

# CURRICULUM VITAE

Jeffrey S. Rosenthal

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## BIOGRAPHICAL INFORMATION:

### Personal:

Born: October 13, 1967.  
Scarborough, Ontario, Canada.

Address: Department of Statistics  
University of Toronto  
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### 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
<b>COPSS Presidents’ Award</b>	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 <i>Canadian Who’s Who</i>	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

### 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, <i>Applied Stochastic Models</i>	

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\* Apparently the youngest recipient to date.

<i>in Business and Industry</i>	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, <i>Canadian Journal of Statistics</i>	2007 – 2009
Associate Editor, <i>Electronic Journal of Statistics</i>	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)

## 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.

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

- 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.
- 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. Feuerwerker 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](http://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 C. 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. Proshan 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 Application 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)** J. 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.
- 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 J. 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)** J. Yang, E. Levi, R. Craiu, and J.S. Rosenthal (March 2016), “Adaptive Component-wise Multiple-Try Metropolis Sampling”. *Journal of Computational and Graphical Statistics*, to appear. (Accepted August 2018.)
- 109)** R. Entezari, R. Craiu, and J.S. Rosenthal (April 2016), “Likelihood Inflating Sampling Algorithm”. *Canadian Journal of Statistics*, to appear. (Accepted July

- 2017.) (Plus a related refereed discussion of an article by Matthew T. Pratola, to appear in *Bayesian Analysis*, 2016.)
- 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*, to appear. (Accepted May 2017.)
  - 112) J.S. Rosenthal (October 2016), “Simple Confidence Intervals for MCMC Without CLTs”. *Electronic Journal of Statistics* **11(1)** (2017), 211–214.
  - 113) 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*, to appear. (Accepted May 2017.)
  - 114) 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*, to appear. (Accepted March 1, 2018.)
  - 115) J.S. Rosenthal (March 2017), “Statistics Using Just One Formula” (education paper). *Teaching Statistics* **40(1)**, 7–11, 2017.

#### **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.



## 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 111<sup>th</sup> 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 111<sup>th</sup> 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”. MAVIBA 2013 – 8th International Workshop on Models and Analysis of Vocal Emissions for Biomedical Applications, 2014.

### **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.] [Solutions manual, “A Collection of Exercises in Advanced Probability Theory” by M. Soltanifar, L. Li, and J.S. Rosenthal, published electronically, July 2010.]
- 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. [Canadian hardcover published September 2005; six printings; made numerous bestseller lists. Canadian paperback edition (including additional 18-page “PS” section) published September 2006; two printings; made numerous bestseller lists. Also published in the United States by Joseph Henry Press, 2006; 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); and in Turkey by Tubitak, 2017. Excerpt published in *The Act of Writing*, 8th ed. (R. Conrad, ed.), April 2009. For details see [probability.ca/sbl/](http://probability.ca/sbl/)]

#### **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/writings/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/writings/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 Commission (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 (January 2009), Statistical analysis of retail seller major lottery wins in Western Canada, for CBC TV National News (7 pages).
- 28) J.S. Rosenthal (February 2009), Brief statistical analysis of second- and third-place lottery wins, for CBC national radio news.
- 29) 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)
- 30) 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*.
- 31) J.S. Rosenthal (October 2011), “The Mathematics of Your Next Family Reunion”. Published in *Plus Magazine*, December 2011.
- 32) J.S. Rosenthal (February 2013), “Monte Carlo to the Rescue”. Short article for the *Royal Society of Canada Academy III Bulletin*.
- 33) 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.
- 34) 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.
- 35) J.S. Rosenthal (September 2013), Confidential report (30 pages) about statistical analysis of retailer lottery win probabilities.
- 36) J.S. Rosenthal (February 2014), “Technical analysis for Agrium 2014 final offer arbitration”. Expert witness report (25 pages) for Davis LLP in civil hearing.
- 37) J.S. Rosenthal (September 2014), “Probability, Justice, and the Risk of Wrongful Conviction”. *The Mathematics Enthusiast* **12** (June 2015), 11–18.

- 38) 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>
- 39) 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”.
- 40) J.S. Rosenthal (August 2015), “The kids are alright: divide by  $n$  when estimating variance”. *IMS Bulletin*, p. 9, December 2015.
- 41) J.S. Rosenthal (June 2016), “Mathematics to Scale”. *Pi In The Sky*, Issue 20, 2017, 3–5.
- 42) J.S. Rosenthal (January 2017), “Statistical analysis related to R. v. Yuk Yuen Lee”. Expert witness report (and later testimony) for drug trafficking trial.
- 43) J.S. Rosenthal (October 2017), “Statistical analysis related to Double Diamond and ThermoEnergy”. Expert witness report for civil lawsuit.
- 44) J.S. Rosenthal (March 2018), “Statistical analysis related to R. v. David Zheng”. Expert witness report for drug trafficking trial.
- 45) J.S. Rosenthal (May 2018), “Statistical analysis related to excessive Vermont lottery wins”. Internal report for the Vermont Lottery company.
- 46) J.S. Rosenthal (June 2018), “Statistical Analysis of Ontario 2018 Election Vote-Splitting”. <http://probability.ca/ontario2018/>
- 47) J.S. Rosenthal (June 2018), “Ontario’s Center-Left Statistical Conundrum”. <http://probability.c>

**Submitted Manuscripts:**

- 1) M.J. Osborne, J.S. Rosenthal, and C. Stewart (September 2016), “Information aggregation with costly reporting”.
- 2) J. Negrea and J.S. Rosenthal (February 2017), “Error Bounds for Approximations of Geometrically Ergodic Markov Chains”.

- 3) H. Duanmu, J.S. Rosenthal, and W. Weiss (April 2017), “Ergodicity of Markov Processes via Non-Standard Analysis”.
- 4) J.S. Rosenthal (July 2017), “Many-Candidate Nash Equilibria for Elections Involving Random Selection”.
- 5) J. Yang and J.S. Rosenthal (August 2017), “Complexity Results for MCMC derived from Quantitative Bounds”.
- 6) C. Beaulac and J.S. Rosenthal (September 2017), “Predicting University Students’ Academic Success and Choice of Major using Random Forests”.
- 7) C. Beaulac and J.S. Rosenthal (April 2018), “Handling Missing Values using Decision Trees with Branch-Exclusive Splits”.
- 8) R. Entezari, P.E. Brown, and J.S. Rosenthal, “Bayesian Spatial Analysis of Hardwood Tree Counts in Forests via MCMC”.
- 9) N.G. Tawn, G.O. Roberts, and J.S. Rosenthal (July 2018), “Weight-Preserving Simulated Tempering”.

**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.)



### Research Papers Completed under my Supervision:

- 1) A. Gibbs, “Bounding the convergence time of the Gibbs sampler in Bayesian image reconstruction”. *Biometrika* **87(4)** (2000), 749–66.
- 2) A. 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. 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 C. 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) C. Yang, “On The Weak Law of Large Numbers for Unbounded Functionals for Adaptive MCMC”. Submitted for publication, February 2008.
- 11) C. 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.

**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) Università 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 Mathématiques*, 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 propriétés 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’tth 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, University of Newcastle, U.K. June 22, 2018.
- 141) ISBA 2018 World Meeting, Edinburgh, U.K. “Statistical Rhetoric”. June 24–29, 2018.

- 142) LMS Invited Lecture Series and CRISM Summer School in Computational Statistics. “Optimising and Adapting the Metropolis Algorithm” (three hours of lectures). July 9–13, 2018.

**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) Public lecture, “Born on Friday the Thirteenth: The Curious World of Probabilities”. Joint Statistical Meetings, Vancouver. July 30, 2018.
- 83) Education talk, “Teaching Markov Chains Using Java Applets”. Joint Statistical Meetings, Vancouver. August 1, 2018.

**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
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### 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

**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 4502	Monte Carlo Estimation
2016	STA 4502	Monte Carlo Estimation
2016	STA 2006S	Applied Stochastic Processes
2017	STA 2006S	Applied Stochastic Processes
2017	STA 4502	Topics in Stochastic Processes

**Online Course:**

Statistics: Making Sense of Data:

8-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 (secondary supervisor), August 2015 – present.

Cédric Beaulac, October 2016 – present.

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

**Post-Doctoral Fellows / Visitors / Research Assistants Supervised:**

Qing Deng, January – March, 2002.

Bruno de Sousa, August 2002 – July 2004.

Shaojun Wang, December 2002 – June 2003.

Yves Atchadé, January 2003 – May 2003.

Ye Sun (secondary supervisor), 2007 – 2009.

Krzysztof Latuszynski, 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.

**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](http://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 superstition, 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 *Sports Illustrated* issue of Nov 3, 2014 (page 64).

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

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

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 excessive Vermont lottery wins, January 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.

### **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.

**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

## **ADMINISTRATIVE POSITIONS:**

### **Within University:**

Associate Chair (Graduate Studies), Department of Statistics, 2000–03