

VITA for RICHARD DURRETT

Date of Birth: August 17, 1951.

Married, two children

Education:

<i>Degree</i>	<i>Department</i>	<i>Institution</i>	<i>Date</i>
Ph.D.	Operations Research	Stanford University	June 1976
M.S.	Mathematics	Emory University	August 1973
B.S.	Mathematics	Emory University	June 1972

Positions Held:

UCLA	E. R. Hedrick Assistant Professor	1976–78
	Assistant Professor	1978–81
	Associate Professor	1981–84
	Professor	1984–85
Cornell	Professor	1985–

Miscellaneous Achievements:

Alfred P. Sloan Fellowship, 1981–1983

Elected Fellow, Institute of Mathematical Statistics, August 1981

AMS Centennial Fellowship, 1984–1986

Guggenheim Fellowship, 1988–1989

45 minute lecture at International Congress of Math in Kyoto, 1990

Editor, *Annals of Applied Probability*, 1997–1999 (three years)

Elected to American Academy of Arts and Sciences, 2002

Elected to National Academy of Science, 2007

IMS Wald Lectures, 2008

Fellow American Association for the Advancement of Science, 2009

39 Ph.D. Students (listed by year of degree):

UCLA

- 1979 Chris Cagan
- 1981 Jeff Moore
- 1984 Rodrigo Bañuelos, Scott Schumacher
- 1985 Charles Clark, Bao Nguyen

Cornell

- 1988 Irene Ferreira, Glen Swindle, Nelson Tanaka
- 1989 Steve Bianco, Chris Noble
- 1990 Claudia Neuhauser, Xiaolong Luo
- 1991 Seth Stafford, Erich Friedman
- 1994 Heike Dengler, Susan Lee
- 1995 Gang Ma
- 1996 Hassan Allouba
- 1997 Don Allers, Nikhil Shah
- 1998 Robert Battig, Eknath Belbase, Min-jeong Kang, Semyon Kruglyak
- 1999 Ilya German
- 2000 Lisa Newton
- 2001 Dave Hiebeler, Peter Calabrese
- 2002 Nancy Sundell
- 2003 Janet Best
- 2005 Nathanael Berestycki, Raazesh Sainudiin
- 2006 Yannet Interian
- 2007 Arkendra De, Deena Schmidt, Ben Chan
- 2008 Emilia Huerta-Sanchez
- 2009 Daniel Remenik

BOOKS

1. *Brownian Motion and Martingales in Analysis*. (1984), Wadsworth Pub.Co.
2. *Lecture Notes On Particle Systems And Percolation*. (1988) Wadsworth Pub. Co., Belmont CA
3. *Probability: Theory and Examples*. (1991) Wadsworth Pub. Co., Pacific Grove, CA; Second Edition (1995), Duxbury Press; Third Edition (2004), Duxbury Press
4. *The Essentials of Probability*. (1993) Duxbury Press
5. *Stochastic Calculus: A Practical Introduction*. (1996) CRC Press [update of 1]
6. *Essentials of Stochastic Processes*. (1998) Springer-Verlag.
7. *Probability Models of DNA Sequence Evolution*. (2002) Springer-Verlag, second edition (2006)
8. *Random Graph Dynamics*. (2006) Cambridge U. Press
9. *Elementary Probability for Applications*. (2009) Cambridge U. Press [update of 4].

RESEARCH PAPERS

1. With S. G. Ghurye, Waiting times without memory. *J. Appl. Probability*, 13 (1976), 65-75.
2. With K. L. Chung, Downcrossings and local time, *Z. fur Wahr.* 35 (1976), 147-149.
3. With D. L. Iglehart and D. R. Miller, Weak convergence to Brownian meander and Brownian excursion. *Ann. Prob.*, 5 (1977), 117-129.
4. With D. L. Iglehart, Functionals of Brownian meander and Brownian excursion. *Ann. Prob.*, 5 (1977), 130-135.
5. With S. I. Resnick, Weak convergence with random indices. *Stoch. Proc. Appl.*, 5 (1977), 213-220.
6. Conditional limit theorems for some null recurrent Markov processes. *Ann. Prob.*, 6 (1978), 798-828. **(Ph.D. Thesis)**
7. With S. I. Resnick, Functional limit theorems for dependent variables. *Ann. Prob.*, 6 (1978), 829-846.
8. An infinite particle system with additive interactions. *Adv. Appl. Prob.*, 11 (1979), 335-383.
9. The genealogy of critical branching processes. *Stoch. Proc. Appl.*, 8 (1978), 101-116.

10. Conditioned limit theorems for random walks with negative drift. *Z. fur Wahr.*, 52 (1980), 277-287.
11. Maxima of branching random walks vs. independent random walks. *Stoch. Proc. Appl.*, 9 (1979), 117-135.
12. Maxima of branching random walks. *Z. fur Wahr.*, 62 (1983), 165-170.
13. On the shape of a random string. *Ann. Prob.*, 7 (1979), 1014-1027.
14. On the growth of one dimensional contact processes. *Ann. Prob.* 8 (1980), 890-907.
15. With J.T. Cox, Some limit theorems for percolation processes with necessary and sufficient conditions. *Ann. Prob.*, 9 (1981), 583-603.
16. With T. Liggett, The shape of the limit set in Richardson's model. *Ann. Prob.*, 9 (1980), 186-193.
17. An introduction to infinite particle systems. *Stoch. Proc. Appl.*, 11 (1981), 109-150.
18. A new proof of Spitzer's result on the winding of two dimension Brownian motion. *Ann. Prob.*, 10 (1982), 244-246.
19. With M. Brennan, Splitting intervals, *Ann. Prob.* 14 (1986), 1024-1036
20. With D. Griffeath, Contact processes in several dimensions, *Z. fur Wahr.*, 53 (1982), 535-552.
21. With D. Griffeath, Supercritical contact processes on Z , *Ann. Prob.*, 11 (1983), 1-15.
22. With T. Cox, Oriented percolation in dimensions $d \geq 4$: Bounds and asymptotic formulas, *P. Camb. Phil. Soc.*, 93 (1983), 151-162.
23. Oriented percolation in two dimensions, Special Invited Paper, *Ann. Prob.*, 12 (1984), 999-1040.
24. With T. Liggett, Fixed points of the smoothing transformation, *Z. fur Wahr.*, 64 (1983), 275-301.
25. With K. L. Chung and Z. Zhao, Extension of domains with finite gauge. *Math. Ann.*, 264 (1983), 73-79.
26. Some general results concerning the critical exponents of percolation processes. *Z. fur Wahr.*, 69 (1985), 421-437.
27. On the unboundedness of martingale transforms. Pages 27-36 in *Seminaire de Prob. XIX*. Springer Lecture Notes 1123.
28. With B. Nguyen, Thermodynamic inequalities for percolation. *Comm. Math. Phys.*, 99 (1985), 253-269.
29. Reversible diffusion processes. Ch. 6 in *Probability and Harmonic Analysis*. Edited by J. Chao and W. Wołczyński. Marcel Dekker.

30. Some peculiar properties of a particle system with sexual reproduction. in *Stochastic Spatial Processes*. Edited by P. Tautu. Lecture Notes in Math 1212, Springer, New York
31. Stochastic growth models: Ten problems for the 80's (and 90's). in *Particle Systems, Random Media and Large Deviations*. Edited by R. Durrett. AMS Contemporary Math., Vol. 41.
32. Multidimensional RWRE with subclassical limiting behavior. *Comm. Math. Phys.*, 104 (1986), 87-102.
33. Multidimensional RWRE with subclassical limiting behavior. in *Random Media*. Edited by G. Papanicolaou. IMA Volumes in Math and its Appl., Vol.7. Springer, New York
34. Stochastic growth models. in *Percolation Theory and the Ergodic Theory of Infinite Particle Systems*. Edited by H. Kesten. IMA Volume 8, Springer Verlag.
35. With M.D. Brennan, Splitting intervals, II: limit laws for lengths. *Prob. Th. Rel. Fields*, 75 (1987), 109-127.
36. With J. T. Chayes and L. Chayes, Inhomogeneous percolation problems and incipient infinite clusters. *J. Phys. A* 20 (1987), 1521-1530
37. With J. T. Chayes and L. Chayes, Critical behavior of two dimensional first passage times. *J. Stat. Phys.* 45 (1986), 933-951.
38. With J. T. Chayes and L. Chayes, Connectivity properties of Mandelbrot's percolation process. *Prob. Th. Rel. Field.* 77 (1988), 307-324.
39. With Liu Xiu-fang, The contact process on a finite set. *Ann Prob.* 16 (1988), 1158-1173.
40. Crabgrass, measles and gypsy moths: an introduction to interacting particle systems, *Math. Intelligencer.* 10 (1988), No. 2, 37-47.
41. Crabgrass, measles and gypsy moths: An introduction to modern probability, *Bull. AMS* 18 (1988), 117-143.
42. With R. H. Schonmann, The contact process on a finite set, II., *Ann. Prob.* 16 (1988), 1570-1583
43. With R. H. Schonmann, Large deviations for the contact process and two dimensional percolation. *Prob. Th. Rel. Field.* 77 (1988), 583-603
44. With J.T. Cox, Limit theorems for the spread of epidemics and forest fires. *Stoch. Proc. Appl.* 30 (1988), 171-191
45. With M. Bramson and G. Swindle, Statistical mechanics of crabgrass. *Ann. Prob.* 17 (1989), 444-481
46. With L. Gray, Some peculiar properties of a particle system with sexual reproduction. *Unpublished manuscript*
47. With M. Bramson, Random walk in random environment: A counter-example? *Comm. Math. Phys.* 119 (1988), 199-211

48. Stochastic growth models: recent results and open problems. Pages 308-312 in *Proceedings of the International Symposium in Mathematical Approaches to Ecological and Environmental Problem Solving*. Edited by C. Castillo-Chavez, S. Levin, and C. Shoemaker. Lecture Notes in Biomathematics, 81. Springer-Verlag, New York
49. With M. Bramson, A simple proof of the stability criterion of Gray and Griffeath. *Prob. Th. Rel. Fields.* 80 (1988), 293-298.
50. With R.H. Schonmann, and N.I. Tanaka, The contact process on a finite set, III. *Ann. Prob.* 17 (1989), 1303-1321
51. With R.H. Schonmann, and N.I. Tanaka, Correlation lengths for oriented percolation. *J. Stat. Phys.* 55 (1989), 965-979
52. With N.I. Tanaka, Scaling inequalities for oriented percolation. *J. Stat. Phys.* 55 (1989), 981-995
53. With J.T. Cox, Large deviations for independent random walks. *Prob. Th. Rel. Fields.*, 84 (1990), 67-82
54. With W.D. Ding and T.M. Liggett, Ergodicity of reversible reaction diffusion processes. *Prob. Th. Rel. Fields*, 85 (1990), 13-26
55. With G. Swindle, Are there bushes in a forest? *Stoch. Proc. Appl.* 37 (1991), 19-31
56. With H. Kesten, The critical parameter for connectedness of some random graphs. Pages 161-176 in *A Tribute to P. Erdős*. Edited by A. Baker, B. Bollobas, and A. Hajnal. Cambridge U. Press
57. A new method for proving the existence of phase transitions. Pages 141-170 in *Spatial Stochastic Processes*. Edited by K.S. Alexander and J.C. Watkins. Birkhauser, Boston
58. With Chen Jin-wen and Liu Xiu-fang, Exponential convergence for one dimensional contact processes. *Acta Math. Sinica* 6 (1990), 349-353
59. With M. Bramson and W.D. Ding, Annihilating branching processes. *Stoch. Proc. Appl.*, 37 (1991), 1-17
60. The contact process: 1974-1989. Pages 1-18 in *Mathematics of Random Media* (1992). Edited by W.E. Kohler and B.S. White. American Math. Society
61. With M. Bramson and R.H. Schonmann, The contact process in a random environment. *Ann. Probab.*, 19 (1991), 960-983
62. With H. Kesten, and E. Waymire, On weighted heights of random trees. *J. Theoretical Prob.*, 4 (1991), 223-237
63. With J.T. Cox and R. Schinazi, The critical contact process seen from the right edge. *Prob. Th. Rel. Field.* 87 (1991), 325-332
64. With H. Kesten and G. Lawler, Making money from fair games. Pages 235-268 in *Random Walks, Brownian Motion, and Interacting Particle Systems*. (1991) Edited by R. Durrett and H. Kesten. Birkhauser, Boston

65. With A. Moller, Complete convergence theorem for a competition model. *Prob. Th. Rel. Fields* 88 (1991), 121-136
66. With J. Steif, Some rigorous results for the Greenberg-Hastings model. *J. Theoretical Prob.*, 4 (1991), 669-690
67. With C. Neuhauser, Epidemics with recovery in $d = 2$. *Ann. Appl. Prob.* 1, (1991), 189-206
68. With J.T. Cox, Nonlinear voter models. Pages 189-202 in *Random Walks, Brownian Motion, and Interacting Particle Systems*. (1991) Edited by R. Durrett and H. Kesten. Birkhauser, Boston
69. Stochastic models of growth and competition. Pages 1049-1056 in Proceedings of the International Congress of Math. Kyoto, Springer-Verlag, New York
70. Multicolor particle systems with large threshold and range. *J. Theoretical Prob.*, 5 (1992), 127-152
71. Stochastic growth models: bounds on critical values. *J. Appl. Prob.*, 29 (1992), 11-20
72. Predator-prey systems. Pages 37-58 in *Asymptotic problems in probability theory: stochastic models and diffusions on fractals*. (1992) Edited by K.D. Elworthy and N. Ikeda. Pitman Research Notes 283. Longman, Essex, England
73. With L.C.G. Rogers, Asymptotic behavior of Brownian polymers. *Prob. Th. Rel. Field.*, 92 (1992), 337-349
74. With J. Steif, Fixation results for threshold voter models. *Ann. Probab.*, 21 (1993), 232-247
75. Some new games for your computer. *Nonlinear Science Today*, 1 (1993), No.4, p. 1-6
76. With L. Buttel and J.T. Cox. Estimating the critical values of stochastic growth models. *J. Appl. Prob.* 30 (1993), 445-461
77. With C. Neuhauser. Particle systems and reaction diffusion equations. *Ann. Prob.* 22 (1994), 289-333
78. Stochastic models of growth and competition. Pages 176-183 in *Patch Dynamics*. (1993) Edited by S. Levin, T. Powell, and J. Steele. Lecture Notes in Biomathematics, 96. Springer, New York
79. With D. Griffeath. Asymptotic behavior of excitable cellular automata. *J. Experimental Math.*, 2 (1993), 183-206
80. With R. Schinazi. Asymptotic critical value for a competition model. *Ann. Applied Prob.* 3 (1993), 1047-1066
81. With S. Levin. Stochastic spatial models: A user's guide to ecological applications. *Phil. Trans. Roy. Soc., B*, 343 (1994), 329-350
82. With S. Levin. The importance of being discrete (and spatial). *Theoret. Pop. Biol.* 46 (1994), 363-394

83. Spatial epidemic models. Pages 187-201 in *Epidemic Models: Their Structure and Relation to Data*. (1995) Edited by Denis Mollison. Cambridge U. Press
84. With G. Swindle. Coexistence results for catalysts. *Prob. Th. Rel. Fields*, 98 (1994), 489-515
85. Ten Lectures on Particle Systems. Pages 97-201 in *St. Flour Lecture Notes*. Lecture Notes in Math 1608. (1995). Springer-Verlag, New York
86. With R. Schinazi. Intermediate phase for contact processes on trees. *Ann. Prob.* 23 (1995), 668-673
87. With J.T. Cox. Hybrid zones and voter model interfaces. *Bernoulli* 1 (1995), 343-370
88. With S. Levin. Spatial models for species-area curves. *J. Theor. Biol.* 179 (1996), 119-127
89. With M. Bramson and J.T. Cox. Spatial models for species-area curves. *Ann. Prob.*, 24 (1996), 1727-1751
90. With S. Levin. Allelopathy in spatially distributed populations. *J. Theor. Biol.*, 185 (1997), 165-172
91. With H. Allouba, J. Hawkes, and E. Perkins. Super-tree random measures. *J. Theoretical Prob.*, 10 (1997), 773-794
92. With C. Neuhauser. Coexistence results for some competition models. *Ann. Appl. Probab.*, 7 (1997), 10-45
93. With Z.Q. Chen and Gang Ma. Holomorphic diffusions and boundary behavior of harmonic functions. *Ann. Prob.*, 25 (1997), 1103-1134
94. With Y.C. Liu and M.G. Milgroom. A spatillay structured stochastic model to simulate heterogeneous transmission of viruses in a fungal population. *Ecological Modelling.*, 127 (2000), 291-308
95. With S. Levin. From individuals to epidemics. *Phil. Trans. Roy. Soc., B.* 351 (1996), 1615-1621
96. With S. Levin. Spatial aspects of interspecific competition. *Theoret. Pop. Biol.* 53 (1998), 30-43
97. Stochastic Spatial Models. Pages 1-48 in *Probability Theory and Applications* Lecture Notes of Park City Mathematics Institute, American Math. Society.
98. With L. Buttel and R. Harrison. Spatial models for hybrid zone evolution. *Heredity.* 84 (2000), 9-19
99. With M. Bramson and J.T. Cox. A spatial model for the abundance of species. *Ann. Probab.* 26 (1998), 658-709
100. With B. Granovsky and S. Gueron. The equilibrium behavior of reversible coagulation-fragmentation processes. *J. Theoret. Prob.* 12 (1999), 447-474

101. Stochastic Spatial Models. Pages 39–94 in *Mathematics Inspired by Biology*. Springer Lecture Notes in Math 1714.
102. With S. Kruglyak. A new stochastic model of microsatellite evolution. *J. Appl. Prob.* **36** (1999), 621–631
103. With S. Kruglyak, M. Schug, and C. Aquadro. Equilibrium distributions of microsatellite repeat length resulting from a balance between slippage events and point mutations. *Proc. Nat. Acad. Sci., USA.* 95 (1998), 10774–10778
104. With J. Molofsky, J. Dushoff, D. Griffeth, and S. Levin. Local frequency dependence and global coexistence. *Theoret. Pop. Biol.*, 55 (1999), 270–282
105. With Ed Perkins. Rescaled contact processes converge to super-Brownian motion in two or more dimensions. *Prob. Theor. Rel. Fields.* 114 (1999), 309–399
106. With Rinaldo Schinazi. Boundary modified contact processes. *J. Theor. Prob.* **13** (2000), 575–594
107. With Ted Cox and Ed Perkins. Rescaled voter models converge to super-Brownian motion. *Ann. Prob.* **28** (2000), 185–234
108. With Ted Cox and Ed Perkins. Rescaled particle systems converging to super-Brownian motion. Pages 269–284 in *Perplexing Problems in Probability: Festschrift in Honor of Harry Kesten*, edited by M. Bramson and R. Durrett, Birkhauser
109. Stochastic Spatial Models. *SIAM Review.* **41** (1999), 677–718
110. With R.E. Broughton and S.E. Stanley. Quantification of homoplasy for nucleotide transitions and transversions and a reexamination of assumptions in weighted phylogenetic analysis. *Systematic Biology.* **49** (2000), 617–627
111. Harry Kesten’s publications: A personal perspective. Page 1–25 in *Perplexing Problems in Probability: Festschrift in Honor of Harry Kesten*, edited by M. Bramson and R. Durrett, Birkhauser
112. With Simon Levin. Lessons on pattern formation from planet WATOR. *J. Theor. Biol.* **205** (2000), 201–214
113. With T.J. Vision, D.G. Brown, D.B. Shmoys, and S.D. Tanksley. Selective mapping: a strategy for optimizing the construction of high-density linkage maps. *Genetics.* **155** (2000), 407–420
114. Mutual invadability implies coexistence in spatial models. *Memoirs of the AMS.* Volume 156 (2002), Number 740
115. With S. Kruglyak, M. Schug, and C.F. Aquadro. Distribution and abundance of microsatellites in the yeast genome can be explained by a balance between slippage events and point mutations. *Mol. Biol. Evol.* **17** (2000), 1210–1219
116. With L.A. Buttell and S.A. Levin. Competition and species packing in patchy environments. *Theor. Pop. Biol.*, to appear

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118. With P. Calabrese and C.F. Aquadro. Dynamics of microsatellite divergence under stepwise mutation and proportional slippage / point mutation models. *Genetics*. **159** (2001), 839–852
119. With P. Diaconis. Chutes and ladders in Markov chains. *J. Theor. Prob.* **14** (2001), 899–926
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121. With N. Sundell. Exponential distance statistics to detect the effects of population subdivision. *Theor. Pop. Biol.* **60** (2001), 107–116
122. With A. De, M. Ferguson, and S. Sindi. The equilibrium distribution for a generalized Sankoff-Ferretti model accurately predicts chromosome size distributions in a wide variety of species. *J. Appl. Prob.* **38** (2001), 324–334
123. With H. Kesten, and V. Limic. Once edge-reinforced random walk on a tree. *Prob. Th. Rel. Fields.* **122** (2002), 567–
124. With K.Y. Chen and S.D. Tanksley. A simple formula useful for positional cloning. *Genetics*. **160** (2002), 353–355
125. With J.T. Cox. The stepping stone model: New formulas expose old myths. *Ann. Appl. Prob.* **12**, 1348–1377
126. With V. Limic. A surprising Poisson process arising from a species competition model. *Stoch. Proc. Appl.* **102** (2002), 301–309
127. With V. Limic. Rigorous results for the NK model. *Ann. Prob.* **31** (2003), 1713–1753
128. Shuffling chromosomes. *J. Theoretical Prob.* **16** (2003), 725–750
129. With T. York and R. Nielsen. Bayesian estimation of the number of inversions in the history of two chromosomes. *J. Comp. Bio.* **9** (2002), 805–818
130. With N. Sundell and E.G. Cooch. Dynamics of a two patch herbivory system: Herbivore enhancement, adaptive behavior, and trophic cascades.
131. With P. Calabrese. Dinucleotide repeats in the Drosophila and human genomes have complex length dependent mutation processes. *Mol. Biol. Evol.* **20** (2003), 715–725
132. With L. Buttel, and R. Harrison. Genetic structure of mosaic hybrid zones.
133. With I. Zahle and J.T. Cox. The stepping stone model, II. Genealogies and the infinite sites model. *Ann. Appl. Probab.* **15** (2005), 671–699
134. With J. Schweinsberg. Approximating selective sweeps. *Theor. Pop. Biol.* **66** (2004), 129–138

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136. Rigorous results for the CHKNS random graph model. Proceedings of *Discrete Random Walks 2003*. Available online: <http://dmtcs.loria.fr/proceedings/dmACind.html>
137. With R. Nielsen, and T.L. York. Bayesian estimation of genomic distance. *Genetics* **166** (2004), 621–629
138. With S.A. Levin. Can stable groups be maintained by homophilous imitation alone? *Journal of Economic Behavior and Organization.* **57** (2005), 267–278
139. With R. Sainudiin, C.F. Aquadro, and R. Nielsen. Microsatellite models: Insights from a comparison of humans and chimpanzees. *Genetics* **168** (2004), 383–395
140. Genome Rearrangement. In *Statistical Methods in Molecular Evolution*. Edited by R. Nielsen.
141. With Rachel Ward. Subfunctionalization: How often does it occur? How long does it take? *Theor. Pop. Biol.*, **66** (2004), 93–100
142. With Nathanael Berestycki. A phase transition in the random transposition random walk. *Prob. Theory. Rel. Fields.* 136 (2006), 203–233
143. With Jonah Blasiak. Random Oxford Graphs. *Stoch. Processes Appl.* **115** (2005), 1257–1278
144. With Deena Schmidt. Adaptive evolution drives the diversification of zinc-finger binding domains. *Mol. Biol. Evol.* **21** (2004), 2326–2339
145. With Jason Schweinsberg. Power laws for family sizes in a gene duplication model. *Annals of Probability.* **33** (2006), 2094–2126
146. With Leonid Mytnik, and Ed Perkins. Competing super-Brownian motions as limits of interacting particle systems. *Electronic Journal of Probability.* **10** (2005), 1147–1220
147. With Jason Schweinsberg. A coalescent model for the effect of advantageous mutations on the genealogy of a population. *Stoch. Proc. Appl.* **115** (2005), 1628–1657
148. With Paul Jung. Two phase transitions for the contact process on small worlds. *Stoch. Proc. Appl.* 117 (2007), 1910–1927
149. With Emilia Huerta-Sanchez. Wagner’s canalization model. *Theor. Pop. Biol.* 71 (2007), 121–130
150. With Thomas L. York, Steven Tanksley and Rasmus Nielsen. Bayesian and maximum likelihood estimation of genetic maps. *Genetical Research.* 85 (2006), 159–168
151. With Benjamin Chan. A new coexistence result for competing contact processes. *Ann. Appl. Prob.* 16 (2006), 1155–1165
152. With Ilijana Zahle. On the width of hybrid zones. *Stoch. Proc. Appl.* 117 (2007), 1751–1763

153. With Yannet Interian. Genomic midpoints: computation and evolutionary implications.
154. With Deena Schmidt. Waiting for regulatory sequences to appear. *Ann. Appl. Prob.* 17 (2007), 1–32
155. With Mateo Restrepo. One dimensional stepping stone models, sardine genetics, and Brownian local time. *Anna. Appl. Prob.* 18 (2008), 334–358
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157. With Nathanael Berestycki. Limiting behavior of the distance of a random walk. *Electronic. J. Prob.* 13 (2008), 374–395
158. With Nicolas Lanchier. Coexistence in host pathogen systems. *Stoch. Proc. Appl.* 118 (2008), 1004–1021
159. With Tom York and Rasmus Nielsen. Dependence of paracentric inversion rate on tract length. *BioMedCentral Bioinformatics.* (2007) 8: paper 1115
160. With Raazesh Sainudiin and Andy Clark. Simple models of genomic variation in human SNP density. *BioMedCentral Genetics.* (2007) 8: paper 146
161. With Emilia Huerta-Sanchez and Carlos Bustamante. Population genetics of polymorphism and divergence under fluctuating selection. *Genetics.* 178 (2008), 325–337
162. With Lea Popovic. Degenerate diffusions arising from gene duplication models. *Ann. Appl. Prob.* 19 (2009), 15–48
163. With Deena Schmidt and Jason Schweinsberg. A waiting time problem arising from the study of multi-stage carcinogenesis. *Ann. Appl. Prob.* 19 (2009), 676–718
164. With Deena Schmidt. Waiting for two mutations: with applications to regulatory sequence evolution and the limits of Darwinian evolution. *Genetics.* 180 (2008), 1501–1509
165. With Ben Chan and Nicolas Lanchier. Coexistence for a multitype contact process with seasons. *Ann. Appl. Prob.*
166. With Shirsendu Chatterjee Contact processes on random graphs with power law degree distributions have critical value 0. *Ann. Prob.*
167. With Daniel Remenik. Chaos in a Spatial Epidemic Model. *Ann. Appl. Prob.*
168. Coexistence in Stochastic Spatial Models. (Wald Lecture Paper). *Ann. Appl. Prob.* 19 (2009), 477–496
169. With John Mayberry. Evolution in predator-prey systems.
170. With Shirsendu Chatterjee. Persistence of activity in random Boolean networks.

171. With Stephen Moseley. Evolution of resistance and progression to disease during clonal expansion of cancer.
172. With Daniel Remenik. Brunet-Derrida particle systems, free boundary problems and Wiener-Hopf equations.