guidance", by Adam Liptak, Nov. 17, 2010.)

83) D.M. Day, J.D. Nielsen, A.K. Ward, Y. Sun, J.S. Rosenthal, T. Duchesne, I. Bevc, and L. Rossman (October 2010) [N-A], "Long-term Follow-up of the Criminal Activity of Adjudicated Youth in Ontario". *Canadian Journal of Criminology and Criminal Justice* **54(4)** (2012), 378–413.

84) D.B. Woodard and J.S. Rosenthal (January 2011) [N-A], "Convergence rate of Markov chain methods for genomic motif discovery". *Annals of Statistics* **41(1)** (2013), 91–124.

85) K. Latuszynski, G.O. Roberts, and J.S. Rosenthal (January 2011), "Adaptive Gibbs samplers and related MCMC methods". *Annals of Applied Probability* **23(1)** (2013), 66–98.

86) J.S. Rosenthal (May 2011), "Was the Conservative majority predictable?" *Canadian Journal of Statistics* **39(4)** (2011), 721–733.

87) J.D. Nielsen, J.S. Rosenthal, Y. Sun, D.M. Day, I. Bevc, and T. Duchesne (June 2011) [N-A], "Group-based Criminal Trajectory Analysis using Cross-Validation Criteria". *Communications in Statistics – Theory and Methods* **43** (2014), 4337–4356.

88) Y. Yunusova, J.S. Rosenthal, K. Rudy, M. Baljko, and J. Daskalogiannakis (November 2011) [N-A], "Place of articulation for lingual consonants defined using electromagnetic articulography". *Journal of the Acoustical Society of America* **132(2)** (2012), 1027–1038.

89) G.O. Roberts and J.S. Rosenthal (March 2012), "Minimising MCMC Variance via Diffusion Limits, with an Application to Simulated Tempering". *Annals of Applied Probability* **24(1)** (2014), 131–149.

90) K. Bodwin, J.S. Rosenthal, and A.H. Yoon (May 2012), "Opinion Writing and Authorship on the Supreme Court of Canada". *University of Toronto Law Journal* **63** (2013), 159–192.

91) P.E. Brown, F. Chimard, A. Remorov, J.S. Rosenthal, and X. Wang (May 2012), "Statistical Inference and Computational Efficiency for Spatial Infectious-Disease Models with Plantation Data". *Journal of the Royal Statistical Society, Series C* **63(3)** (April 2014), 467–482.

92) G.L. Jones, G.O. Roberts, and J.S. Rosenthal (June 2012), "Convergence of Conditional Metropolis-Hastings Samplers". *Advanced in Applied Probability* **46(2)** (2014), 422–445.

93) K. Bodwin, J.S. Rosenthal, and A.H. Yoon (August 2012), "A Statistical Approach to Judicial Authorship: A Case Study of Judge Easterbrook". *Advances and Applications in Statistics* 37(2) (2013), 123–148.

94) M.A. Bailey, J.S. Rosenthal, and A.H. Yoon (September 2012), "Grades and Incentives: Assessing Competing GPA Measures and Post-Graduate Outcomes". *Studies in Higher Education* **41** (2016), 1548–1562.

95) G.O. Roberts and J.S. Rosenthal (November 2012), "A Note on Formal Constructions of Sequential Conditional Couplings". *Statistics and Probability Letters* **83** (2013), 2073–2076.

96) R.V. Craiu and J.S. Rosenthal (March 2013), "Bayesian Computation via Markov chain Monte Carlo" (review paper). *Annual Review of Statistics and Its Application* **1** (2014), 179–201.

97) K. Latuszynski and J.S. Rosenthal (June 2013), "The Containment Condition and AdapFail Algorithms". *Journal of Applied Probability* **51(4)** (December 2014), 1189–1195.

98) J.S. Rosenthal (July 2013), "Statistics and the Ontario Lottery Retailer Scandal". Non-research paper (12 pages). *CHANCE Magazine* **27(1)** (February 2014). Reprinted in *The Best Writing on Mathematics*, Princeton University Press, 2015.

99) C. Sherlock, A.H. Thiery, G.O. Roberts, and J.S. Rosenthal (September 2013) [N-A], "On the efficiency of pseudo-marginal random walk Metropolis algorithms". *Annals of Statistics* **43(1)** (2015), 238–275.

100) R.V. Craiu, L. Gray, K. Latuszynski, N. Madras, G.O. Roberts, and J.S. Rosenthal (March 2014), "Stability of Adversarial Markov Chains, with an Applica-

tion to Adaptive MCMC Algorithms". *The Annals of Applied Probability* **25(6)** (2015), 3592–3623.

101) J.S. Rosenthal (May 2014), "Interdisciplinary Sojourns". *Canadian Journal of Statistics* **42(4)** (2014), 509–524.

102) G.O. Roberts and J.S. Rosenthal (August 2014), "Complexity Bounds for MCMC via Diffusion Limits". *Journal of Applied Probability* **53(2)** (June 2016), 410–420.

103) Jinyoung Yang and J.S. Rosenthal (September 2014) [N-A], "Automatically Tuned General-Purpose MCMC via New Adaptive Diagnostics". *Computational Statistics* **32(1)** (2017), 315–348. (See also the related R software package "atmcmc".)

104) G.O. Roberts and J.S. Rosenthal (February 2015), "Surprising Convergence Properties of Some Simple Gibbs Samplers Under Various Scans". *International Journal of Statistics and Probability* **5(1)** (January 2016), 51–60.

105) J.S. Rosenthal and Jinyoung Yang (July 2015), "Ergodicity of Combocontinuous Adaptive MCMC Algorithms". *Methodology and Computing in Applied Probability* **20(2)** (2018), 535–551.

106) J.S. Rosenthal and P. Rosenthal (August 2015), "Spectral Bounds for Certain Two-Factor Non-Reversible MCMC Algorithms". *Electronic Communications in Probability* **20(91)** (2015), 1–10.

107) M. Gollob, J.S. Rosenthal, and K. Thorpe (November 2015), "The probability of pathogenicity in clinical genetic testing: a solution for the variant of uncertain significance". *International Journal of Statistics and Probability* **5(4)** (July 2016), 52–58.

108) Jinyoung Yang, E. Levi, R. Craiu, and J.S. Rosenthal (March 2016), "Adaptive Component-wise Multiple-Try Metropolis Sampling". *Journal of Computational and Graphical Statistics* **28(2)** (2019), 276–289.

109) R. Entezari, R. Craiu, and J.S. Rosenthal (April 2016), "Likelihood Inflating Sampling Algorithm". *Canadian Journal of Statistics* **46(1)** (March 2018), 147–175. (Winner of CJS Best Paper award.) (Plus a related refereed discussion of an article by Matthew T. Pratola, in *Bayesian Analysis* **11(3)** (2016), 935–937.)

110) J.S. Rosenthal (July 2016), "Nash Equilibria for Voter Models with Randomly Perceived Positions". *Stochastic Models* **34(1)** (2018), 98–114.

111) J.S. Rosenthal (July 2016), "Stochastic Simulation of Sequential Game-Theory Voting Models". *Communications in Statistics: Simulation and Computation* **47(7)** (2018), 2040–2054.

112) M.J. Osborne, J.S. Rosenthal, and C. Stewart (September 2016), "Information aggregation with costly reporting". *Economic Journal* **130(625)** (2020), 208–232.

113) J.S. Rosenthal (October 2016), "Simple Confidence Intervals for MCMC Without CLTs". *Electronic Journal of Statistics* **11(1)** (2017), 211–214.

114) G.O. Roberts and J.S. Rosenthal (November 2016), "Hitting Time and Convergence Rate Bounds for Symmetric Langevin Diffusions". *Methodology and Computing in Applied Probability* **21(3)** (2019), 921–929.

115) P.A. Ernst, W.S. Kendall, G.O. Roberts and J.S. Rosenthal (February 2017), "MEXIT: Maximal un-coupling times for stochastic processes". *Stochastic Processes and their Applications* **129(2)** (2019), 355–380.

116) J. Negrea and J.S. Rosenthal (February 2017), "Approximations of Geometrically Ergodic Markov Chains". *Advances in Applied Probability* **53(4)** (December 2021), 981–1022.

117) J.S. Rosenthal (March 2017), "Statistics Using Just One Formula" (education paper). *Teaching Statistics* **40(1)** (2017), 7–11.

118) H. Duanmu, J.S. Rosenthal, and W. Weiss (April 2017), "Ergodicity of Markov Processes via Non-Standard Analysis" (153 manuscript pages). *Memoirs of the American Mathematical Society* **273(1342)** (September 2021), 1–114.

119) J.S. Rosenthal (July 2017), "Many-Candidate Nash Equilibria for Elections Involving Random Selection". *Methodology and Computing in Applied Probability* **21(1)** (2019), 279–293.

120) Jun Yang and J.S. Rosenthal (August 2017), "Complexity Results for MCMC derived from Quantitative Bounds". *Annals of Applied Probability* **33(2)** (2023), 1459–1500.

121) C. Beaulac and J.S. Rosenthal (September 2017), "Predicting University Students' Academic Success and Choice of Major using Random Forests". *Research in Higher Education* **60(7)** (2019), 1048–1064.

122) C. Beaulac and J.S. Rosenthal (April 2018), "BEST: A decision tree algorithm that handles missing values". *Computational Statistics* **35(3)** (2020), 1001–1026.

123) N.G. Tawn, G.O. Roberts, and J.S. Rosenthal (July 2018), "Weight-Preserving Simulated Tempering". *Statistics and Computing* **30** (2020), 27–41.

124) R. Entezari, P.E. Brown, and J.S. Rosenthal (July 2018), "Bayesian Spatial Analysis of Hardwood Tree Counts in Forests via MCMC". *Environmetrics* **31(4)** (June 2020), e2608.

125) Jun Yang, G.O. Roberts and J.S. Rosenthal (April 2019), "Optimal Scaling of Random-Walk Metropolis Algorithms on General Target Distributions". *Stochastic Processes and their Applications* **130** (2020), 6094–6132.

126) Z. Guo, I. Khuu, K. Zhu, J.S. Rosenthal, and F.P. Schoenberg (April 2019), "Distinguishing Luck from Skill through Statistical Simulation: A Case Study." *Communications in Statistics – Simulation and Computation* **51(5)** (2022), 2537–2559.

127) J.S. Rosenthal, A. Dote, K. Dabiri, H. Tamura, S. Chen, and A. Sheikholeslami (October 2019), "Jump Markov Chains and Rejection-Free Metropolis Algorithms". *Computational Statistics* **36** (2021), 2789–2811.

128) C. Beaulac, J.S. Rosenthal, Q. Pei, D. Friedman, S. Wolden, and D. Hodgson (January 2020), "An evaluation of machine learning techniques to predict the outcome of children treated for Hodgkin-Lymphoma". *Applied Artificial Intelligence* **34(14)** (2020), 1100–1114.

129) J.S. Rosenthal (May 2020), "Maximum Binomial Probabilities and Game Theory Voter Models". *Advances and Applications in Statistics* **64(1)** (2020), 75–85.

130) Y.H. Jiang, T. Liu, Z. Lou, J.S. Rosenthal, S. Shangguan, F. Wang, and Z. Wu (August 2020), "The Coupling/Minorization/Drift Approach to Markov Chain Convergence Rates". *Notices of the American Mathematical Society*, April 2021, 471–479.

131) J.J. Slater, P.E. Brown, and J.S. Rosenthal (September 2020), "Forecasting subnational COVID-19 mortality using a day-of-the-week adjusted Bayesian hierarchical model". *Stat (ISI)* **10(1)** (December 2021), e328.

132) G.O. Roberts, J.S. Rosenthal, and N.G. Tawn (September 2020), "Skew Brownian Motion and Complexity of the ALPS Algorithm". *Journal of Applied Probability* **59(3)** (September 2022), 777–796.

133) C. Beaulac and J.S. Rosenthal (October 2020), "Introducing a high-resolution hand-written digits data set with writer characteristics". *SN Computer Science* **4(66)** (2023).

134) Y.H. Jiang, T. Liu, Z. Lou, J.S. Rosenthal, S. Shangguan, F. Wang, and Z. Wu (December 2020), "MCMC Confidence Intervals and Biases". *International Journal of Statistics and Probability* **11(1)**, January 2022, 29–39.

135) Y.H. Jiang, T. Liu, Z. Lou, J.S. Rosenthal, S. Shangguan, F. Wang, and Z. Wu (December 2020), "Convergence Rates of Attractive-Repulsive MCMC Algorithms". *Methodology and Computing in Applied Probability* **24** (2022), 2029–2054.

136) G.M. Eadie, J.J. Webb, and J.S. Rosenthal (April 2021) [N-A], "Bayesian Inference of Globular Cluster Properties using Distribution Functions". *The Astrophysical Journal* **926(2)**, 211, February 2022.

137) J.J. Slater, P.E. Brown, J.S. Rosenthal, and J. Mateu (April 2021) [N-A], "Capturing Spatial Dependence of COVID-19 Case Counts with Cellphone Mobility Data". *Spatial Statistics* 100540 (2022).

138) J.M. Dmetrichuk, J.S. Rosenthal, J. Man, M. Cullipa, and R.A. Wells (May 2021) [N-A], "Non-Natural Manners of Death in Ontario: Effects of the COVID-19 Pandemic and Related Public Health Measures". *The Lancet Regional Health – Americas* **7**, March 2022, 100130.

139) Q. Zhou, Jun Yang, D. Vats, G.O. Roberts, and J.S. Rosenthal (May 2021) [N-A], "Dimension-free Mixing for High-dimensional Bayesian Variable Selection". *Journal of the Royal Statistical Society, Series B* **84(5)** (November 2022), 1751–1784.

140) A. Dharamshi, V. Ngo, and J.S. Rosenthal (May 2021), "Sampling by Divergence

Minimization". *Communications in Statistics – Simulation and Computation*, to appear. (Accepted March 2023.)

141) R.V. Craiu, P. Gustafson, and J.S. Rosenthal (Sept 2021), "Reflections on Bayesian Inference and Markov Chain Monte Carlo". *Canadian Journal of Statistics* **50(4)** (2022), 1213–1227.

142) S. Sixta and J.S. Rosenthal (December 2021), "Convergence Rate Bounds for Iterative Random Functions Using One-Shot Coupling". *Statistics and Computing* **32(5)** (Oct 2022), art. 71.

143) D. Rosenthal and J.S. Rosenthal (December 2021), "Optimal Strategies and Rules for the Game of Horse". *Notices of the American Mathematical Society* **69(6)** (June/July 2022), 1014–1017.

144) G.O. Roberts and J.S. Rosenthal (December 2021), "Polynomial Convergence Rates of Piecewise Deterministic Markov Processes". *Methodology and Computing in Applied Probability* **25(6)** (2023), 5–18.

145) M.A. Gallegos-Herrada, D. Ledvinka, and J.S. Rosenthal (March 2022), "Equivalences of Geometric Ergodicity of Markov Chains". *Journal of Theoretical Probability*, to appear. (Accepted January 2023.)

146) S. Chen, J.S. Rosenthal, A. Dote, H. Tamura, and A. Sheikholeslami (April 2022), "Optimization via Rejection-Free Partial Neighbor Search". *Statistics and Computing* **33(6)** (Dec 2023), art. 131.

147) J.J. Slater, A. Bansal, H. Campbell, J.S. Rosenthal, P. Gustafson, and P.E. Brown (April 2022) [N-A], "A Bayesian Approach to Estimating COVID-19 Incidence and Infection Fatality Rates". *Biostatistics* **25(2)** (Apr 2024), 354–384.

148) G.O. Roberts and J.S. Rosenthal (May 2022), "Football Group Draw Probabilities and Corrections". *Canadian Journal of Statistics*, to appear. (Accepted July 2023.)

149) S. Chen, J.S. Rosenthal, A. Dote, H. Tamura, and A. Sheikholeslami (October 2022), "Sampling via Rejection-Free Partial Neighbor Search". *Computational Statistics & Data Analysis*, to appear. (Accepted August 2023.)

Refereed Book Chapters:

1) J.S. Rosenthal (June 2008), "Optimal Proposal Distributions and Adaptive MCMC". Chapter 4 of the book *Handbook of Markov chain Monte Carlo*, ed. by S. Brooks, A. Gelman, G.L. Jones, and X.-L. Meng, Chapman & Hall, 2011.

2) J.S. Rosenthal (February 2013), "Lessons From a Twisted Career Path". Chapter 11 of the COPSS award winners volume "Past, Present, and Future of Statistical Science" (X. Lin, C. Genest, D.L. Banks, G. Molenberghs, D.W. Scott, and J.-L. Wang, eds.), 117–128, 2014. CRC Press.

3) J.S. Rosenthal (February 2013), "Optimising and Adapting the Metropolis Algorithm". Chapter 6 of the SSC volume "Statistics in Action: A Canadian Outlook" (J.F. Lawless, ed.), 93–108, 2014. Chapman & Hall / CRC.

4) J.S. Rosenthal (February 2022), "How Markov's Little Idea Transformed Statistics". Chapter in *Handbook of the History and Philosophy of Mathematical Practice* (Springer Nature), 2023, B. Sriraman, ed.

5) J.S. Rosenthal (September 2023), "Optimising and Adapting Metropolis Algorithm Proposal Distributions". *Handbook of Markov chain Monte Carlo*, 2nd ed., to appear.

Refereed Conference Proceedings:

1) G.O. Roberts and J.S. Rosenthal (May 1999), "Recent progress on computable bounds and the simple slice sampler". In *Monte Carlo Methods*, N. Madras (ed.), Fields Institute Communications, AMS, Providence, R.I., 2000, 123–130.

2) J.A. Fill, M. Machida, D.J. Murdoch, and J.S. Rosenthal (June 1999), "Extension of Fill's perfect rejection sampling algorithm to general chains (extended abstract)". In *Monte Carlo Methods*, N. Madras (ed.), Fields Institute Communications, AMS, Providence, R.I., 2000, 37–52.

3) J.J. Lu, J.S. Rosenthal, and A.E. Shaffer (January 2000), "Crossword puzzles: a case study in compute-intensive meta-reasoning". *Proceedings of the third International Workshop on First order Theorem Proving (FTP '00)*, St. Andrews, Scotland, 2000.

4) A. Borodin, G.O. Roberts, J.S. Rosenthal, and P. Tsaparas (November 2000), "Finding Authorities and Hubs From Link Structures on the World Wide Web". *Proceedings of the Tenth International World Wide Web Conference*, 2001. (Chosen as *Selected Area Highlight* for Hypermedia.)

5) T. Duchesne and J.S. Rosenthal (April 2002), "A stochastic justification of some simple reliability models". Communications of the Third International Conference on Mathematical Methods in Reliability: Methodology and Practice, H. Langseth and B. Linqvist, Eds. (2002), 211–214.

6) D.M. Day, I. Bevc, J.S. Rosenthal, T. Duchesne, L. Rossman, and F. Theodor (2003) [N-A], "Predicting Adult Offenders' Criminal Trajectories From Their Juvenile Criminal Trajectories". Poster presented at the 111th Convention of the American Psychological Association, Toronto, Canada.

7) I. Bevc, T. Duchesne, J.S. Rosenthal, L. Rossman, F. Theodor, and E. Sowa (2003) [N-A], "Young Offenders' Diagnoses As Predictors of Subsequent Adult Criminal Behaviour". Poster presented at the 111th Convention of the American Psychological Association, Toronto, Canada.

8) D.M. Day, I. Bevc, T. Duchesne, J.S. Rosenthal, Y. Sun, and F. Theodor (2007) [N-A], "Criminal trajectories from adolescence to adulthood in an Ontario sample of offenders". In G. Bourgon, R.K. Hanson, J.D. Pozzulo, K.E. Morton Bourgon, and C.L. Tanasichuk (eds.), *The Proceedings of the 2007 North American Correctional and Criminal Justice Psychology Conference (User Report)*, 143–148. Public Safety Canada, Ottawa, 2008.

9) J.S. Rosenthal (2008), "Markov Chain Monte Carlo Algorithms: Theory and Practice". MCQMC'08 Conference Proceedings, published Sept 2009.

10) S. Richardson, L. Bottolo, and J.S. Rosenthal [N-A] (April 2010), "Bayesian models for sparse regression analysis of high dimensional data". *Bayesian Statistics 9* conference proceedings (Oxford University Press, October 2011), 539–560.

11) D.M. Day, J.D. Nielsen, A.K. Ward, Y. Sun, J.S. Rosenthal, I. Bevc, T. Duchesne, and L. Rossman (June 2011) [N-A], "Trajectories of Criminal Activity in a Sample of 378 Adjudicated Ontario Youth". Presented at the 72nd annual CPA conference / 2nd NACCJPC conference, Toronto, June 2, 2011.

12) M.A. Turner, J.S. Rosenthal, J. Chen, and C. Hao (January 2012) [N-A], "Adaptation to Climate Change in Preindustrial Iceland". *American Economic Review: Papers & Proceedings* **102(3)** (2012), 1–8.

13) Y. Yunusova, J.S. Rosenthal, J.R. Green, S. Shellikeri, J. Wang, and L. Zinman (September 2013), "Detection of Bulbar ALS using a comprehensive speech assessment battery". MAVEBA 2013 – 8th International Workshop on Models and Analysis of Vocal Emissions for Biomedical Applications, 2014.

14) C. Beaulac, J.S. Rosenthal, and D. Hodgson (October 2018), "A Deep Latent-Variable Model Application to Select Treatment Intensity in Survival Analysis". NeurIPS 2018 Machine Learning for Health (ML4H) workshop (digital acceptance).

Books:

1) J.S. Rosenthal (2000), "A First Look at Rigorous Probability Theory" (graduate-level textbook). World Scientific Publishing Company, Singapore. 177 pages. ISBN 981-02-4303-0 / 981-02-4322-7(pbk). [Second printing, 2003; third printing, 2005; fourth printing, 2006.] Second edition (very substantial revision; 221 pages), 2006, ISBN 981-270-370-5 / 981-270-371-3(pbk). [Second printing, 2007; third printing, 2009; fourth printing, 2010; fifth printing 2011; sixth printing 2013; seventh printing 2016; eighth & Kindle printing 2020.] [Solutions manual, "A Collection of Exercises in Advanced Probability Theory" by M. Soltanifar, L. Li, and J.S. Rosenthal, published electronically July 2010, updated January 2020 and August 2023.]

2) M.J. Evans and J.S. Rosenthal (2003), "Probability and Statistics: The Science of Uncertainty" (undergraduate-level textbook). W.H. Freeman Publishers, New York. 685 pages. ISBN 0-7167-4742-1. [Second printing, 2004; Spanish edition, Editorial Reverté, 2005.] Second edition, 2010, ISBN 1-4292-2462-2.

3) J.S. Rosenthal (2005), "Struck by Lightning: The Curious World of Probabilities" (book for the general public). HarperCollins Canada. 264 pages. ISBN 0-0020-0791-6 / 978-0006394952(pbk). [Canadian hardcover published September 2005; six printings; made numerous bestseller lists. Canadian paperback edition (including additional 18-page "PS" section) published September 2006; multiple printings; made numerous bestseller lists. Also published in the United States

by Joseph Henry Press, 2006, ISBN 0309097347; in Italy by Longanesi, 2006; in Australia and New Zealand by ABC Enterprises, 2006; in Slovenia by DMFA, 2007; in Germany and Austria and Switzerland by Eighborn, 2007; in Japan by Hayakawa, 2007 (paperback 2008); in India by Jaico, 2008; in the United Kingdom by Granta, 2008; in the Czech Republic by Academia, 2008; in Korea by Bupyo, 2010; in Spain by Tusquets, 2011; in China by Shanghai Scientific, 2013 (renewed 2017); in Turkey by Tubitak, 2017; and in Traditional Chinese by Streamer Publishing, May 2023. Excerpt published in *The Act of Writing*, 8th ed. (R. Conrad, ed.), April 2009. For details see probability.ca/sbl.]

4) J.S. Rosenthal (2018), "Knock on Wood: Luck, Chance, and the Meaning of Everything" (book for the general public). HarperCollins Canada. 333 pages. ISBN 9781443453073. [Canadian hardcover published October 2018. Canadian paperback published September 2019. Published in Croatia by Profil Knjiga in 2020, and in Japan by Hayakawa in January 2021. For details see probability.ca/kow.]

5) J.S. Rosenthal (2019), "A First Look at Stochastic Processes" (advanced-undergraduate-level textbook). World Scientific Publishing Company, Singapore. 202 pages. ISBN 978-981-120-790-7 / 978-981-120-897-3(pbk) / 978-981-120-792-1(ebook).

Non-Refereed Publications:

1) G. Baumgartner, J. Chan, J.S. Rosenthal (February 1988), "On Packing a Train". Winning paper in *Competition in Mathematical Modeling*. Published in *Journal of Undergraduate Mathematics and its Applications*, Vol. **9** No. **4** (1988), 353–371.

2) P. Diaconis and J.S. Rosenthal (March 1992), in "Discussion on Gibbs sampler and other Markov chain Monte Carlo methods". *Journal of the Royal Statistical Society, Series B*, Vol. **55** No. **1** (1993), 71. (Invited.)

3) J.S. Rosenthal (June 1992), comment on "Iterative simulation using single and multiple sequences" by A. Gelman, D. Rubin, and C. Geyer. *Statistical Science*, Vol. **7** No. **4** (1992), 498. (Invited.)

4) J.S. Rosenthal (June 1994), "Theoretical rates of convergence for Markov chain Monte Carlo". Computing Science and Statistics: Proceedings of the 26th Symposium on the Interface (J. Sall and A. Lehman, eds.). Interface Foundation of North America, Vol. **26**, 486–489 (1994).

5) J.S. Rosenthal (September 1994), "Markov chain Monte Carlo algorithms". Proceedings of IT/STAT Workshop '94.

6) J.S. Rosenthal (August 1998), "They Zapped Me with Lasers" (article about laser-eye surgery). *Outreach Connection*, September 23, 1998, p. 14.

7) J.S. Rosenthal (August 2002), Discussion of "Efficient construction of reversible jump Markov chain Monte Carlo proposal distributions", by S.P. Brooks, P. Giudici, and G.O. Roberts. *Journal of the Royal Statistical Society, Series B*. (Invited.)

8) G.O. Roberts and J.S. Rosenthal (March 2003), "Markov chain Monte Carlo". Article for Section 10, Probability Theory, of the *Encyclopedia of the Actuarial Sciences* (S. Asmussen, ed.), 10 pages, 2003.

9) J.S. Rosenthal (May 2003), Margins of error in opinion polls. At
http://probability.ca/jeff/writing/pollerror.html

10) J.S. Rosenthal, Drawing of Jean Chrétien. *Fred* (Fredricton community newspaper), January 2004 issue, p. 21.

11) J.S. Rosenthal (March 2005), Biography of the statistician W.K. Hastings. At
http://probability.ca/hastings/

12) J.S. Rosenthal (April 2005), The magical mathematics of music. *Plus Magazine* **35**, May 2005.

13) J.S. Rosenthal (April 2005), How probability theory nearly destroyed Canada. *Outreach Connection*, Issue #620 (October 14, 2005), pp. 8–9.

14) J.S. Rosenthal (April 2005), Quizzes about probabilities. Published in the *Saturday Night Magazine* issues of June – October, 2005.

15) J.S. Rosenthal (June 2005), "Monty Hall, Monty Fall, Monty Crawl". *Math Horizons* (September 2008 issue), pages 5–7.

16) J.S. Rosenthal (September 2005), Article about the probabilities of the Toronto International Film Festival's ticket lottery system. *National Post* (newspaper), Toronto section, p. 20, September 10, 2005.

17) J.S. Rosenthal (August 2006), A simple solution to the Monty Hall problem. Available at:
http://probability.ca/jeff/writing/montysimple.html

18) J.S. Rosenthal (September 2006), Research Contributions of the CRM-SSC Award Winner. *Le Bulletin du CRM* **12(2)** (2006), 7–14.

19) J.S. Rosenthal (October 2006), Book review of *King of Infinite Space: Donald Coxeter, the Man Who Saved Geometry.* Published in the *Globe and Mail*, page D10, October 14, 2006.

20) J.S. Rosenthal (October 2006), Statistical analysis of "insider" Ontario lottery wins, as part of an investigation by the CBC television program *Fifth Estate.* (The investigation led to loads of media coverage, Ontario legislature debate, an Ombudsman's investigation, the lottery CEO's resignation, significant lottery policy reforms, several police investigations, repayment of some customers' lottery winnings, and at least three arrests.) More information is available at:
http://probability.ca/sbl/#fifthestate

21) J.S. Rosenthal (October 2006), Probability calculations for 27 different Discovery Channel (U.S.A.) video cell phone "What Are The Odds?" segments. (Also participated in the videotaping of them.)

22) J.S. Rosenthal (February 2007), Statistical analysis of lottery draw numbers and of retail seller major prize wins, for the Nova Scotia Gaming Commision (40 page report).

23) J.S. Rosenthal (November 2007), "Lottery fraud: Solving crimes using math". *RCMP Gazette magazine* **70(1)** (2008), 18–19 (published in both English and French). Reprinted in *Convergence* (Association des statisticiennes et statisticiens du Québec), Volume XIII(2), July 2008, 15–16.

24) J.S. Rosenthal (March 2008), "I'm Biased, Your Biased". Written for *Sublime Magazine.*

25) D.M. Day, I. Bevc, F. Theodor, J.S. Rosenthal, and T. Duchesne (October 2008) [N-A], "Change and continuity in criminal offending: Criminal trajectories of the 'Toronto' sample." Report for the Ontario Ministry of Children and Youth Services. (102 pages)

26) J.S. Rosenthal (October 2008), Brief statistical analysis of retail seller lottery wins in Atlantic Canada, for the Nova Scotia Gaming Corporation (NSGC).

27) J.S. Rosenthal, C. Mariano, M. Chauhan, and T. Scrieciu, (June 2010), Koodo Mobile Savings Calculator (online customer plan optimisation tool).

28) J.S. Rosenthal (January 2009), Statistical analysis of retail seller major lottery wins in Western Canada, for CBC TV National News (7 pages).

29) J.S. Rosenthal (February 2009), Brief statistical analysis of second- and third-place lottery wins, for CBC national radio news.

30) D.M. Day, J.D. Nielsen, A.K. Ward, J.S. Rosenthal, Y. Sun, I. Bevc, and T. Duchesne (December 2010) [N-A], "Criminal Trajectories of Two Subsamples of Adjudicated Ontario Youths". Report for the National Crime Prevention Centre (NCPC), at Public Safety Canada. (52 pages)

31) J.S. Rosenthal (July 2011), "Statistical analysis related to R. v. Leighton Hay". Expert witness report (followed by a deposition) about an appeal to the *Supreme Court of Canada.*

32) J.S. Rosenthal (October 2011), "The Mathematics of Your Next Family Reunion". Published in *Plus Magazine*, December 2011.

33) J.S. Rosenthal (February 2013), "Monte Carlo to the Rescue". Short article for the *Royal Society of Canada* Academy III Bulletin.

34) J.S. Rosenthal (March 2013), "The Rosenthal Fit: A Statistical Ranking of NCAA Men's Basketball Teams". Report for the TSN sports television channel web site.

35) J.S. Rosenthal (August 2013), Mathematics problem about the Metropolis algorithm of 1953. Published in the *Pi Mu Epsilon Journal* **13(9)** (Fall 2013), 522–523.

36) J.S. Rosenthal (September 2013), Confidential report (30 pages) about statistical analysis of retailer lottery win probabilities.

37) J.S. Rosenthal (February 2014), "Technical analysis for Agrium 2014 final offer arbitration". Expert witness report (25 pages) for Davis LLP in civil hearing.

38) J.S. Rosenthal (September 2014), "Probability, Justice, and the Risk of Wrongful Conviction". *The Mathematics Enthusiast* **12** (June 2015), 11–18.

39) J.S. Rosenthal (October 2014), "Pi Instant: March 14, 2015, at 9:26:53.58979... a.m.". *Math Horizons*, February 2015 issue, p. 22. Available at: http://probability.ca/jeff/writing/PiInstant.html

40) J.S. Rosenthal (January 2015), "Statistical Analysis of Deaths at Residential Schools" (282 pages including tables and graphs). Statistical analysis conducted on behalf of the Truth and Reconciliation Commission (TRC) of Canada, for their report "Honouring the Truth, Reconciling for the Future".

41) J.S. Rosenthal (August 2015), "The kids are alright: divide by n when estimating variance". *IMS Bulletin*, p. 9, December 2015.

42) J.S. Rosenthal (June 2016), "Mathematics to Scale". *Pi In The Sky*, Issue 20, 2017, 3–5.

43) J.S. Rosenthal (January 2017), "Statistical analysis related to R. v. Yuk Yuen Lee". Expert witness report (and later testimony) for marijuana grow-op trial.

44) J.S. Rosenthal (October 2017), "Statistical analysis related to Double Diamond and ThermoEnergy". Expert witness report for civil lawsuit.

45) J.S. Rosenthal (March 2018), "Statistical analysis related to R. v. David Zheng". Expert witness report for drug trafficking trial.

46) J.S. Rosenthal (May 2018), "Statistical analysis related to excessive Vermont lottery wins". Internal report for the Vermont Lottery company.

47) J.S. Rosenthal (June 2018), "Statistical Analysis of Ontario 2018 Election Vote-Splitting". http://probability.ca/ontario2018/

48) J.S. Rosenthal (June 2018), "Ontario's Center-Left Statistical Conundrum". http://probability.ca/jeff/writing/ontario2018art.html

49) J.S. Rosenthal (August 2018), "Statistical Analysis Related to Alberta Health Billing Audits". Expert witness report for a medical billing audit review.

50) J.S. Rosenthal (August 2018), "Computing Margins of Error in Opinion Polls". At

http://probability.ca/jeff/writing/margerror.html

51) J.S. Rosenthal (October 6, 2018), "The luck of the judge: Why surprising but meaningless coincidences arise all the time". *The Globe and Mail* newspaper, p. O9.

https://www.theglobeandmail.com/opinion/article-the-luck-of-the-judge/

52) J.S. Rosenthal (November 2019), "Strategic Voting with Ranked Ballots". At

http://probability.ca/jeff/rankedstrategic.html

53) J.S. Rosenthal (October 2020), Expert witness report for a Tax Court of Canada hearing about luck versus skill in online poker (53 pages).

54) J.S. Rosenthal (November 2020), "Polling sometimes misses the mark, but without it we'd be in the dark". Published in the *Globe and Mail* opinion section, Nov. 14, 2020, page O9.

55) J.S. Rosenthal (November 2020), "Polls, Damned Polls, and Statistics". *IMS Bulletin* **50(1)**, p. 4, January/February 2021.

56) M. Fulford and J.S. Rosenthal (April 2021), "The Annals Quadfecta 23". *IMS Bulletin* **50(4)**, p. 18, June/July 2021.

57) J.S. Rosenthal (April–July, 2021), Probability calculations for 10 episodes of Smithsonian Channel documentary "History by the Numbers".

58) J.S. Rosenthal (August 2021), "Olympic sprint false start failed to get off the blocks". *Toronto Star*, p. A15, Aug 10, 2021.

59) J.S. Rosenthal (August 2021), "Random Race Starter Timer to Reduce Anticipation". Available at: probability.ca/startcalcs

60) J.S. Rosenthal (August 2021), "Online Random Race Starter Timer". Available at: probability.ca/starter

61) G.O. Roberts and J.S. Rosenthal (March 2022), "Football Group Draw Methods and Probabilities". Interactive web page. Available at: probability.ca/fdraw

62) J.S. Rosenthal (March 31, 2022), "World Cup groups – what are the odds?". [Web title: "For kicks, we came up with a fairer way to determine the World Cup draw".] Toronto Star, opinion section, p. A17, March 31, 2022.

63) J.S. Rosenthal (August 2022), "Saving sprint disqualifications like Devon Allen's with a unique 'random start' solution". Opinion piece in *Athletics Illustrated*.

64) J.S. Rosenthal (October 2022), "Crowdmark Lessons I Have Learned". Detailed notes about my experiences with the grading management software Crowdmark. Inspired Crowdmark's "cheat sheet" documentation. Available at: http://probability.ca/crowdmark/

Submitted Manuscripts:

1) J.J. Slater, P.E. Brown, J.S. Rosenthal, and J. Mateu (November 2022), "Leveraging cellphone-derived mobility networks to assess COVID-19 travel risk".

2) R.M. Neal and J.S. Rosenthal (May 2023), "Efficiency of reversible MCMC methods: elementary derivations and applications to composite methods".

3) D. Ledvinka and J.S. Rosenthal (September 2023), "Equivalence of Starting Point Cutoff and the Concentration of Hitting Times on a General State Space".

4) S. Sixta, J.S. Rosenthal, and A. Brown (September 2023), "Bounding and estimating MCMC convergence rates using common random number simulations".

Unpublished Manuscripts:

1) J.S. Rosenthal (January 1989), "The de Branges proof of the Bieberbach Conjecture". Master's Thesis, Department of Mathematics, Harvard University.

2) J.S. Rosenthal (April 1992), "Rates of Convergence for Gibbs Sampler and other Markov Chains". Ph.D. thesis, Department of Mathematics, Harvard University. (Dr. Persi Diaconis, advisor.)

3) J.S. Rosenthal (November 1992), "Convergence of Pseudo-finite Markov Chains".

4) M. Bramson, J. Quastel, and J.S. Rosenthal (May 2004), "When Can Martingales Avoid Ruin?".

5) J.S. Rosenthal (April 2007), "Expressions for the Markov Chain CLT Variance". (Superceded by joint paper with Häggström, above.)

6) J.S. Rosenthal and A.H. Yoon (August 2020), "The Salience and Longevity of Judicial Precedent: A Case Study of the U.S. Supreme Court".

Other Research Papers Completed under my Supervision:

1) A.L. Gibbs, "Bounding the convergence time of the Gibbs sampler in Bayesian image reconstruction". *Biometrika* **87(4)** (2000), 749–66.

2) A.L. Gibbs, "Convergence in the Wasserstein metric for Markov chain Monte Carlo algorithms with applications to image restoration". *Stochastic Models* **20(4)** (2004), 473–92.

3) A.L. Gibbs and F. Su, "On choosing and bounding probability metrics". *International Statistical Review* **70** (2001), 419–35.

4) W.K. Yuen, "Generalization of discrete-time geometric bounds to the convergence rate of Markov processes on $\mathbf{R}^n$". *Stochastic Models* **18(2)** (2002), 301–331.

5) W.K. Yuen, "Applications of geometric bounds to the convergence rate of Markov chains on $\mathbf{R}^n$", *Stochastic Processes and their Applications* **87** (2000), 1–23.

6) M. Bédard, "Weak Convergence of Metropolis Algorithms for Non-iid Target Distributions". *Annals of Applied Probability* **17** (2007), 1222–44.

7) M. Bédard, "Optimal Acceptance Rates for Metropolis Algorithms: Moving Beyond 0.234". *Stochastic Processes and their Applications*, **118** (2008), 2198–2222.

8) M. Bédard, "Efficient Sampling using Metropolis Algorithms: Applications of Optimal Scaling Results". *Journal of Computational and Graphical Statistics* **17** (2008), 312–332.

9) A. Jasra and Chao Yang, "A regeneration proof of the central limit theorem for uniformly ergodic Markov chains". *Statistics and Probability Letters* **78(12)** (Sept. 1, 2008), 1649–1655.

10) Chao Yang, "On The Weak Law of Large Numbers for Unbounded Functionals for Adaptive MCMC". Submitted for publication, February 2008.

11) Chao Yang, "Recurrent and Ergodic Properties of Adaptive MCMC". Submitted for publication, February 2008.

12) Y. Bai, "Simultaneous drift conditions for Adaptive Markov Chain Monte Carlo algorithms". Submitted for publication, January 2009.

13) Y. Bai, "An adaptive directional Metropolis-within-Gibbs algorithm". Submitted for publication, April 2009.

14) J. Negrea, "Optimal Scaling and Shaping of Random Walk Metropolis via Diffusion Limits of Block-I.I.D. Targets". Submitted for publication, February 2019.

Invited Research Lectures:

1) Harvard/MIT, Prob and Phys Seminar, February 1991, "Rates of Convergence for Data Augmentation".

2) Stanford University, Stats Seminar, July 1991, "Rates of Convergence for Gibbs Sampler for Variance Component Models".

3) U of Ottawa, Math Colloquium, Jan. 9, 1992, "Convergence to Stationarity of Random Walks on Groups".

4) U of Minnesota, Prob Seminar, Jan. 31, 1992, "The Cut-off Phenomenon for Random Walks on Groups".

5) Carnegie-Mellon U, Stat Colloq, Feb. 12, 1992, "Rates of Convergence for the Gibbs Sampler".

6) University of British Columbia, Math Colloq, Feb. 14, 1992, "Convergence to Stationarity of Random Walks on Groups".

7) University of Victoria, Math Colloq, Feb. 18, 1992, "Convergence to Stationarity of Random Walks on Groups".

8) McMaster University, Math Colloq, Feb. 21, 1992, "Rates of Convergence for the Gibbs Sampler".

9) Queen's University, Math Colloq, Feb. 24, 1992, "Rates of Convergence for the Gibbs Sampler".

10) University of Toronto, Stat Colloq, Feb. 25, 1992, "Rates of Convergence for the Gibbs Sampler".

11) U of Minnesota, Stat Colloq, Nov. 12, 1992, "Theoretical Rates of Convergence for the Gibbs Sampler".

12) U of Wisconsin at Madison, Prob Seminar, Jan. 28, 1993, "Harris Recurrence, and Convergence Rates for the Gibbs Sampler".

13) U of Minnesota, Prob Seminar, Feb. 12, 1993, "Harris Recurrence, and Convergence Rates for the Gibbs Sampler".

14) U of Minnesota, Math Ed Seminar, April 28, 1993, "Classroom experiments in cooperative learning."

15) IMS satellite conference on Directions in Probability, Stanford, CA. Invited talk, Aug. 8, 1993, "Rates of Convergence for the Gibbs Sampler".

16) IMA seminar on Applied Probability, Minneapolis MN. November 3, 1993, "Coupling and minorization conditions for Markov chain Monte Carlo".

17) Guest lecturer, course on Teaching Preparation, University of Minnesota. November 17, 1993, "Cooperative Learning".

18) U of Chicago, Stats colloquium, Nov. 29, 1993, "Theoretical convergence rates for Markov chain Monte Carlo".

19) York University, probability seminar, March 1, 1994, "Minorization and drift conditions for Markov chain Monte Carlo".

20) U of Toronto, Stats colloquium, March 17, 1994, "Theoretical convergence rates for Markov chain Monte Carlo".

21) McMaster university, stats seminar, March 23, 1994, "The cut-off phenomenon for random walks on compact groups".

22) Interface '94 conference, Research Triangle Park, NC. Invited talk, June 18, 1994, "Theoretical convergence rates for Markov chain Monte Carlo".

23) Conference on Markov chain Monte Carlo, Mt. Holyoke, MA. Invited talk, June 26, 1994. "Theoretical convergence rates for Markov chain Monte Carlo".

24) Special Probability Series, Dept. of Mathematics, University of Wisconsin – Madison. Four invited talks, Sept. 6,7,8,9, 1994. "Convergence of Markov chain Monte Carlo".

25) IEEE-IMS Information Theory Workshop on Information Theory and Statistics. Invited talk, Oct. 29, 1994. "Markov chain Monte Carlo algorithms".

26) University of Miami, math colloquium, April 21, 1995, "Convergence of Markov chain Monte Carlo".

27) University of Minnesota, probability seminar, May 5, 1995, "Shift-coupling and minorization conditions for Markov chains".

28) Colorado State University, statistics colloquium, May 11, 1995, "Shift-coupling and minorization conditions for Markov chains".

29) Carleton University, Workshop on Simulation and Monte Carlo Algorithms, Sept. 30, 1995, "Convergence rates for Markov chain Monte Carlo algorithms".

30) York University, probability seminar, Nov. 3, 1995, "Optimal scaling for Langevin algorithms".

31) University of Western Ontario, statistics colloquium, Nov. 9, 1995, "Convergence rates for Markov chain Monte Carlo algorithms".

32) University of Waterloo, statistics colloquium, Feb. 8, 1996, "Convergence rates for Markov chain Monte Carlo algorithms".

33) University of Toronto, math colloquium, April 3, 1996, "Convergence rates for Markov chains".

34) Università di Pavia (Italy), statistics seminar, April 23, 1996, "Convergence rates for Markov chain Monte Carlo algorithms".

35) Mt. Holyoke College, conference on Stochastic Inference, Monte Carlo, and Empirical Methods, June 30, 1996, "Recent results on convergence of Markov chain Monte Carlo".

36) Technische Universitaet Berlin (Germany), probability colloquium, December 11, 1996, "Convergence Rates for Markov chain Monte Carlo Algorithms".

37) Technische Universitaet Berlin (Germany), probability seminar, December 12, 1996, "The cutoff phenomenon for random walks on compact groups".

38) Dartmouth College, mathematics colloquium, March 6, 1997, "The cutoff phenomenon for random walks on compact groups".

39) Statistical Society of Canada, invited talk (with discussion), Fredericton, June 2, 1997, "Markov chain Monte Carlo: Some practical implications of theoretical results".

40) Queen's University, mathematics and statistics colloquium, "Convergence of Gibbs samplers for uniform distributions". January 30, 1998.

41) University of Guelph, mathematics and statistics colloquium, "Convergence of Gibbs samplers for uniform distributions". March 27, 1998.

42) Workshop on Probability Theory and Applications, Nottingham Trent University (England), "The Mathematics of Markov chain Monte Carlo algorithms". Invited keynote afternoon talk, April 24, 1998.

43) University of Cambridge (England), Statistical Laboratory seminar, "Slice sampler Markov chains". April 28, 1998.

44) University of Warwick (England), Workshop on Randomised Algorithms and Stochastic Stability, "A stability result for general (non-Markovian) random sequences". July 28, 1998.

45) Canadian Mathematical Society, winter meeting, probability session, Kingston, Ontario, "The Mathematics of Markov chain Monte Carlo". December 14, 1998.

46) University of Iowa (U.S.A.), statistics colloquium, "Convergence of Gibbs samplers for uniform distributions". April 15, 1999.

47) Fields Institute, Toronto, probability seminar, "Slice sampler Markov chains". May 26, 1999.

48) Universita di Pavia (Italy), Workshop on Highly Structured Stochastic Systems, main speaker, September 14–18, 1999.

49) Concordia University, *Université du Québec à Montréal*, and *Centre de Recherches en Mathematiques*, colloquium, "Markov chain convergence times and pseudo-small sets". Montréal, March 10, 2000.

50) University of Western Ontario, seminar, "Markov chain convergence times and pseudo-small sets". March 16, 2000.

51) Bernoulli Society / IMS meeting, Guanajuato, Mexico, invited speaker, "Markov chain convergence times and pseudo-small sets". May 15–20, 2000.

52) University of Lancaster (England), probability seminar, "Convergence of perturbed Markov chains". June 28, 2000.

53) Monte Carlo 2000 Conference, Monaco, invited speaker, "Convergence of perturbed Markov chains". July 3–5, 2000.

54) Colby College (Maine), mathematics colloquium, "How Quickly Does Randomness Set In?". October 2, 2000.

55) Université Laval, statistics seminar, "Convergence de l'échantillonneur de Gibbs pour les distributions uniformes" (in French). December 1, 2000.

56) University of Toronto, statistics seminar, "An Odd Assortment of Probability Applications". January 18, 2001.

57) York university, mathematics colloquium, "Convergence of Gibbs samplers for uniform distributions". April 5, 2001.

58) SSC/WNAR/IMS workshop, Simon Fraser University, invited talk, "Convergence of Gibbs samplers for uniform distributions". June 11, 2001.

59) TMR Workshop on MCMC Model Choice, Spetses (Greece), invited talk, "Some Thoughts about Computable Bounds for Reversible Jump Algorithms". August 8, 2001.

60) Probability seminar, University of Lancaster, "Coupling Constructions for Markov Chains". June 13, 2002.

61) IMS Annual Meeting, Banff, "A simulation approach to convergence rates for Markov chain Monte Carlo algorithms'". July 29, 2002.

62) 4th Probability Symposium, Banff, "One-Shot Coupling for Markov Chains". July 31, 2002.

63) University of Minnesota, Statistics Seminar, "Coupling Constructions for Markov Chains". October 24, 2002.

64) University of Minnesota, Probability Seminar, "When Can Supermartingales Avoid Ruin?". October 25, 2002.

65) University of California at Berkeley, Probability Seminar, "When Can Supermartingales Avoid Ruin?". November 22, 2002.

66) EPSRC short course (11 hours, joint with G.O. Roberts), Lancaster, U.K., "Understanding MCMC". July 21–25, 2003.

67) LMS Durham (U.K.) Symposium on Markov Chains, "Statistics and MCMC". July 27, 2003.

68) LMS Durham (U.K.) Symposium on Markov Chains, "Optimal Scaling of Metropolis-Hastings Proposal Distributions". August 2, 2003.

69) Workshop on Particle and Monte Carlo Methods, Barcelona, Spain, July 24–25, 2004. "Coupling constructions and MCMC convergence".

70) *Adap'ski* Workshop on Adaptive Monte Carlo Algorithms, Bormio, Italy, January 9–11, 2005. "Coupling and Ergodicity of Adaptive MCMC".

71) Statistics colloquium, Université de Montréal, "Adaptive MCMC: A Java Applet's Perspective". March 18, 2005.

72) Mathematics and Statistics colloquium, York University, "Adaptive MCMC: A Java Applet's Perspective". March 31, 2005.

73) Research lecture (in honour of CRM-SSC Prize), SSC annual meeting, University of Western Ontario, "A random walk through the big Metropolis (couples welcome)". May 31, 2005.

74) Mathematics and Statistics colloquium, University of Ottawa, "Adaptive MCMC: A Java Applet's Perspective". November 25, 2005.

75) Statistics seminar, University of Florida, "Adaptive MCMC: A Java Applet's Perspective". February 23, 2006.

76) Statistics seminar, Carnegie Mellon University, "Adaptive MCMC: A Java Applet's Perspective". May 1, 2006.

77) Invited lecture, "New Developments in MCMC" workshop, Warwick (England), August 2006.

78) Mathematics colloquium, University of Prince Edward Island, "Probability Calculations Using Martingales". September 27, 2006.

79) "Rounds" presentation about probabilities, Institute for Clinical Evaluative Sciences (ICES), January 10, 2007.

80) Research lecture (in honour of CRM-SSC Prize), *Centre de Recherches Mathématiques*, Montréal, "Les marches aléatoires et les algorithmes MCMC" (in French). January 12, 2007.

81) Colloquium, Institute for the History and Philosophy of Science and Technology, University of Toronto, "From Gambling Games to Monte Carlo Algorithms". January 24, 2007.

82) Statistics seminar, University of Chicago, "Adaptive MCMC: Challenges and Opportunities". March 5, 2007.

83) Gentry Lectures, Wake Forest University, North Carolina, "What is MCMC?" and "Coupling and Convergence of MCMC", March 8–9, 2007.

84) Math colloquium, Colby College, "What is MCMC?", March 19, 2007.

85) Tutorial about MCMC (90 mins), DIMACS (New Jersey) Workshop, "MCMC: Synthesizing Theory and Practice", June 4, 2007.

86) Statistics seminar, Dalhousie University, "Adaptive MCMC: Challenges and Opportunities", June 8, 2007.

87) Short course (7 hours, joint with G.O. Roberts), New Directions in Monte Carlo Methods, Fleurance, France, "Coupling and Convergence for MCMC", June 25–29, 2007.

88) Statistics seminar, University of Western Ontario, "Adaptive MCMC: Challenges and Opportunities", October 25, 2007.

89) Statistics seminar, Harvard University, "Adaptive MCMC: Challenges and Opportunities", November 5, 2007.

90) University of Toronto, Math Graduate Students seminar, "Coupling of Markov Chains". November 13, 2007.

91) Fields Institute, Grad Day talk, "What is MCMC?". November 17, 2007.

92) Canada-Mexico Statistics Meeting, Guanajuato, "Adapting the Metropolis Algorithm", February 21, 2008.

93) Plenary speaker, MCQMC Conference, Montreal, "Markov Chain Monte Carlo Algorithms: Theory and Practice", July 8, 2008.

94) Keynote speaker, ISBA Meeting, Australia, "Adaptive Markov Chain Monte Carlo Algorithms", July 24, 2008.

95) Statistics seminar, University of Michigan, "Adaptive Markov Chain Monte Carlo Algorithms", October 3, 2008.

96) Statistics seminar, Michigan State University, "Adaptive Markov Chain Monte Carlo Algorithms", October 7, 2008.

97) Presentation to SSC Board and Executive, "What is MCMC?", October 18, 2008.

98) Statistics seminar, University of Waterloo, "Adaptive Markov Chain Monte Carlo Algorithms", November 13, 2008.

99) Statistics seminar, University of Warwick (England), "Adaptive MCMC", December 12, 2008.

100) Keynote speaker, Graduate Student Research Day, Fields Institute, "Adaptive Markov Chain Monte Carlo Algorithms", May 5, 2009.

101) Plenary Speaker, Journées de Statistique, Bordeaux, France, "Des Résultats théoriques sur les algorithmes Monte Carlo par chaînes de Markov" (in French), May 26, 2009.

102) PIMS-SFU Distinguished Chair lecture series, Vancouver, June 4, 5, and 10, 2009.

103) Statistics seminar, University of Manitoba, "Adapting Markov Chain Monte Carlo Algorithms", Nov 10, 2009.

104) Statistics seminar, Centre de recherches mathématiques, "Comment optimiser l'algorithme Metropolis?" (in French), Nov 13, 2009.

105) Math colloquium, McMaster University, "Optimising and Adapting the Metropolis Algorithm". Feb 5, 2010.

106) Statistics seminar, University of Nevada at Las Vegas, "Optimising and Adapting the Metropolis Algorithm". Feb 19, 2010.

107) Presentation to graduating math/stat students, Université Laval, "Des proprietés théoriques des algorithmes MCMC" (in French). Apr 29, 2010.

108) Invited talk, SSC annual meeting, Quebec City, "Optimising and Adapting the Metropolis Algorithm" (delivered in French). May 24, 2010.

109) Invited talk, Simulation of Stochastic Networks workshop, Cambridge (U.K.), "Optimising and Adapting the Metropolis Algorithm" June 23, 2010.

110) Plenary talk, Field Lecture in Statistics, APICS meeting, Saint Mary's University, Halifax, "What is MCMC?". Oct 16, 2010.

111) Computational Statistics seminar and Statistics Colloquium joint talk, Guelph University, "Adapting Markov Chain Monte Carlo Algorithms", Oct 22, 2010.

112) Statistics seminar, Université des Antilles et de la Guyane (Guadeloupe), "Des propriétés théoriques des algorithmes MCMC" (in French), Dec 16, 2010.

113) Opening invited speaker, "Adap'ski III" IMS/ISBA joint meeting, Utah, "Conditions for Ergodicity of Adaptive MCMC Algorithms". Jan 3, 2011.

114) Opening plenary speaker, "MCMSki III" IMS/ISBA joint meeting, Utah, "MCMC Theory: What is it Good For?". Jan 5, 2011.

115) Plenary speaker, Optimization Days conference, HEC, Montreal, "Optimising and Adapting the Metropolis Algorithm", May 2, 2011.

116) Invited speaker, workshop on Computational Methods in Applied Sciences, Columbia University, New York City, "Adaptive Metropolis and Gibbs samplers", Sept 24, 2011.

117) Statistics seminar, Cornell University, Ithaca, New York, "Adaptive Metropolis and Gibbs samplers", Oct 12, 2011.

118) Mathematics and Statistics colloquium, Queen's University, Kingston, Ontario, "Adaptive Metropolis and Gibbs samplers", Oct 14, 2011.

119) Statistics seminar, University of Western Ontario, London, Ontario, "Adaptive Metropolis and Gibbs samplers", Nov 10, 2011.

120) Invited talk, workshop 12w5105, Banff International Research Station (BIRS), "Adapting Metropolis Algorithms and Gibbs samplers", March 19, 2012.

121) Seymour Geisser Distinguished Lecture, Department of Statistics, University of Minnesota, "Adapting Metropolis Algorithms and Gibbs Samplers". Apr 26, 2012.

122) Keynote speaker, 24'th Nordstat conference, Umea, Sweden, "Adaptive Markov Chain Monte Carlo Algorithms". June 13, 2012.

123) Research overview talk (20 min), New Fellows Presentations, Royal Society of Canada's 130th annual meeting, Ottawa, November 18, 2012.

124) Plenary speaker, 15th IMS Meeting of New Researchers in Statistics and Probability, "What is MCMC?" Montréal, August 2, 2013.

125) Introductory Overview Lecture, JSM 2013, "The Theoretical Underpinnings of MCMC". Montréal, August 5, 2013.

126) Invited speaker, JSM 2013, "Ergodicity of Adaptive MCMC Algorithms". Montréal, August 6, 2013.

127) Statistics seminar, University of Manitoba, "Adaptive MCMC For Everyone", Feb 26, 2015.

128) CRM Distinguished Lecture, University of Ottawa, "Adaptive MCMC For Everyone", May 1, 2015.

129) PIMS Young Researchers Conference, University of Alberta, "The Mathematics of MCMC", June 13, 2016.

130) Opening plenary speaker, IWAP Applied Probability Workshop, Toronto, "The Mathematics of MCMC", June 20, 2016.

131) Markov Lecture discussant, INFORMS 2016 conference, Nashville, "Adaptive MCMC for Everyone", Nov 14, 2016.

132) AMSI/SSA Lecturer, Australia: gave **ten** talks in total, including research, public, and conference talks. November/December 2016. For more information, see: http://research.amsi.org.au/amsi-ssa-lecturer/

133) Plenary speaker, Australian Statistical Conference, "Adaptive MCMC for Everyone". Dec 8, 2016.

134) Constance van Eeden Lecturer, University of British Columbia, "Adaptive MCMC for Everyone". April 6, 2017.

135) Alan B. Pritsker Distinguished Lecturer, Purdue University, "The Magic of Monte Carlo". April 27, 2017.

136) Warwick University statistics seminar, "Adaptive MCMC for Everyone". May 5, 2017.

137) Oxford University probability seminar, "Conditions for Convergence of Adaptive MCMC". May 8, 2017.

138) International Conference on Monte Carlo Methods and Applications, H.E.C., Montreal. "Adaptive MCMC for Everyone". July 7, 2017.

139) Workshop on Emerging Technologies and the Legal Process, University of Toronto, Faculty of Law. "Intelligibility of Legal Prediction Algorithms" (discussion leader). April 7, 2018.

140) I-Like Workshop on Monte Carlo Methods, "Adaptive MCMC for Everyone". University of Newcastle, U.K. June 22, 2018.

141) LMS Invited Lecture Series and CRiSM Summer School in Computational Statistics, University of Warwick. "Optimising and Adapting the Metropolis Algorithm" (three hours of lectures). July 9–13, 2018.

142) Plenary talk, MAA Seaway Section, University of Toronto at Mississauga, "From Monte Carlo to Markov Chains". October 13, 2018.

143) Seminar, Fujitsu Co-Creation Research Laboratory, UofT, "Introduction to MCMC Algorithms". October 24, 2018.

144) Statistics Research Day, University of Toronto, "Adaptive MCMC for Everyone". November 30, 2018.

145) Journées de statistique, l'Université du Québec à Montréal, "L'adaptation de l'algorithme Metropolis" (in French). March 15, 2019.

146) Math/Stat Colloqium, University of Windsor, "Adaptive MCMC for Everyone". March 26, 2019.

147) Seminar, Fujitsu Co-Creation Research Laboratory, UofT, "Computational Complexity and MCMC Algorithms". April 23, 2019.

148) Short talk, Fujitsu Co-Creation Research Laboratory, UofT, "Mathematical Foundations of Rejection-Free Metropolis". June 26, 2019.

149) Research talk, Joint Statistical Meetings, Denver, "Likelihood Inflated Sampling Algorithm". July 30, 2019.

150) Research talk, International Conference in Probability and Statistics in Celebration of the 80th Birthday of Gérard Letac, "Quantitative Convergence Bounds for MCMC Algorithms". Fields Institute, Toronto, April 3, 2020 (postponed due to COVID-19).

151) Rustagi Memorial Lecture, "The Magic of Monte Carlo". Ohio State University, April 14, 2020 (postponed due to COVID-19).

152) UGA/Clemson Joint Seminar, "The Magic of Monte Carlo". University of Georgia, April 16, 2020 (postponed due to COVID-19).

153) Seminar at Georgia Tech University, April 17, 2020 (postponed due to COVID-19).

154) Research talk, "Adaptive MCMC For Everyone". Symposium on Data Science and Statistics, Pittsburgh, June 4, 2020 (moved online due to COVID-19).

155) McGill University statistics research seminar (online), "Adaptive MCMC For Everyone". Oct 16, 2020.

156) Rustagi Memorial Lecture, Ohio State University (online), "Adaptive MCMC For Everyone". Oct 22, 2020.

157) Research seminar, Vector Institute (online), "Adapting the Metropolis Algorithm". Nov 20, 2020.

158) CMPS Symposium Seris, University of British Columbia (Okanagan Campus; online), "Adaptive MCMC For Everyone". Jan 13, 2021.

159) Algorithms & Computationally Intensive Inference seminar, University of Warwick (online), "MCMC Confidence Intervals and Biases Without CLTs". Jan 22, 2021.

160) Research seminar, Departamento Académico de Estadìstica, Instituto Tecnológico Autnomo de México, "Adaptive MCMC For Everyone". Jan 29, 2021.

161) Research seminar, Institute for Mathematics and its Applications, University of Minnesota (online), "Adapting the Metropolis Algorithm", March 23, 2021.

162) Presidential Invited Address, Statistical Society of Canada (online), "Probability, Statistics, and Murder", June 7, 2021.

163) Data Sciences Speaker Series at UofT (online), "The Magic of Monte Carlo", Oct 18, 2021.

164) Seminar, Fujitsu Co-Creation Research Laboratory, UofT (online), "Partial Neighbour Search for MCMC". Oct 26, 2021.

165) ASA Georgia Winter Lecture Series (online), "Monte Carlo Algorithms, from Theory to Practice". Dec 7, 2021.

166) Seminar, Fujitsu Co-Creation Research Laboratory, UofT (online), "Weight-Preserving Simulated Tempering". Mar 23, 2022.

167) Operations Research Seminar, Stanford University, "MCMC Lessons from an Industrial Collaboration". Feb 22, 2023.

168) Statistics Seminar, Stanford University, "Speeding Up Metropolis Using Theorems". Feb 28, 2023.

169) Seminar, Fujitsu Co-Creation Research Laboratory, UofT (online), "Conditional Probability from Monty Hall to Monte Carlo". Apr 26, 2023.

170) Stellar Stats 2023 workshop, University of Toronto, "MCMC for Globular Cluster Estimation". May 4, 2023.

171) Keynote Plenary Presentation, New England Statistics Symposium (NESS), "Speeding Up Metropolis Using Theorems". June 5, 2023.

172) Seminar talk, Delft University (Netherlands), "Equivalences of Geometric Ergodicity". June 12, 2023.

173) Computational Statistics Seminar, University of Warwick, "Equivalences of Geometric Ergodicity". June 23, 2023.

174) David Sprott Distinguished Lecture, University of Waterloo, "Speeding up Metropolis using Theorems". Oct 27, 2023.

175) Statistics Seminar, University of British Columbia, "Speeding up Metropolis using Theorems". Feb 22, 2024.

176) Statistics Seminar, Columbia University, "Speeding up Metropolis using Theorems". April 25, 2024.

177) Invited conference presentation, SSC, St. John's, "Experiments with MCMC Tempering Options". June 5, 2024.

Invited Non-Research Lectures:

1) U of T Alumni Homecoming, October 5, 2002.

2) U of T Senior Alumni Association, Monday Series, November 10, 2003.

3) *Word on the Street* presentation, Vancouver, September 25, 2005.

4) *Talk of the Town* live interview with Hal Wake, Vancouver, September 26, 2005.

5) University of Toronto Bookstore reading series, November 21, 2005.

6) *Keep Toronto Reading* series, Toronto Reference Library, February 16, 2006.

7) Paid speaker, First Canadian Humour Conference, Hamilton, February 18, 2006.

8) University Lecture Series, Markham, March 16, 2006.

9) University College Senior Common Room presentation, March 20, 2006.

10) U of T Senior Alumni Association, Wednesday Series, March 29, 2006.

11) Paid speaker, Responsible Gambling Council annual conference, Toronto, April 10, 2006.

12) U of T Senior Alumni Association, Monday Series, April 17, 2006.

13) U of T Senior Alumni Association, Tuesday Series, April 18, 2006.

14) Paid speaker, Empire Financial Group, Maui, April 25, 2006.

15) U of T International Alumni Council Assembly, May 13, 2006.

16) After-dinner speaker, *TechKnowFile* conference, Toronto, May 16, 2006.

17) Paid speaker, Purchasing Management Association Canada, Calgary, May 25–26, 2006.

18) University College Authors reading series, June 1, 2006.

19) Hamilton Public Library book club, September 19, 2006.

20) Hamilton Public Library public reading series, September 19, 2006.

21) Public lecture, University of Prince Edward Island, September 25, 2006.

22) Talk to Natural Philosophers group at U of T, October 10, 2006.

23) Talk to Council of Jewish Women, Toronto, October 11, 2006.

24) Public lecture, University of Western Ontario, October 17, 2006.

25) U of T Senior Alumni Association, Tuesday Series, October 24, 2006.

26) U of T Scarborough Senior Alumni Association, October 26, 2006.

27) University Lecture Series, St. George campus, October 27, 2006.

28) Royal Canadian Institute Sunday Science series, October 29, 2006.

29) Paid speaker, Scotia-McLeod investors dinner, November 1, 2006.

30) Talk to high school students, Crescent School, January 19, 2007.

31) Paid speaker, Canadian Life Insurance Medical Officers, May 14, 2007.

32) Distinguished Lecture in Statistics, Dalhousie University, June 8, 2007.

33) Talk to Oraynu Secular Jewish Congregation, "Struck by Lightning? Improbability and Everyday Choices". September 28, 2007.

34) University College Senior Common Room presentation, "Prof versus lottery: Statistics on the front page". November 26, 2007.

35) Talk at Toronto Police Services fraud conference, "What are the Odds: Lottery Fraud, Risk, and Probability". December 13, 2007.

36) Talk to Humanist Association of Toronto, "The Curious World of Probabilities". January 13, 2008.

37) Public Talk, Perimeter Institute, Waterloo, "The Curious World of Probabilities". April 2, 2008.

38) Presenter, Take Our Daughters and Sons to Work Day, U of T, "Probabilities, Games and the Law of Large Numbers". April 24, 2008.

39) Special guest speaker, Ontario Association for Mathematics Education conference (high school mathematics teachers), Branksome Hall, November 20, 2008.

40) Presenter about probability/statistics, U of T Fall Campus Day, Oct 24, 2009.

41) Paid speaker, Ontario Association of Law Enforcement Planners (OALEP) symposium, Stratford, "The Curious World of Probabilities", Nov 3, 2009.

42) Public talk, University of Manitoba, "The Curious World of Probabilities", Nov 9, 2009.

43) Public talk, L'Université de Montréal, "Pile ou face, et autres grandes questions de probabilité" (in French), Nov 12, 2009.

44) Paid speaker, Community of Federal Regulators workshop, Ottawa, "The Curious World of Probabilities", Nov 23, 2009.

45) University Forum Lecture Series, University of Nevada at Las Vegas, "The Curious World of Probabilities", Feb 18, 2010.

46) Public talk, Centre for Inquiry – Ontario, "The Curious World of Probabilities", Apr 16, 2010.

47) Public talk for World Statistics Day, University of Toronto, "Statistics in the Headlines", Oct 20, 2010.

48) Inaugural David K. Pickard Memorial Lecture, Harvard University, "How to Discuss Statistics on Live Television", Nov 13, 2010.

49) Featured speaker, Ontario Association for Mathematics Education annual conference, Windsor, Ontario, "The Curious World of Probabilities". May 12, 2011.

50) Paid speaker, Collins Barrow Toronto LLP, "The Probability of Risk", breakfast meeting, Sept 22, 2011.

51) Talk to undergraduate science students, "The Magic of Monte Carlo", Science Olympiad, University of Ottawa, Jan 27, 2012.

52) Talk to high school students, "The Curious World of Probabilities", Upper Canada College, Toronto Feb 6, 2012.

53) Talk to high school students, "The Curious World of Probabilities", Convocation Hall, University of Toronto, Feb 22, 2012.

54) Talk to undergraduate math students, "The Magic of Monte Carlo", Carleton College, Northfield, Minnesota, Apr 24, 2012.

55) IMA public mathematics lecture, "The Curious World of Probabilities", Institute of Mathematics and its Applications, University of Minnesota, Apr 25, 2012.

56) U of T Senior Alumni Canadian Perspectives talk, "Probabilities and the Lottery Retailer Scandal". April 10, 2013.

57) TEDxUofT talk, "When to be Surprised". May 18, 2013.

58) Keynote speaker, SSC Student Conference, Edmonton, "Lessons from a Twisted Career Path". May 25, 2013.

59) Public talk, SSC Conference, Edmonton, "Solving Crimes Using Math: the Lottery Retailer Scandal". May 26, 2013.

60) University College Alumni talk, "Solving Crimes Using Math: the Lottery Retailer Scandal". May 31, 2013.

61) Plenary speaker, Problem Gambling Institute of Ontario (PGIO) forum, "Gambling and the Curious World of Probabilities". June 10, 2013.

62) Opening keynote speaker, annual conference of the Canadian Institute for the Administration of Justice, "Probability, Statistics and Justice". October 10, 2013.

63) Speaker and panelist, Treehouse Talks lecture series, Toronto Reference Library. November 8, 2013.

64) Opening keynote speaker, National Judicial Institute conference, Quebec City, "The Curious World of Probabilities". February 12, 2014.

65) Manitoba High Court Judges conference, "Probability, Statistics and Justice". June 7, 2014.

66) Opening keynote speaker, annual conference of the Supreme and High Courts of Ireland, "Probability, Statistics and Justice". July 18, 2014.

67) University College Senior Common Room talk, "Probability, Justice, and an Alleged Double-Infanticide". September 22, 2014.

68) Opening keynote speaker, Health Science Information Consortium of Toronto annual conference, "The Curious World of Probabilities". Gerstein Library, Toronto, October 9, 2014.

69) Public talk for "U of T in your Neighbourhood", "The Curious World of Probabilities". Wychwood Library, Toronto, November 12, 2014.

70) Public opening talk, "From Coins to Polls to Monte Carlo". CMS Winter Meeting, Hamilton, Ontario, December 5, 2014.

71) Public talk, "From Lotteries to Polls to Monte Carlo". University of Winnipeg, February 27, 2015.

72) Paid speaker, Ontario Municipal Benchmarking Initiative (OMBI), "From Lotteries to Polls to Monte Carlo". Ottawa, April 30, 2015.

73) Public talk for "U of T in your Neighbourhood", "The Curious World of Probabilities". Toronto Board of Trade, Sept 28, 2015.

74) Paid speaker, City of Toronto Human Resources Dept, "From Lotteries to Polls to Monte Carlo". October 8, 2015.

75) Woodsworth College Alumni Association AGM, featured speaker, "The Curious World of Probabilities". May 26, 2016.

76) Statistical Society of Canada Annual Meeting, "Lessons from a Twisted Career Path". May 31, 2016.

77) CBC journalists meeting, Toronto, "Math Errors in the Media". Sept 28, 2016.

78) Presentation to University of Toronto undergraduate students, about academic careers in statistics. Sponsored by the University of Toronto Statistical Sciences Union (SSU). March 25, 2017.

79) Warwick Public Lecturer in Mathematics and Statistics, "From Lotteries to Polls to Monte Carlo". University of Warwick, England, May 3, 2017.

80) U of T Spring Reunion / ShakerEd featured speaker, "The Curious World of Probabilities". June 3, 2017.

81) Featured Lecture, Professional Night, Advanced Placement Statistics annual meeting, "From Lotteries to Polls to Crimes to Monte Carlo". Kansas City, June 16, 2017.

82) ISBA 2018 World Meeting, Edinburgh, U.K. "Statistical Rhetoric". June 24–29, 2018.

83) Public lecture, "Born on Friday the Thirteenth: The Curious World of Probabilities". Joint Statistical Meetings (JSM), Vancouver. July 30, 2018.

84) Education talk, "Teaching Markov Chains Using Java Applets". Joint Statistical Meetings, Vancouver. August 1, 2018.

85) University College Senior Common Room presentation, "The Puzzle of Luck". Oct 1, 2018.

86) Plenary talk, "The (Mis)Use of Probabilities in Criminal Cases". Forensic Science and Criminal Law Conference, Vancouver, June 7, 2019.

87) Three University Lecture Series talks about probability and luck: in Oakville on Oct 29, in Markham on Nov 1, and in Toronto's Bloor Cinema on Nov 7, 2019.

88) <u>Four</u> public talks about probability and luck at: Centre For Inquiry Toronto on Dec 4, Rotman School on Dec 5, and CANSSI opening ceremonies on Dec 6, 2018.

89) <u>Multiple</u> talks about probability and luck at: Humanist Association of Toronto (HAT) on Jan 12, Harvard Club of Toronto on Mar 6, University of Toronto Senior College on Mar 13, Centre For Inquiry Ottawa on Mar 17, at the University of Windsor on Mar 25, to Oraynu on Apr 2, at CRAM Toronto on Apr 5, the 2019 MBNCanada National Forum on Apr 11, the Halton Peel Humanists on May 14, Mississauga Secondary School on May 22, and U of T Alumni Reunion on June 1, 2019.

90) Public interviews about probability and luck at Brentwood Library on Apr 16, and at Northern District Library on Apr 17, 2019.

91) Presentation and discussion about probability books, Massey-Gail Law Firm, Washington D.C., Aug 1, 2019.

92) Talk to 500 UWO alumni, "Probability and Luck", Nov 22, 2019.

93) Talk to Arts and Letters Club, "The Puzzle of Luck", Nov 26, 2019.

94) Talk to University College Senior Common Room (SCR), "Probability, Statistics, and Murder", Jan 27, 2020.

95) Talk to Osgoode Innocence Project, "The (Mis)Use of Probabilities in Criminal Cases", Jan 29, 2020.

96) Talk to University College Alumni, "Probability, Statistics, and Murder", May 28, 2020. (Postponed due to covid-19.)

97) Talk to Grey-Bruce (Owen Sound) Humanists, "Luck, Chance, and the Meaning of Everything". Oct 18, 2020.

98) Talk to Bootmakers (Sherlock Holmes) Society, "Probability, Statistics, and Murder", Oct 24, 2020. (Postponed due to covid-19.)

99) Interview for University College about election poll statistics, posted Nov. 2, 2020, available at: https://www.youtube.com/watch?v=ZMtKEz98pVU

100) Brief presentation about probability puzzles, Fujitsu/DA holiday party, Dec. 11, 2020.

101) Live interview about writing for UofT Writing Centres, Feb. 26, 2021.

102) Talk to Health Science Information Consortium of Toronto, "Knock On Wood: The Puzzle of Luck", Dec 3, 2021.

103) Invited conference talk, International Statistical Institute World Congress, Ottawa, "How to discuss statistics on live television", July 20, 2023.

104) Invited talk to judges, National Judicial Institute, Vancouver, "Probability and Justice". Feb 21, 2024.

Contributed Lectures:

1) Workshop on Probability and Lie Theory, McGill University. Short talk, Sept. 10, 1992, "General lower bounds for convergence of random walks".

2) Randomness and Computation Workshop, Edinburgh. Short talk, July 27, 1993. "Convergence of Independent Particle Systems".

TEACHING:

Undergraduate Courses (Harvard):

1989	Math 21a	Multivariable Calculus
1990	Math 21a	Multivariable Calculus

Undergraduate Courses (Minnesota):

1992	Math 5681	Probability and Stochastic Processes I
1993	Math 5682	Probability and Stochastic Processes II
1993	Math 5683	Probability and Stochastic Processes III
1993	Math 1151	Precalculus

Graduate Course (Minnesota):

1993	Math 8690	Topics in Probability

Undergraduate Courses (Toronto):

1994	STA 257S	Probability with Statistical Applications
1995	STA 257S	Probability with Statistical Applications
1996	STA 257S	Probability with Statistical Applications
1996–97	SCI 199Y	First-Year Seminar
1997–98	SCI 199Y	First-Year Seminar
1998–99	SCI 199Y	First-Year Seminar
2001	STA 447S	Stochastic Processes
2002	STA 447S	Stochastic Processes
2004	STA 261S	Probability and Statistics II
2004–05	SCI 199Y	First-Year Seminar
2005–06	SCI 199Y	First-Year Seminar
2007	STA 410F	Statistical Computation
2008	STA 447S	Stochastic Processes
2008	STA 286S	Probability and Statistics for Engineering Science
2008–09	SCI 199Y	First-Year Seminar
2009–10	SCI 199Y	First-Year Seminar
2010–11	PMU 199Y	First-Year Seminar
2012	STA 447S	Stochastic Processes
2012	STA 201F	Why Numbers Matter
2013	STA 201F	Why Numbers Matter
2014	STA 201F	Why Numbers Matter
2015	STA 201F	Why Numbers Matter
2016	STA 130S	Intro to Statistical Reasoning
2016	STA 447S	Stochastic Processes

2017	STA 130S	Intro to Statistical Reasoning
2017	STA 447S	Stochastic Processes
2018	STA 447S	Stochastic Processes
2018	PMU 199F	First-Year Seminar
2019	STA 447S	Stochastic Processes
2019	STA 198F	First-Year Seminar
2020	STA 447S	Stochastic Processes
2020	STA 198F	First-Year Seminar
2022	STA 257F	Probability and Statistics (L1 and L2)
2023	STA 257F	Probability and Statistics (L1 and L2)
2024	STA 257F	Probability and Statistics (L1 and L2)

Graduate Courses (Toronto):

1994	STA 3047S	Stochastic Processes
1994	STA 2111F	Graduate Probability I
1995	STA 2211S	Graduate Probability II
1995	STA 2111F	Graduate Probability I
1995	STA 3077F	Research Topics in Probability
1996	STA 2211S	Graduate Probability II
1996	STA 2111F	Graduate Probability I
1997	STA 2211S	Graduate Probability II
1997	STA 2111F	Graduate Probability I
1998	STA 2211S	Graduate Probability II
1998	STA 2111F	Graduate Probability I
1999	STA 2211S	Graduate Probability II
2000	STA 2112F	Mathematical Statistics I
2001	STA 2006S	Applied Stochastic Processes
2001	STA 4247S	Research Topics in Stochastic Processes

2001	STA 3047F	Stochastic Processes
2002	STA 2006S	Applied Stochastic Processes
2002	STA 2111F	Graduate Probability I
2003	STA 2211S	Graduate Probability II
2003	STA 2111F	Graduate Probability I
2003	STA 4276F	Research Topics in Monte Carlo Methods
2004	STA 2211S	Graduate Probability II
2004	STA 2111F	Graduate Probability I
2005	STA 2211S	Graduate Probability II
2005	STA 2111F	Graduate Probability I
2006	STA 2211S	Graduate Probability II
2007	STA 2102F	Computational Techniques in Statistics
2008	STA 2006S	Applied Stochastic Processes
2009	STA 3431S	Monte Carlo Methods
2010	STA 3431S	Monte Carlo Methods
2011	STA 3431S	Monte Carlo Methods
2011	STA 2111F	Graduate Probability I
2012	STA 2211S	Graduate Probability II
2012	STA 2006S	Applied Stochastic Processes
2013	STA 4502S	Monte Carlo Estimation
2016	STA 4502S	Monte Carlo Estimation
2016	STA 2006S	Applied Stochastic Processes
2017	STA 2006S	Applied Stochastic Processes
2017	STA 4502S	Topics in Stochastic Processes
2017	STA 3431F	Monte Carlo Methods
2018	STA 2006S	Applied Stochastic Processes
2018	STA 3431F	Monte Carlo Methods

2019	STA 2006S	Applied Stochastic Processes
2019	STA 3431F	Monte Carlo Methods
2019	STA 4502S	Topics in Stochastic Processes
2020	STA 2006S	Applied Stochastic Processes
2020	STA 3431F	Monte Carlo Methods
2021	STA 3431F	Monte Carlo Methods
2022	STA 2111F	Graduate Probability I
2023	STA 2111F	Graduate Probability I

Online Course (MOOC):

Statistics: Making Sense of Data:
Eight-week video-based Massive Open Online Course (MOOC) on the Coursera platform,
April–June 2013. Joint with Alison Gibbs. (Videos purchased for additional distribution
and sale by SAGE Publishing, April 2017.)

Ph.D. Theses Supervised:

Alison Gibbs, 1995 – 2000.

Wai Kong Yuen, 1996 – 2001.

Mylène Bédard, 2002 – 2006.
   [Winner of Pierre Robillard Award for best statistics
   doctoral thesis defended in Canada in 2006, and of
   Governor General's gold medal, 2007.]

Chao Yang, 2005 – 2008.

Yan Bai, 2007 – 2009.

Jinyoung Yang, September 2013 – September 2016.

Duanmu (Kevin) Haosui, April 2013 – December 2017.

Reihaneh Entezari, June 2013 – July 2018.

Jun Yang (co-supervisor), August 2015 – May 2020.

Cédric Beaulac, October 2016 – April 2021.

Jeffrey Negrea (co-supervisor), September 2017 – July 2022.

Justin Slater (co-supervisor), May 2020 – March 2023.

Sigeng Chen, May 2020 – Aug 2023.

Sabrina Sixta, May 2020 – present.

David Ledvinka, June 2022 – present.

Marco Gallegos-Herrada (co-supervisor), June 2022 – present.

Alexander Valencia-Sanchez, May 2023 – present.

Post-Doctoral Fellows / Visitors / Research Assistants Supervised:

Qing Deng (postdoc), January – March, 2002.

Bruno de Sousa (postdoc), August 2002 – July 2004.

Shaojun Wang (postdoc), December 2002 – June 2003.

Yves Atchadé (PhD student), January 2003 – May 2003.

Ye Sun (RA, secondary supervisor), 2007 – 2009.

Krzysztof Latuszynski (visitor), September & October 2009.

Lianne Rossman (research assistant), January – December 2011.

Xinyue Liao (MSc research assistant), March – June 2011.

Xin Wang (MSc research assistant), May – July 2011.

Omar Khalil (research assistant), June – August 2011.

Kelly Bodwin (research assistant), September – December 2011.

Austin Brown (postdoc), July 2023 – June 2025.

Reading / research courses:

MAT 4000L, Kar Wong, Summer 1994.

MAT 1508H, Brett Stevens, Fall 1994.

MAT 4000L, Wai Kong Yuen, Summer 1996.

STA 4000H, Martin van Driel, Summer 1996.

Graduate Research Project, Phil Reiss, 1996.

STA 496H, Shira Korman, Spring 1997.

STA 4000H, Aaron Galluzzi, Summer/Fall 2001.

STA 4000H, Daniel McFadyen, Summer 2003.

NSERC URF, David Clement, Summer 2003.

STA 4000Y, Anjali Mazumder, Summer/Fall 2003.

Graduate Research Project, Kun Zhang, Summer 2004.

Graduate Research Project, Longhai Li, Summer 2004.

Graduate Research Project, Johannes Hohendorff, Fall 2005.

Graduate Research Projects, Olga Chilina, Winter & Summer 2006.

NSERC URF, Shuheng John Zheng, Summer 2006.

Undergraduate informal readings, Daniela Takeva, Summer 2006.

Ye Sun (York University), research assistantship, Summer 2006.

Graduate Research Projects, Olga Chilina, Fall & Winter 2007–8.

STA 4000H, Zhengfei Chen, Summer 2009.

STA 4000H, Fanfu Xie, Summer 2009.

STA 496H, Christian Rudnick, Summer 2009.

STA 4000H, Jian Chen, Fall 2009.

STA 4000H, Chunyan Hao, Fall 2009.

Visiting research student, Florencia Chimard, Feb–Mar 2010.

Undergraduate reading course, Kai Yang, Fall 2010.

Undergraduate reading course, Ali-Kazim Zaidi, Summer 2011.

University of Toronto Excellence Award (UTEA), Kai Yang, Summer 2011.

Undergraduate reading course, Alexander Remorov, Fall 2011.

Graduate reading course for FOUR students, Winter 2012.

MSc project, Mufan (Bill) Li, Summer/Fall 2015 / Winter 2016.

Undergraduate reading course, Zhenan (Eric) Fan & Yeming (Ethan) Wen, Winter 2016.

Undergraduate summer research projects, Jun Ouyang & Yiqi (Shane) Shi
& Yang Wang & Ye (Sophia) Hua, Summer 2016.

MSc project, Jeffrey Negrea, Fall 2016.

Undergraduate research project, Yilun Yao and Wenzheng Zhou, Fall 2016.

MSc project, Omar Chéhab (visiting from France), Summer 2017.

Engineering Science undergrad thesis, Yufan Li, 2017–2018.

** For additional supervisions, see: probability.ca/jeff/grad.html

Media Interviews / Consultations:

Interview for newspaper article, Globe and Mail, p. F9, March 31, 2001.

Three television interviews (on CTV, CFMT, and CityTV)
　　　　　　　　re "Day of Symmetry" (20-02-2002), February 20, 2002.

Television panelist, Discovery Health Network, May 14, 2002.

Five interviews for Global Television News (Leslie Roberts) about probabilities,
　　　　　　　　on April 2, 14, 20, and 29, and May 7, 2004.

Interview on TVOntario (Mary Ito) about randomness, October 8, 2004.

Interview on CBC Television re Serial Diners (in French), June 24, 2005.

In 2005–6, I did a huge amount of media to publicise my new book
　　Struck by Lightning, including a total of 45 radio interviews, 13 television
　　interviews (in three different cities), 8 interviews for print media, and
　　5 live appearances; see `http://probability.ca/sbl/#publicity`.

Panelist on TVOntario (Mary Ito) about science icons, March 6, 2006.

Three radio and one TV interview about lotteries, May 4–9, 2006.

Tabby Johnson Show, Newstalk 1010 CFRB radio, May 27, 2006.

Interview for newspaper article, National Post, May 30, 2006.

CBC Television interview about lotteries, August 9, 2006.

THIRTEEN different media interviews about lotteries, October 25–31, 2006.

Interview about probabilities for Radio New Zealand, October 26, 2006.

Three different media interviews about lotteries, April 3–4, 2007.

Appearance on CBC documentary "Winning for a Living", March 6, 2008.

Three different media interviews about movie "21", March 27–31, 2008.

Interview about probabilities on AM800 CKLW radio (Windsor), June 23, 2008.

Interview for National Public Radio's *Marketplace* program, August 20, 2008.

Interview for CBC Radio's *Ideas* program of Dec. 9, 2008.

Panelist on BBC World Service *The Forum* program, Dec. 17, 2008.

Interview for CBC TV National News about Western Canada
retailer lottery wins, Jan. 21, 2009.

Interview for CTV news about lottery probabilities, Jan. 24, 2009.

Interview with rem.fm radio (Spain) about probabilities, Jan. 29, 2009.

Interview with WNYC radio (New York) about "luck", Feb. 6, 2009.

Interview for CBC TV about recent Ontario retailer lottery wins, Feb. 6, 2009.

Interview with Global Television News debunking lottery "strategies", Feb. 17, 2009.

Interview with CBC radio Vancouver about probabilities, June 4, 2009.

Interview with 640 AM radio about lotteries and other probabilities, July 15, 2009.

Interview on CBC Radio (Mary Ito) about probabilities and Haiti, Jan 24, 2010.

Interview for Toronto Star about pedestrian deaths, Jan 28, 2010.

Interview for Discovery documentary about lightning, Feb 12, 2010.

Interview for ABC Radio, Australia (Robyn Williams), Feb 12, 2010.

Interview for Global Television News about lottery probabilities, Feb 25, 2010.

Interviews with Canadian Press and with CTV about lottery probabilities, Mar 19, 2010.

Interview with French CBC radio about statistics, May 30, 2010.

Interviews for two *Weird or What* documentary segments that aired Sept, 2010.

Interview with CityTV about lottery prize location probabilities, Mar 14, 2011.

Interview with CBC North (Yellowknife) radio about coincidences, Mar 22, 2011.

Interview with CBC Windsor radio about randomness, May 12, 2011.

Interview with *Skeptically Speaking* about probability, July 7, 2011.

Interview for *Globe and Mail* (page A3) about death ages, July 25, 2011.

Interview on CBC Radio (Ontario) with Mary Ito about probabilities, Jan 7, 2012.

Interview on Thunder Bay radio about Canadian political parties, March 29, 2012.

Interview for Vision TV about "supernatural" coincidences, May 1, 2012.

Probability expert for *Caramilk* commercial, May 24, 2012.

Interview with CBC Winnipeg radio about lottery probabilities, July 6, 2012.

Interview on CBC Radio (Ontario) with Mary Ito about math and music, July 8, 2012.

Interview with Globe & Mail about homicide statistics, July 20, 2012.

Interview on CFRC radio (Kingston) about homicide statistics, Aug 2, 2012.

Interview for TSN television about NCAA basketball statistics, March 19, 2013.

Interview for TSN radio about NCAA basketball statistics, March 22, 2013.

Interview with Global Television news about lottery probabilities, April 12, 2013.

Interview on CBC Radio about hockey probabilities, April 17, 2013.

Interview on CBC Radio about hockey probabilities, May 13, 2013.

Interview with Sun Media about lottery win rates article, October 11, 2013.

Calculations for *Palm Beach Post* (Florida) re excessive lottery wins, November, 2013.

Interview with Toronto Star about pedestrian fatalities, Dec 6, 2013.

Interview with Global Television about Friday the 13th, Dec 13, 2013.

Interview with CTV News about lottery probabilities, Dec 20, 2013.

Interview with CTV News about lottery probabilities, Mar 7, 2014.

Interview on CBC Radio 1 about luck and superstituion, Mar 16, 2014.

Interview for *Globe and Mail* about statistics of human relationships, Apr 27, 2014.

Interview for *Toronto Star* about NBA draft probabilities, May 21, 2014.

Interview for *Boston Globe* front-page article about excessive lottery wins, July 2014.

Interview for *Atlanta Journal-Constitution* about excessive lottery wins, August 2014.

Statistical analysis for *CBC News*, re campus sexual assaults, Oct/Nov 2014.

Statistical analysis for *Shine TV* documentary series, Oct/Nov 2014.

Statistical analysis for *Sports Illustrated* issue of Nov 3, 2014 (page 64).

Live interview on Tastytrade Network (Chicago), Dec 3, 2014.

Interview about probabilities for *Hamilton Spectator*, Dec 4, 2014.

Interview about lottery probabilities for *Ming Pao Daily News*, Feb 2, 2015.

Interview about car crash probabilities for *Toronto Sun*, Feb 5, 2015.

Interview with CBC's *Fresh Air* about Pi Day, March 14, 2015.

Interview with CBC's *Definitely Not the Opera* about probability, March 14, 2015.

Discussion of mathematical logic puzzle for *Global News*, April 15, 2015.

Interview on CHCH's *Square Off* about lotteries, July 22, 2015.

Interview for *Wall Street Journal* about shark attack probabilities, July 22, 2015.

Interview for *CBC Radio Newfoundland* about Chase The Ace probabilities, Aug. 11, 2015.

Interview for *CTV News* about Blue Jays probabilities, Aug. 15, 2015.

Interview for *CBC Toronto TV News* about Blue Jays probabilities, Aug. 15, 2015.

Interview for *U of T News* about odds, Aug. 17, 2015.

Calculations for *NBC* (Washington D.C.) re excessive lottery wins, August, 2015.

Interview for *Global News* about Blue Jays probabilities, Sept. 22, 2015.

Interview for *Global News* about Blue Jays probabilities, Oct. 21, 2015.

Interview for *U of T News* about Blue Jays, Oct. 8, 2015.

Calculations for *Charlotte Observer* re excessive NC lottery wins, November 2015.

Multiple interviews re probabilities for huge Powerball jackpot, Jan 13, 2016.

Calculations re World Cup of Hockey scheduling, Feb 24, 2016.

Interview with Toronto Star re Leap Day birthday probabilities, Mar 2, 2016.

Interview on BNN TV re Pi Day and probabilities, Mar 14, 2016.

Interview with Research2Reality about sports statistics, Mar 21, 2016.

Interview for CTV News about multiple lottery wins, April 7, 2016.

Interview about probabilities on 2UE Breakfast TV, Australia, November 28, 2016.

Interview about probabilities on RN Drive, ABC Radio National, December 1, 2016.

Interview for Australian Financial Review article, December 3, 2016.

Interview about lightning odds for Herald Sun, Australia, December 10, 2016.

Interview about probabilities for The Advertiser, Australia, December 12, 2016.

Interview about probabilities on ABC Breakfast TV, December 15, 2016.

Interview with Research2Reality about academics, published July 12, 2017.

Interview with VT Digger newspaper about Vermont lottery wins, Jan 25, 2018.

Interview with Macleans Magazine about statistics of parents' fears, March 27, 2018.

Interview for U of T News about election polls, June 4, 2018.

Live interview on BNN Bloomberg TV about election polls, June 5, 2018.

Live interview on CTV News Channel about election polls, June 6, 2018.

Interview for Globe and Mail about birthday probabilities, July 27, 2018.

Interview with Ben Mulroney on CTV about luck and probability, Oct 2, 2018.

Interview for U of T News about luck and probability, Oct 5, 2018.

CBC Radio's The Current with Anna Maria Tremonti, broadcast Oct 9, 2018.

Interview on GlobalTV Toronto Morning Show, Oct 9, 2018.

Interview on CityTV's Breakfast Television about luck and probability, Oct 19, 2018.

Recorded lottery probability answers for Newstalk 1010 radio, Oct 19, 2018.

Call-in show on CBC Maritime radio about luck and probability, Oct 31, 2018.

Interview with Globe & Mail's Cathal Kelly about hockey probabilities, Nov 23, 2018.

Interview with Global News Morning BC television, Dec 7, 2018.

Interview on The Simi Sara Show (Vancouver radio), Dec 7, 2018.

Interview with CBC Kitchener radio about lottery probabilities, Jan 12, 2019.

Interview with CBC Iqaluit radio about lottery probabilities, Jan 16, 2019.

Interview with CBC Toronto radio about CRAM Toronto event, Feb 28, 2019.

Interview with CBC Windsor radio about luck, Mar 26, 2019.

Brief interview with *UofT News* about CRAM Toronto, Apr 8, 2019.

Interview with *Canadian Atheist* about luck and statistics, Apr 12, 2019.

Interview with *CityTV News / 680 News* about basketball probabilities, May 13, 2019.

Interview with *680 News* radio about Raptors probabilities, May 15, 2019.

Raptors probs interviews with Canadian Press and CityTV, May 30, 2019.

Raptors probs, with CBC Newsworld / Radio-Canada / Humber, May 31, 2019.

Interview with *BBC Canada* about safe-opening news story, June 5, 2019.

Background interview with *TVO* about luck/skill/basketball, June 5, 2019.

Raptors probs interview live on CTV News Channel, June 10, 2019.

Print interview about Raptors probs for torontolife.com, June 10, 2019.

Interview on CP24 with George Lagogianes re Friday the 13th. Sept 13, 2019.

Interview for What On Earth Is Going On podcast, released Sept 13, 2019.

Interview on CTV's Your Morning about strategic voting, Oct 7, 2019.

Interview with Research2Reality about Monte Carlo research, Oct 8 & Dec 3, 2019.

Writen interview with Ming Pao Daily about the election, Oct 18, 2019.

Interview with CBC News Network (Carole MacNeil) about Lotto Max, Jan 2, 2020.

Interview for CBC News Toronto/National (Greg Ross) about Lotto Max, Jan 3, 2020.

Interview for CJAD 800AM in Montreal (Natasha Hall) about Lotto Max, Jan 7, 2020.

Interview for GlobalTelevision about coronavirus risks, Feb 4, 2020.

Interview for CityTV about coronavirus spread, March 2, 2020.

Interview for TVO documentary about election forecasting, March 3, 2020.

Interview for Global News National about coronavirus spread, March 5, 2020.

Interview with The Pointer (Brampton) about coronavirus data, March 25, 2020.

Interview with Toronto Star about coronavirus graphs, March 27, 2020.

Interview with U of T's Arts and Science news, March 27, 2020.

Interview with Research2Reality about academic research, published July 17, 2020.

Interview for healthing.ca about COVID-19 herd immunity, published July 21, 2020.

Interview with Geoff Currier on CJOB (Winnipeg) about covid statistics, Sept 17, 2020.

Interview with Global News Toronto (TV) about election poll accuracy, Nov. 4, 2020.

Interview with 680 News (radio) about election poll accuracy, Nov. 4, 2020.

Interview on CBC Here and Now (Gill Deacon) about Friday the 13th, Nov 13, 2020.

Series of 13 regional CBC Radio interviews about the science of luck, Feb 10, 2021.

Interview with University College News about my music, March 18, 2021.

Interview with Geoff Currier on CJOB (Winnipeg) about covid statistics, April 5, 2021.

Interview with The Pointer (Brampton) about the Canadian census, May 6, 2021.

Lottery probs interview for CTV News Toronto, June 15, 2021.

Lottery prob comparisons for the Toronto Star, June 21, 2021.

Q&A about luck for Japanese magazine "Voice", Oct 7, 2021.

Guest on *It'll Be Fine* cooking show, Dec 23, 2021.

Interview about pandemic-era data challenges for *The Pointer* (Brampton), Jan 1, 2022.

Interview about luck on The CRAM Podcast, posted Jan 20, 2022.

Q&A for Wired Magazine (1,800,000 views!), posted Feb 22, 2022.

Interview for Toronto Star article about wheels versus doors, Mar 10, 2022.

Interview on 105.9 FM The Region (Vaughan) radio about pi, Mar 14, 2022.

Interview on CJAD 800 (Montreal) radio about Lotto Max, Mar 25, 2022.

Interview for UofT news about World Cup draw probabilities, Apr 1, 2022.

Interview with CBC.ca about World Cup draw probabilities, Apr 1, 2022.

Interview with Canadian Press about Ontario election polls, Apr 12 / 24, 2022.

Interview for "The Last Word" on KSFR 101.1 FM radio, Arizona, June 23, 2022.

Interview for "Something You Should Know" podcast, June 23, 2022.

Interview for UofT Podcast "What Now", aired Sept 7, 2022.

Interview for Australian Podcast "The Random Sample", aired Sept 12, 2023.

Interview on CP24 and CTV re gold ball lottery, Sept 27, 2023.

Other Teaching, Lectures, and Outreach:

Faculty speaker, MAT137 student meeting, January 1994.

Helped to re-design graduate probability program, February 1994.

Probability liaison to Math Dept, March 1994.

MASSU student-faculty seminar speaker, March 1994.

Department representative, U of T Day, October 1994.

Invited lecture, Mathematical Sciences Day, April 29, 1995.

Department representative, U of T Day, October 1995.

Short talk, interdepartmental MCMC meeting, U of T, February 1, 1996.

Short talk to high school teachers, U of T, February 16, 1996.

Presentation to high school students (2.5 hours), November 23, 1996.

Supervisor of studies, Mathematical Statistics program, 1996 – present.

Department representative, U of T Day, October 1996.

Department representative, Science Options Day, March 1997.

Judge, Metro Toronto Region Science Fair, April 11, 1997.

Presenter, Discover Science Day, U of T, April 15, 1997.

Short talk to high school students, U of T, August 15, 1997.

Department representative, U of T Day, October 1997.

Presentation to high school students (1.5 hours), October 25, 1997.

Presentation to gifted high school students (1 hour), February 19, 1998.

University of Toronto, graduate student seminar speaker, November 20, 1998.

Department representative, Science Options Day, March 1999.

Presentation to high school students (1.5 hours), May 1, 2000.

Guest lecturer, JUM 102H, November 15, 2000.

Presentation to high school teachers (3 hours), Fields Institute, April 10, 2001.

Presentation to high school students (1.5 hours), May 16, 2002.

Department representative, U of T Day, October 5, 2002.

Undergrad math student Q&A session (1 hour), April 10, 2003.

Presentation to Nelson Mandela Park elementary school, March 3, 2006.

Featured author at University College book club, February 26, 2009.

Panelist, Graduate Student Research Day, Fields Institute, May 5, 2009.

Master of Ceremonies, banquet, SSC annual meeting, June 2, 2009.

Panelist, JUMP, mathematical literacy, Fields Institute, March 5, 2010.

Faculty speaker, student recruitment event, UofT, March 30, 2011.

Interview about MCMC/SBL/improv, ISBA Bulletin **18(1)**, 9–10, March 2011.

Presentation about MCMC for graduate student orientation, Sept 8, 2011.

Panelist, Graduate Student Research Day, Fields Institute, April 19, 2012.

Talk about gambler's ruin problem, U of T Math Camp, August 1, 2012.

Panelist on book publishing for Science Outreach workshop, May 3, 2013.

Presentation about MCMC for graduate student orientation, Sept 5, 2013.

Presentation about MCMC for graduate student orientation, Sept 4, 2014.

Guest lecturer, Osgoode Law School evidence class, October 20, 2014.

Talk to U of T undergrad society about MCMC, November 25, 2014.

Presentation at U of T undergrad math societies gathering, March 3, 2015.

Presentation to CMS Math Camp at York University, July 6, 2015.

Presentation about MCMC for graduate student orientation, Sept 10, 2015.

Probability interview for U of T Arts & Science podcast, Sept 22, 2015.

Short course (4 hours) about MCMC to Fujitsu, Nov 1/15/19/Dec 2, 2019.

Online host of Data Sciences Institute launch event, Sept 17, 2021.

Faculty participant, PRE U of T academic orientation panel, Sept 5, 2023.

DEPARTMENTAL AND UNIVERSITY SERVICE:

1994–95	Graduate Committee
	Publicity Committee
	Visitors Committee
1995–96	Library Committee
	Seminar Committee
	Publicity Committee
	Hiring Committee
	Secondary School Liaison Committee
1996–97	Publicity Committee

Hiring Committee
Secondary School Liaison Committee
Departmental Chair Search Committee
Endowed Chair Proposal Committee
Departmental Research Evaluation Committee

1997–98 UTFA Council Representative
UTFA Communications Subcommittee
UTFA Academic Freedom Subcommittee
Publicity Committee
Secondary School Liaison Committee
Graduate Committee
MCMC Seminar co-organiser
Departmental Research Evaluation Committee
United Way departmental canvasser
Departmental photo board organiser & photographer

1998–99 UTFA Council Representative
UTFA Technical Consultant
Planning Committee
Departmental Teaching Evaluation Committees (two; chair of one)
Faculty "Mentor" Program
Departmental photo board photographer
Author of departmental "overview" for web page

1999–00 (on sabbatical research leave)
UTFA Council Representative

2000–01 Associate Chair, Graduate Studies
Chair, Graduate Committee
SGS Division III Executive Committee
OCGS Review Committee
Organiser, Grad Student Non-Academic Jobs Meeting
Organiser, Grad Student "Pizza Meetings"
Coordinator, Ph.D. Comprehensive Exams
Computer Committee (Chair, February–June)
Departmental Research Evaluation Committee
Departmental photo board photographer
Supervisor of Studies, Statistics and Mathematics programme

UTFA Council Representative

2001–02   Associate Chair, Graduate Studies
            Chair, Graduate Committee
            SGS Division III Executive Committee
            Organiser, Grad Student Non-Academic Jobs Meeting
            Organiser, Grad Student "Pizza Meetings"
            Coordinator, Ph.D. Comprehensive Exams
            Chair, Computer Committee
            OCGS Review Committee
            Promotions Committee
            Departmental photo board photographer
            Departmental Chair Search Committee
            Supervisor of Studies, Statistics and Mathematics programme
            UTFA Council Representative

2002–03   Associate Chair, Graduate Studies
            Chair, Graduate Committee
            SGS Division III Executive Committee
            OCGS Review Committee
            Organiser, Grad Student Non-Academic Jobs Meeting
            Organiser, Grad Student "Pizza Meetings"
            Coordinator, Ph.D. Comprehensive Exams
            Departmental photo board photographer
            Hiring Committee
            MCMC Seminar organiser
            Supervisor of Studies, Statistics and Mathematics programme
            UTFA Council Representative

2003–04   Hiring Committee
            Computing Committee
            Planning Committee
            Promotions Committee
            Publicity and Liaison Committee
            Probability Seminar co-organiser
            Probability Ph.D. Comprehensive Exam coordinator
            Arts & Science Faculty General Committee
            Supervisor of Studies, Statistics and Mathematics programme

2004–05   Hiring Committees (3)

Computing Committee
Publicity and Liaison Committee
U of T Discovery Day coordinator
Probability Seminar co-organiser
Probability Ph.D. Comprehensive Exam coordinator
Supervisor of Studies, Statistics and Mathematics programme

2005–06   Hiring Committees (2)
Computing Committee (chair)
Statistics Seminar coordinator
Promotions Committee
Probability Ph.D. Comprehensive Exam coordinator
Supervisor of Studies, Statistics and Mathematics programme

2006–07   (on sabbatical research leave)
Supervisor of Studies, Statistics and Mathematics programme

2007–08   Seminar Coordinator
Computing Committee (chair)
Graduate Committee
Promotions Committee
Supervisor of Studies, Statistics and Mathematics programme

2008–09   Promotions Committee
Hiring Committee
Staff Reorganisation Committee
Supervisor of Studies, Statistics and Mathematics programme

2009–10   Seminar Committee (chair)
Promotions Committee
PTR Committee
IMS Nominating Committee
Dean's Rep, Math Dept Hiring Committee
Supervisor of Studies, Statistics and Mathematics programme

2010–11   Academic Board
Hiring Committee
Computing Committee
Graduate Committee (July–Sept plus)

Promotions Committee
CRM-SSC Prize Committee
Supervisor of Studies, Statistics and Mathematics programme

2011–12   Academic Board
Computing Committee (chair)
Promotions Committee
PhD Comprehensive Exam probability chair
Fields Distinguished Lecture Selection Committee
COPSS Presidents' Award Prize Committee
Supervisor of Studies, Statistics and Mathematics programme

2012–13   Academic Board
Computing Committee (chair)
Seminar Committee
Promotions Committee
Fields Distinguished Lecture Selection Committee
COPSS Presidents' Award Prize Committee

2013–14   (on sabbatical research leave January–June)
Fields Distinguished Lecture Selection Committee (chair)
Computing Committee (chair), July–December
Seminar Committee, July–December
Promotions Committee

2014–15   (on sabbatical research leave January–June)
Promotions Committee
Undergraduate Committee
Hiring Committee (for Lecturer position)

2015–16   Computing Committee (chair)
Promotions (and Nominations) Committee
Statistics Undergraduate Committee
Hiring Committee (for UTM research position)
SSC Awards Committee
SSC Science Writers Award Committee

2016–17   Promotions (and Nominations) Committee
Computer Coordinator / Faculty Liaison

Hiring Committee (for statistics research position)
Statistics Research Committee
Statistics Social Committee
SSC Awards Committee

2017–18   Promotions (and Nominations) Committee
Computer Coordinator / Faculty Liaison
Hiring Committee (for statistics/CS joint position)
Statistics Social Heartbeat Committee
Statistics Students Union Faculty Validator
Postdoctoral Training Centre in Stochastics PIMS-CANSSI Evaluator
SSC Awards Committee

2018–19   Promotions (and Nominations) Committee
Computer Coordinator / Faculty Liaison
Statistics Social Committee
Statistics Research Committee
Statistics Graduate Students Research Day Organising Committee
Hiring Committee for Data Science (with CS)
Hiring Committee for Data Visualisation (with CS)
Hiring Committee for Actuarial Science
Postdoctoral Training Centre in Stochastics PIMS-CANSSI Evaluator

2019–20   Promotions (and Nominations) Committee
Computer Coordinator / Faculty Liaison
Statistics Research Committee
Hiring Committee: Stats for Environmental Sciences
Departmental Research Evaluation Committee #1
Hiring Committee: CANSSI Ontario Director
Departmental Research Evaluation Committee #2

2022–23   Promotions & Awards Committee (chair)
Executive Committee
Research Committee
Computer Committee
Promotion Committee for Teaching-Stream Candidate
Hiring Committee for HMB-STA Teaching-Stream Position

2023–24   Promotions & Awards Committee (chair)

Executive Committee
Research Committee
Computing Committee
Hiring Committee for Computational Statistics Position
Tenure Review Reading Committees (2)
Tenure Review Teaching Committee
SSC Research Committee

ADMINISTRATIVE POSITIONS:

Within University:
Associate Chair – Graduate Studies, Department of Statistics, 2000–03
Associate Chair – Promotions & Awards, Department of Statistical Sciences, 2022–24