

Priscilla E. Greenwood

Curriculum Vitae, January 9 2023

Department of Mathematics
The University of British Columbia
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Post-secondary education

Duke University, Durham, N.C., B.A., 1955-1959
University of Wisconsin Madison, M.A., 1961
Ph.D., 1963

Academic appointments

University of Wisconsin, Assistant Professor, 1963-1964
North Carolina College, Durham, Associate Professor, 1964-1966
University of British Columbia, Assistant Professor, 1967-1975
Associate Professor, 1975-1982
Professor, 1985-2000
Professor Emerita, 2000-present

Visiting and Research Professorships post-retirement

Arizona State University, Visiting Professor, 2000-2003
Senior Researcher (12 mo.), 2003-2004
(Ctr. for Evolutionary Functional Genomics)
Research Professor, 2004-2009
Stockholm University, Visiting Professor (3 mo.), 2002
SAMSI, Visiting Professor (12 mo.), 2009-10
(Statistical and Applied Mathematical Institute, Research Triangle Park, NC)
University of Copenhagen, Visiting Professor (4 mo.), 2010

Student and postdoctoral fellow training

Ph.D. Students

Soo Hong Chew, PhD 1980, Two representation theorems and their application to decision theory, University of British Columbia, co-supervised with Kenneth R. MacCrimmon. Now National University of Singapore, Department of Economics.

Anuj Mubayi, PhD 2008, The role of environmental context in the dynamics and control of alcohol use, Arizona State University, co-supervised with Carlos Castillo-Chávez. Now Arizona

State University, School of Human Evolution and Social Change and Simon A. Levin
Mathematical Computational Modeling Science Center.

Carlos Alan Torre, PhD 2009, Deterministic and stochastic metapopulation models for Dengue fever, Arizona State University, co-supervised with Carlos Castillo-Chávez.

Daniel Rios-Doria, PhD 2010, Modeling Transient and Sustained Epidemic Dynamics: Cholera, Influenza and Rubella as Case Studies, Arizona State University, co-supervised with Gerardo Chowell.

David Tello, PhD 2012, A mathematical model of Dopamine neurotransmission, Arizona State University, co-supervised with Sharon Marie Crook. Now Grand Canyon University, College of Arts and Science.

May Anne Estrera Mata, PhD 2017, Avian influenza epidemic recurrence and approximate stochastic models, University of British Columbia Okanagan, co-supervised with Rebecca C. Tyson. Now University of the Philippines Mindanao, Department of Mathematics, Physics and Computer Science.

M.Sc. Students

Glen Cooper, 1975

Brian Leroux, 1986

David Szabo, 1987

Kongning Liu, 1989

Harold Ship, 1993

Anthony Billups, 2005

Azra Panjwani, 2007

Kamal Barley, 2008

Undergraduate Students

Conor Morrison, 2020

James Hu (jointly supervised with Wayne Nagata), 2021

Postdoctoral fellows (since 1998)

Ursula Müller, January-August 1998

John M. Andries, September 1998-July 1999

Greg Lewis, September 1999-July 2000

Luis Gordillo, 2004-2008

Preprints/Research in progress

LF Gordillo, PE Greenwood, intermittent, precipitation-dependent interactions, encompassing Allee effect, may yield vegetation patterns in a transitional parameter range. (Submitted to Bulletin of Math Biology, Jan 2 2023, 13 p)

ND Witte, PE Greenwood. On the density arising from the domain of attraction between sum and supremum: the alpha-sun operator. (Submitted 2020, resubmitted, 2022)

P Rowat, PE Greenwood. An ISI study of a Stochastic Morris-Lecar burster. (To be submitted)

P.E. Greenwood and L.M. Ward. Building stochastic dynamical neural circuits for cortical control. (To be submitted)

Publications

Journals

1. P.E. Greenwood. A convolution equation on a compact interval. Proc. Amer. Math. Soc. 16 (1965), 8-13.
2. P.E. Greenwood. An asymptotic estimate of Brownian path variation. Proc. Amer. Math. Soc. 21 (1969), 134-138.
3. P.E. Greenwood. The variation of a stable path is stable. Z. Wahrsch. Verw. Gebiete 14 (1969), 140-148.
4. P.E. Greenwood and B. Fristedt. Variations of processes with stationary independent increments. Z. Wahrsch. Verw. Gebiete 23 (1972), 171-186.
5. P.E. Greenwood. Asymptotics of randomly stopped sequences with independent increments. Ann. Probab. 1 (1973), 317-321.
6. P.E. Greenwood. On Prabhu's factorization of Levy generators. Z. Wahrsch. Verw. Gebiete 27 (1973), 75-77.
7. P.E. Greenwood. The Martingale. Ann. Probab. 2 (1974), 84-89.
8. P.E. Greenwood. Extreme time of processes with stationary independent increments. Ann. Probab. 3 (1975), 664-676.
9. P.E. Greenwood. Wiener-Hopf methods, decompositions, and factorisation identities for maxima and minima of homogeneous random processes. Adv. Appl. Probab. 7 (1975), 767-785.
10. P.E. Greenwood and I. Monroe. Random stopping preserves regular variation of process distributions. Ann. Probab. 5 (1977), 42-51.
11. P.E. Greenwood. Wiener-Hopf decomposition of random walks and Levy processes. Z. Wahrsch. Verw. Gebiete 34 (1976), 193-198.
12. P.E. Greenwood and Moshe Shaked. Fluctuations of random walk in R^d and storage systems. Adv. Appl. Probab. 9 (1977), 566-587.

13. P.E. Greenwood and Moshe Shaked. Dual pairs of stopping times for random walk. *Ann. Probab.* 6 (1978), 644-650.
14. S. Resnick and P.E. Greenwood. A bivariate stable characterization and domains of attraction. *J. Multivariate Anal.* 9 (1979), 206-221.
15. P.E. Greenwood and J. Pitman. Fluctuation identities for Lévy processes and splitting at the maximum. *Adv. Appl. Probab.* 12 (1980), 893-902.
16. P.E. Greenwood and J. Pitman. Construction of local time and Poisson point processes from nested arrays. *J. London Math. Soc.* (2) 22 (1980), 182-192.
17. P.E. Greenwood and J. Pitman. Fluctuation identities for random walk by path decomposition at the maximum. *Adv. Appl. Prob.* 12 (1980), 291-293.
18. E. Arjas and P.E. Greenwood. Competing risks and independent minima, a marked point process approach. *Adv. Appl. Prob.* 13 (1981), 669-680.
19. P.E. Greenwood, E. Omeij and J.L. Teugels. Harmonic renewal measures. *Z. Wahrsch. Verw. Gebiete* 59 (1982), 391-409.
20. P.E. Greenwood, E. Omeij and J.L. Teugels. Harmonic renewal measures and bivariate domains of attraction in fluctuation theory. *Z. Wahrsch. Verw. Gebiete* 61 (1982), 527-539.
21. P.E. Greenwood and E. Perkins. A conditioned limit theorem for random walk and Brownian local time on square root boundaries. *Ann. Probab.* 11 (1983), 227-261.
22. P.E. Greenwood and E. Perkins. Limit theorems for excursions from a moving boundary. *Theory Probab. Appl.* 29 (1984), 703-714.
23. C.M. Goldie and P.E. Greenwood. Characterizations of set-indexed Brownian motion and associated conditions for finite-dimensional convergence. *Ann. Probab.* 14 (1986), 802-816.
24. C.M. Goldie and P.E. Greenwood. Variance of set-indexed sums of mixing random variables and weak convergence of set-indexed processes. *Ann. Prob.* 14 (1986), 817-839.
25. P.E. Greenwood and A.A. Novikov. One-sided boundary crossing for processes with independent increments. *Theory Probab. Appl.* 31 (1986), 266-277.
26. P.E. Greenwood and M.S. Nikulin. Some remarks with respect to the application of tests of chi-square type. *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* 158 (1987), 49--71; translation in *J. Soviet Math.* 43 (1987), 2776-2791.
27. P.E. Greenwood and G. Hooghiemstra. An extreme-type limit law for a storage process. *Math. Oper. Research* 13 (1988), 232-242.

28. P.E. Greenwood and W. Wefelmeyer. Efficiency of estimators for partially specified filtered models. *Stochastic Process. Appl.* 36 (1990), 353-370.
29. P.E. Greenwood and G. Hooghiemstra. On the domain of attraction of an operator between supremum and sum. *Probab. Theory Related Fields*, 89 (1991), 201-210.
30. P.E. Greenwood and W. Wefelmeyer. Efficient estimation in a nonlinear counting process regression model. *Canad. J. Statist.* 19 (1991), 165-178.
31. P.E. Greenwood and W. Wefelmeyer. Partially specified filtered models and efficiency. *Teor. Veroyatnost. i Primenen.* 37 (1992) 162-165; translation in *Theory Probab. Appl.* 37 (1992) 139-142.
32. P.E. Greenwood and A.N. Shiryaev. Asymptotic minimaxity of a sequential maximum likelihood estimator for a first order autoregressive model. *Stochastics Stochastics Rep.* 38 (1992), 49-65.
33. P.E. Greenwood and I.V. Evstigneev. Markov evolving random field and splitting random elements. *Teor. Veroyatnost. i Primenen.* 37 (1992), 46-48; translation in *Theory Probab. Appl.* 37 (1992), 40-42.
34. P.E. Greenwood and I.A. Ibragimov. On asymptotically efficient estimation in the sense of Bahadur. *Dokl. Akad. Nauk* 332 (1993), 5-7; translation in *Russian Acad. Sci. Dokl. Math.* 48 (1993), 221-224.
35. A. Barbour and P.E. Greenwood. Rates of Poisson approximation to finite range random fields. *Ann. Appl. Probab.* 3 (1993), 91-102.
36. R.A. Doney and P.E. Greenwood. On the joint distribution of ladder variables of random walk. *Prob. Theory Related Fields* 94 (1993), 457-472.
37. P.E. Greenwood and W. Wefelmeyer. Asymptotic minimax results for stochastic process families with critical points. *Stochastic Process. Appl.* 44 (1993), 107-116.
38. P.E. Greenwood and W. Wefelmeyer. Nonparametric estimators for Markov step processes. *Stochastic Process. Appl.* 52 (1994), 1-16.
38. P.E. Greenwood and W. Wefelmeyer. Optimality properties of empirical estimators for multivariate point processes. *J. Multivariate Anal.* 49 (1994), 202-217.
39. P.E. Greenwood and W. Wefelmeyer. Efficiency of empirical estimators for Markov chains. *Ann. Statist.* 23 (1995), 132-143.
40. P.E. Greenwood, I.W. McKeague and W. Wefelmeyer. Outperforming the Gibbs sampler empirical estimator for nearest neighbor random fields. *Ann. Statist.* 24 (1996), 1433-1456.

41. P.E. Greenwood and W. Wefelmeyer. Empirical estimators for semi-Markov processes. *Math. Methods Statist.* 5 (1996), 229-315.
42. P.E. Greenwood and J. Sun. Equivalences of the large deviation principle for Gibbs measures and critical balance in the Ising model. *J. Statist. Phys.* 86 (1997), 149-164.
43. G. Hooghiemstra and P.E. Greenwood. The domain of attraction of the alpha-sun operator for type II and type III distributions. *Bernoulli* 3 (1997), 479-489.
44. P.E. Greenwood and W. Wefelmeyer. Maximum likelihood estimator and Kullback-Leibler information in misspecified Markov chain models. *Theory Probab. Appl.* 42 (1998), 103-111.
45. P.E. Greenwood and W. Wefelmeyer. Cox's factoring of regression model likelihoods for continuous time processes. *Bernoulli* 4 (1998), 65-80.
46. P.E. Greenwood and J. Sun. On criticality for competing influences of boundary and external field in the Ising model. *J. Statist. Phys.* 92 (1998), 35-45.
47. P.E. Greenwood, I.W. McKeague and W. Wefelmeyer. Information bounds for Gibbs samplers. *Ann. Statist.* 26 (1998), 2128-2156.
48. P.E. Greenwood and W. Wefelmeyer. Reversible Markov chains and optimality of symmetrized empirical estimators. *Bernoulli* 5 (1999), 109-123.
49. P.E. Greenwood and I.A. Ibragimov. Bahadur's asymptotic efficiency and the LAN expansion. *Math. Methods Statist.* 8 (1999), 181-208.
50. P.E. Greenwood, I.W. McKeague and W. Wefelmeyer. Von Mises type statistics for single site updated local interaction random fields. *Statistica Sinica* 9 (1999), 699-712.
51. P.E. Greenwood and W. Wefelmeyer. Characterizing efficient estimators for local interaction Gibbs fields. *Stat. Inference Stoch. Process.* 2 (1999), 119-134.
52. P.E. Greenwood, L.M. Ward and W. Wefelmeyer. Statistical analysis of stochastic resonance in a simple setting. *Phys. Rev. E* 60, 4 (1999), 4687-4695.
53. P.E. Greenwood and W. Wefelmeyer. Reversible Markov chains and optimality of symmetrized estimators. *Bernoulli* 5 (1999), 109-123.
54. P.E. Greenwood and I.A. Ibragimov. Bahadur's asymptotic efficiency and the LAN expansion I. Lower bound, Independent observations. *Math. Methods Statist.* 8 (1999), 181-208.
55. P.E. Greenwood, I.W. McKeague and W. Wefelmeyer. Von Mises type statistics for single site updated local interaction random fields. *Statist. Sinica* 9 (1999), 699-712.

56. P.E. Greenwood and W. Wefelmeyer. Characterizing efficient estimators for local interaction Gibbs fields. *Stat. Inf. for Sto. Processes* 2 (1999), 119-134.
57. P.E. Greenwood, L.M. Ward, D.F. Russell, A. Neiman and F. Moss. Stochastic resonance enhances the electrosensory information available to paddlefish for prey capture. *Phys. Rev. Lett.* 84 (2000), 4773-4776.
58. P.E. Greenwood, D.T. Haydon, N.C. Stenseth, and M.S. Boyce. Phase coupling and synchrony in the spatiotemporal dynamics of muskrat and mink populations across Canada. *Proc. Nat. Acad. Sci. U.S.A.* 98 (2001), 13149-13154.
59. P.E. Greenwood, A. Schick and W. Wefelmeyer. Comment on: Inference for semiparametric models: some questions and an answer, by P.J. Bickel and J. Kwon. *Statist. Sinica* 11 (2001), 892-906.
60. P.E. Greenwood, D.T. Haydon, N.C. Stenseth and T. Saitoh. Spatio-temporal dynamics of the grey-sided vole in Hokkaido: identifying coupling using state-based Markov-chain modelling. *Proc. Roy. Soc. Ser. B* 270 (2003), 435-445.
61. P.E. Greenwood, U.U. Müller, L.M. Ward and W. Wefelmeyer. Statistical analysis of stochastic resonance in a threshold detector. *Austrian J. Statist.* 32 (2003), 49-70.
62. P.E. Greenwood, U.U. Müller and W. Wefelmeyer. Efficient estimation for semiparametric semi-Markov processes. *Comm. Statist. Theory Methods* 33 (2004), 419-435.
63. P.E. Greenwood and P. Lánský. Optimum signal in a simple neuronal model with signal dependent noise. *Biol. Cybernet.* 92 (2005), 199-205.
64. P.E. Greenwood, U.U. Müller and L.M. Ward. Soft threshold stochastic resonance. *Phys Rev. E* 70 (2004).
65. P. Lánský and P.E. Greenwood. Optimal signal estimation in neuronal models. *Neural Comput.* 17 (2005), 2240-2257.
66. R. Kuske, L.F. Gordillo and P.E. Greenwood. Sustained oscillations via coherence resonance in SIR. *J. Theoret. Biol.* 245 (2007), 459-469.
67. P.E. Greenwood and P. Lánský. Information content in threshold data with non-Gaussian noise. *Fluctuation and Noise Letters* 7 (2007), L79-L89.
68. P. Lánský and P.E. Greenwood. Optimal signal in sensory neurons under an extended rate coding concept. *Biosystems* 89 (2007), 10-15.
69. L.M. Ward and P.E. Greenwood. 1/f Noise. *Scholarpedia* 2(12):1537 (2007).

70. S. Erland and P.E. Greenwood. Constructing $1/\omega^\alpha$ noise from reversible Markov chains. *Phys. Rev. E* 76 (2007), 031114-1-031114-13.
71. L.F. Gordillo, S.A. Marion, A. Martin-Löf and P.E. Greenwood. Bimodal epidemic size distributions for near-critical SIR with vaccination. *Bull. Math. Biol.* 70 (2008), 589-602.
72. L.F. Gordillo, S.A. Marion and P.E. Greenwood. The effect of patterns of infectiousness on epidemic size. *Math. Biosci. Eng.* 5 (2008), 429-435.
73. E.J. Allen, L.J.S. Allen, A. Arconiega and P.E. Greenwood. Construction of equivalent stochastic differential equation models. *Stoch. Anal. Appl.* 26 (2008), 274-297.
74. A. Mubayi, P.E. Greenwood, C. Castillo-Chávez, P.E. Gruenewald and D. Gorman. Impact of relative residence times on the distribution of heavy drinkers in highly distinct environments. *Socio-Economics Planning Sciences* 44 (2010), 45-66.
75. P.E. Greenwood, A. Schick and W. Wefelmeyer. Estimating the inter-arrival time density of semi-Markov processes under structural assumptions on the transition distribution. *Statist. Prob. Lett* 81 (2011), 277-282.
76. A. Mubayi, P.E. Greenwood, X. Wang, C. Castillo-Chávez, D.M. Gorman, P. Gruenewald and R.F. Saltz. Types of drinkers and drinking settings, an application of a mathematical model. *Addiction* 106 (2011), 749-758.
77. P.H. Baxendale and P.E. Greenwood. Sustained oscillations for density-dependent Markov processes. *J. Math. Biol.* 63 (2011), 433-457.
78. M.T. Giraudo, P.E. Greenwood, and L. Sacerdote. How sample paths of leaky integrate-and-fire models are influenced by the presence of a firing threshold. *Neural Comput.* 23 (2011), 1743-1767.
79. P.F. Rowat and Greenwood, P.E., Identification and continuity of the distributions of burst-length and inter-spike interval in the stochastic Morris-Lecar neuron, *Neural Computation* 23 (2011), 3044-3124.
80. S. Ditlevsen and P.E. Greenwood. The Morris-LeCar neuron embeds a leaky integrate-and-fire model. *J. Math. Biol.* 67 (2013), 239-259.
81. A. Mubayi and P.E. Greenwood. Contextual interventions for controlling alcohol drinking. *Math. Popul. Stud.* 20 (2013), 27-53.
82. R. Bani, R. Hameed, S. Szymanowski, P.E. Greenwood, C. Kribs-Zaleta and A. Mubayi. Influence of environmental factors on college alcohol drinking patterns. *Math. Biosci. Eng.* 10 (2013), 1281-1300.

83. P.E. Greenwood, M.D. McDonnell and L.M. Ward. Dynamics of gamma bursts in local field potentials. *Neural Comput.* 27 (2015) 74-103.
84. P.F. Rowat and P.E. Greenwood. The ISI distribution of the Hodgkin-Huxley neuron. *Front. Comput. Neurosci.* 8 (2014), 111, 1-12.
85. P.E. Greenwood, M.D. McDonnell and L.M. Ward. A Kuramoto coupling of quasicycle oscillators with application to neural networks. *J. of Coupled Systems and Multiscale Dynamics* 4 (2016), 1-13.
86. R.V. Chamberlin, S. Abe, B.F. Davis, P.E. Greenwood and A.S.H. Shevchuk. Fluctuation theorems and 1/f noise from a simple matrix. *Eur. Phys. J. B* (2016), 89:185.
87. L.M. Ward and P.E. Greenwood. Stochastic facilitation in the brain? *J. of Statistical Mechanics* (2016).
88. W. Lee, P.E. Greenwood, N. Heckman and W. Wefelmeyer. Pre-averaged kernel estimators for the drift function of a diffusion process in the presence of microstructure noise. *Stat. Inference Stoch. Process.* 20 (2017), 237-252.
89. F. Barraquand, S. Louca, K.C. Abbott, C.A. Cobbold, F. Cordoleani, D.L. DeAngelis, B.D. Elder, J.W. Fox, P. Greenwood, F.M. Hilker, D.L. Murray, C.R. Stieha, R.A. Taylor, K. Vitense, G.S.K. Wolkowicz and R.C. Tyson. Moving forward in circles: challenges and opportunities in modelling population cycles. *Ecology Letters* 20 (2017), 1074-1092.
90. S. Dixon, N. Huntly, P.E. Greenwood, L.F. Gordillo, A stochastic model for water-vegetation systems and the effect of decreasing precipitation in semi-arid regions, *Math Science and Engineering* 15(5) (2018), 1155-1164.
91. M.A. Mata, R.C. Tyson and P.E. Greenwood. Random fluctuations around a stable limit cycle in a stochastic system with parametric forcing. *J. Math. Biology* 79 (2019), 2133-2155.
92. M.A. Mata, P.E. Greenwood and R. Tyson. The relative contribution of direct and environmental transmission routes in stochastic avian flu recurrence: an approximate analysis. *Bull. Math Biology* (2019), 4484-4517.
93. P.H. Baxendale, P.E. Greenwood and L.M. Ward. Noise sharing and Mexican hat coupling in a stochastic neural field. *Phys. Rev. E* 100 (2019).
94. C.L. Morrison, P.E. Greenwood and L.M. Ward. Plastic systemic inhibition controls amplitude while allowing phase pattern in a stochastic neural field model. *Phys. Rev. E* 103 (2021).
95. P.E. Greenwood, L.M. Ward, Phase offset determines alpha modulation of gamma phase coherence and hence signal transmission, *Biosystems* 219, 2022. (selected papers from 14th International Coding Workshop, Seattle WA, 2021)

96. J. Rubin, T. Parsons, D. Earn, P.E. Greenwood and K. Abbott. Irregular population cycles driven by environmental stochasticity and saddle crawlby. *Oikos* (2022).
97. LF Gordillo, PE Greenwood. Allee effects plus noise induce population dynamics resembling binary Markov highs and lows, *Bulletin of Math Biology* 84(60) (2022).
98. Luis F Gordillo, PE Greenwood, D Strong. Epidemic highs and lows: a stochastic diffusion model for active cases, *J of Biological Dynamics*, special issue on honour of Fred Brauer. (to appear 2023).

Conference Proceedings

1. P.E. Greenwood and R. Hersh. Stochastic differentials and non-standard random variables. *Probabilistic Methods in Differential Equations* (Victoria, B.C., 1974), *Lecture Notes in Math.* 451 (1975), 35-62, Springer.
2. P.E. Greenwood. Point processes and system lifetimes. *Stochastic Differential Systems* (Visegrád, 1980), *Lecture Notes in Control and Information Sci.* 36 (1981), 56-60, Springer.
3. C.M. Goldie and P.E. Greenwood. Central limit results for random fields. *Proceedings of the 1st World Congress of the Bernoulli Society 1* (Tashkent, 1986), VNU Science Press (1987), 345-352.
4. P.E. Greenwood. Partially specified semimartingale experiments. *Statistical inference from stochastic processes* (Ithaca, NY, 1987), *Contemp. Math.* 80 (1988), 1-17.
5. P.E. Greenwood and A.N. Shiryaev. Uniform weak convergence of semimartingales with applications to the estimation of a parameter in an autoregression model of the first order. *Statistics and Control of Random Processes* (Preila, 1987), "Nauka" (1989), 40-48.
6. P.E. Greenwood and M. Ossiander. Functional convergence of evolving random fields. *Selected Proceedings of Sheffield Symposium on Applied Probability* (Sheffield, 1989), *IMS Lecture Notes Series* 18 (1991), 66-99.
7. P.E. Greenwood and W. Wefelmeyer. Efficient estimating equations for nonparametric filtered models. *Statistical Inference in Stochastic Processes*, *Probab. Pure Appl.*, 6, (1991), 107-141, Dekker.
8. P.E. Greenwood and W. Wefelmeyer. Partial likelihood and estimating equations. *Selected Proceedings of the Symposium on Estimating Functions*, Eds. I.V. Basawa, V.P. Godambe and R.L. Taylor, *IMS Lecture Notes Monograph Series* 32 (1997), 19-33.

9. P.E. Greenwood and E.V. Evstigneev. Stochastic extrema, splitting random elements, and models of crack formation. *System Modelling and Optimization (Compiègne, 1993)*, Lect. Notes Control Inf. Sci. 197 (1994), 315-319, Springer.
10. P.E. Greenwood and D.T. Haydon. Semiparametric inference for synchronization of population cycles. *Selected Proceedings of the Symposium on Inference for Stochastic Processes (Athens, GA, 2000)*, 205-211, IMS Lecture Notes Monogr. Ser., 37, Inst. Math. Statist., Beachwood, OH, 2001.
11. L. Gordillo, P.E. Greenwood and R. Kuske. Autonomous stochastic resonance produces epidemic oscillations of fluctuating size. *Prague Stochastics*, Eds. M. Hušková and M. Janžura, Mathfyzpress (2006), 102-111.
12. P.E. Greenwood. A stochastic dynamics viewpoint of some neuron models. *Intelligent Sensors, Sensor Networks and Information Processing (JSSNIP)*, 7th Int. Conf. (2011), 155-157.
13. P.E. Greenwood and L.M. Ward. Rapidly forming, slowly evolving spatial patterns from quasi-cycle Mexican hat coupling. *Neural Coding 2018*, Eds. S. Ditlevsen, L. Kostal, L. Sacerdote and M. Tamborrino. *Math. Biosci. Eng.* 16 (2019), 6769-6793.

Books

(a) Authored

1. P.E. Greenwood and A.N. Shiryaev. Contiguity and the statistical invariance principle. *Stochastics Monographs* 1, Gordon & Breach (1985), viii+236 pages.
2. I.V. Evstigneev and P.E. Greenwood. Markov fields over countable partially ordered sets, extrema and splitting. *Mem. Amer. Math. Soc.* 112(537) (1994), vi+100 pages.
3. P.E. Greenwood and M.S. Nikulin. A guide to chi-squared testing. *Wiley Series in Probability and Statistics: Applied Probability and Statistics* (1996), xiv+280 pages.
4. P.E. Greenwood and L.M. Ward. Stochastic neuron models. *Mathematical Biosciences Institute Lecture Series. Stochastics in Biological Systems* 1.5. Springer (2016), x+75 pages.

(b) Book Chapters

1. P.E. Greenwood and W. Wefelmeyer. On optimal estimating functions for partially specified counting process models. in: *Optimal Estimating Functions*, Ed. V.P. Godambe, Oxford University Press (1991), 147-160.
2. P.E. Greenwood and W. Wefelmeyer. Empirical estimators based on MCMC data. in: *Handbook of Statistics* 21, Ed. D.N. Shanbhag, C.R. Rao, Elsevier (2003), 337-370.

3. P.E. Greenwood, U.U. Müller and W. Wefelmeyer. An introduction to efficient estimation for semiparametric time series. in: Parametric and Semiparametric Models with Applications to Reliability, Survival Analysis, and Quality of Life, Statistics for Industry and Technology, Ed. M.S. Nikulin, N. Balakrishnan, M. Mesbah and N. Limnios, Statistics for Industry and Technology, Birkhäuser (2004), 253-272.
4. P.E. Greenwood and L.F. Gordillo. Stochastic epidemic modeling. in: Mathematical and Statistical Estimation Approaches in Epidemiology, Ed. G. Chowell, Springer (2009), 31-52.
5. S. Bhamidi and P.E. Greenwood. Variants of Brownian motion. in: Wiley Encyclopedia of Operations Research and Management Science, Wiley Online Library (2011).

Key Invited Lectures

Series of Invited Lectures in Europe, 1976-1977: at London School of Economics, London; University of Liverpool (Westfield College); University of Manchester; University of Sheffield; University of Sussex; University of Amsterdam; University of Utrecht; University of Louvain; Helsinki Summer Institute.

Series of Invited Lectures in the U.S.S.R, 1981: delivered in Russian, at Steklov Institute for Mathematics, Russian Academy of Sciences, Moscow and Leningrad; Institute of Mathematics of the National Academy of Sciences of Ukraine, Kiev; Sobolev Institute of Mathematics, Novosibirsk.

1st Word Congress of the Bernoulli Society for Mathematical Statistics and Probability (joint with Charles Goldie), Tashkent, Uzbekistan, U.S.S.R., 1986.

Bernoulli Society for Mathematical Statistics and Probability, special meeting on applied probability to honor J. Gani, Sheffield, England, May 1989.

Workshop and Conference in honor of the 70th birthday of Lucien Le Cam, Yale University, New Haven, CT, December 1994.

Joint Statistical Meetings (JSM), annual conference, Chicago, IL, August 1996.

Krieger-Nelson Prize Lecture, Canadian Mathematical Society (CMS), meeting Laval University, Quebec, June 2002.

Awards and Distinctions

Fellow, Institute of Mathematical Statistics (IMS), elected August 1985.

Awarded Inaugural 3-year, interdisciplinary Major Thematic Grant (\$500,000) by the Peter Wall Institute of Advanced Studies, University of British Columbia, for "Crisis Points and Models for Decision," 1997.

Krieger-Nelson Prize of the Canadian Mathematical Society, for Distinguished Research by Women in Mathematics, 2002.

Festschrift Article. Bingham, N.H., Eustigeev, I.V., Priscilla Greenwood: Queen of Probability, Stochastics: An International Journal of Probability and Stochastic Processes 80 (2008), i-vi.

Festschrift Collection. Stochastics: A Festschrift for Priscilla Greenwood, IMS Lecture Notes Monograph Series 57A, special volume, Institute of Mathematical Statistics, Ed. N.H. Bingham, I.V. Eustigeev (2009).

Order of Canada (member), 2020.

Organizing Scholarly Meetings - Recent

American Institute for Mathematics (AIM) Workshop: Deterministic and Stochastic Spatial Models in Population Dynamics, Palo Alto, CA, May 2009.

Statistical and Applied Mathematical Sciences Institute (SAMS) Workshop, Stochastic Dynamics, Durham, NC, September 2009

Statistical and Applied Mathematical Sciences Institute (SAMS) Workshop, Stochastic Dynamics, Durham, NC, March 2010.

Banff International Research Station for Mathematical Innovation and Discovery (BIRS) Focused Research Group Workshop (internationally competitive award), The Mathematical Genesis of the Phenomenon Called $1/f$ Noise, Banff, Alberta, June 2010.

American Institute for Mathematics (AIM) Workshop: Stochastic Dynamics of Small Networks of NEURONS, Palo Alto, CA, February 2012.

Statistical Society of Canada (SSC), Invited Paper Session, Toronto, Ontario, May 2014.

ICIAM, 8th International Congress on Industrial and Applied Mathematics, Invited Paper Session, Beijing, China, August 2015.

Statistical Society of Canada (SSC), Invited Paper Session, St. Catherines, Ontario, May 2016.

Banff International Research Station for Mathematical Innovation and Discovery (BIRS) Focused Research Group workshop (internationally competitive award), Brain Dynamics and Statistics, Banff, Alberta, February 2017.

Statistical Society of Canada (SSC), Invited Paper Session on Distribution-Free Testing, Montreal, Quebec, June 2018.

International Workshop on Applied Probability (IWAP), Invited Paper Session on Stochastic Neuron and Neural Field Modeling, Budapest, June 2018.

14th International Neural Computation workshop (NC2021), online, co-organizer, July 2021.

Statistical Society of Canada (SSC), Invited Sponsored Paper Session in Probability Section, Stochastic Spatial models for Vegetation, 2023.

Recent Presentations

Joint presentation with L.M. Ward. Building stochastic dynamical neural circuits for cortical control. Neural Computation 2021. (online)

Joint poster with P. Rowat. An ISI study of a Stochastic Morris-Lecar burster. CNS 2021, Organization for Computational Neuroscience. (online)

Overview on Stochastic Neural Networks, online December, 2022, 1 hour + 1/2 hour questions. Pathways to the 2023 IHP program Random Processes in the Brain. (online)

Inst. H Poincare Paris, in workshop on Stochastic Neural Circuits, March 2023. (in person)