References

Addy C. L., Longini I. M. and Haber M. (1991): A generalized stochastic model for the analysis of infectious disease final size data. *Biometrics* **47**, 961-974.

Aldous D. (1989): *Probability approximations via the Poisson clumping heuristics.* Springer-Verlag, New York.

Altmann M. (1995): Susceptible-Infected-Removed epidemic models with dynamic partnerships. *J. Math. Biol.* **33**, 661-675.

Altmann M. (1998): The deterministic limit of infectious disease models with dynamic partners. *Math. Biosci.,* **150**, 153-175.

Andersen P. K., Borgan Ø., Gill R. D. and Keiding N. (1993): *Statistical models based on counting processes.* Springer, New York.

Anderson R. M. and May R. M. (1991): *Infectious diseases of humans; dynamics and control.* Oxford University Press, Oxford.

Andersson H. (1998): Limit theorems for a random graph epidemic model. *Ann. Appl. Prob.* **8**, 1331-1349.

Andersson H. (2000): Epidemic models on social networks. To appear in The Mathematical Scientist.

Andersson H. and Britton T. (1998): Heterogeneity in epidemic models and its effect on the spread of infection. *J. Appl. Prob.* **35**, 651-661.

Andersson H. and Djehiche B. (1998): A threshold limit theorem for the stochastic logistic epidemic. *J. Appl. Prob.* **35**, 662-670.

von Bahr B. and Martin-Löf A. (1980): Threshold limit theorems for some epidemic processes. *Adv. Appl. Prob.* **12**, 319-349.

Bailey N. T. J. (1953): The total size of a general stochastic epidemic. *Biometrika* **40**, 177-185.

Bailey N. T. J. (1975): *The mathematical theory of infectious diseases and its applications.* Griffin, London.

Ball F. (1985): Deterministic and stochastic epidemics with several kinds of susceptibles. *Adv. Appl. Prob.* **17**, 1-22.

Ball F. (1986): A unified approch to the distribution of total size and total area under the trajectory of infectives in epidemic models. *Adv. Appl. Prob.* **18**, 289-310.

Ball F. (1995): Coupling methods in epidemic theory, in *Epidemic models: Their structure and relation to data.* Mollison D., Ed., Publications of the Newton Institute, Cambridge University Press, Cambridge.

Ball F. and Barbour A. D. (1990): Poisson approximation for some epidemic models. *J. Appl. Prob.* **27**, 479-490.

Ball F. and Clancy D. (1993): The final size and severity of a generalised stochastic multitype epidemic model. *Adv. Appl. Prob.* **25**, 721-736.

Ball F. and Donnelly P. (1995): Strong approximations for epidemic models. *Stoch. Proc. Appl.* **55**, 1-21.

Ball F., Mollison D. and Scalia-Tomba G. (1997): Epidemics with two levels of mixing. *Ann. Appl. Prob.* **7**, 46-89.

Barbour A. D. (1975): The duration of the closed stochastic epidemic. *Biometrika* **62**, 477-482.

Barbour A. D., Lindvall T. and Rogers L. C. G. (1991): Stochastic ordering of order statistics. *J. Appl. Prob.* **28**, 278-286.

Barbour A. D., Holst L. and Janson S. (1992): *Poisson approximation.* Oxford University Press, Oxford.

Barbour A. D. and Mollison D. (1990): Epidemics and random graphs, in *Stochastic processes in epidemic theory.* Gabriel J. P., Lefèvre C. and Picard P., Eds., *Lecture notes in Biomathematics* **86**, 86-89.

Bartlett M. S. (1949): Some evolutionary stochastic processes. *J. Roy. Statist. Soc. B* **11**, 211-229.

Bartlett M. S. (1955): *An introduction to stochastic processes.* Cambridge University Press, Cambridge.

Bartlett M. S. (1956): Deterministic and stochastic models for recurrent epidemics. *Proc. Third Berkeley Symp. Math. Statist, & Prob.* **4**, 81-109. Univ. California Press, Berkeley and Los Angeles.

Bartoszyński R. (1972): On a certain model of an epidemic. *Applicationes Mathematicae* **13**, 139-151.

Becker N. G. (1989): *Analysis of Infectious Disease Data.* Chapman and Hall, London.

Becker N. G. (1997): Uses of the EM algorithm in the analysis of data on HIV/AIDS and other infectious diseases. *Statist. Meth. Med. Research* **6**, in press.

Becker N. G. and Britton T. (1999): Statistical studies of infectious disease incidence. *J. Roy. Statist. Soc. B,* **61**, 287-307.

Becker N. G. and Dietz K. (1995): The effect of the household distribution on transmission and control of highly infectious diseases. *Math. Biosci.* **127**, 207-219.

Becker N. G. and Hall R. (1996): Immunization levels for preventing epidemics in a community of households made up of individuals of different types. *Math. Biosci.* **132**, 205-216.

Becker N. G. and Hasofer A. M. (1997): Estimation in epidemics with incomplete observations. *J. Roy. Statist. Soc. B,***59**, 415-429.

Becker N. G. and Starczak D. N. (1997): Optimal vaccination strategies for a community of households. *Math. Biosci.* **129**, 117-132.

Becker N. G. and Utev S. (1998): The effect of community structure on the immunity coverage required to prevent epidemics. *Math Biosci,* **147**, 23-39.

Billingsley P. (1968): *Convergence of probability measures.* Wiley, New York.

Bollobás B. (1985): *Random graphs.* Academic Press, New York.

Britton T. (1998a): Estimation in multitype epidemics. *J. Roy. Statist. Soc. B,* **60**, 663-679.

Britton T. (1998b): On the critical vaccination coverage in multitype epidemics. *J. Appl. Prob.,* **35** 1003-1006.

Cox D. R. (1972): Regression models and life tables (with discussion). *J. Roy. Statist. Soc. B* **34**, 187-220.

Cox J. T. and Durrett R. (1988): Limit theorems for the spread of epidemics and forest fires. *Stoch. Proc. Appl.* **30**, 171-191.

Daley D. J. and Gani J. (1999): *Epidemic Modelling: an introduction.* Cambridge University Press, Cambdridge.

Daley D. J. and Kendall D. G. (1965): Stochastic rumours. *J. Inst. Maths. Applics.* **1**, 42-55.

Dempster A. P., Laird N. M. and Rubin D. B. (1977): Maximum Likelihood from incomplete data via the *EM* algorithm (with Discussion) J. Roy. Statist. Soc. B, **39**, 1-38.

Diekmann O. and Heesterbeek J.A.P. (200?): *Mathematical Epidemiology of Infectious Diseases: Model Building, Analysis and Interpretation.* (In preparation.) Wiley Series in Mathematical and Computational Biology.

Diekmann O., de Jong M. C. M. and Metz J. A. J (1998): A deterministic epidemic model taking account of repeated contacts between the same individuals. *J. Appl. Prob.* **35**, 448-462.

van Doorn E. A. (1991): Quasi-stationary distributions and convergence to quasi-stationarity of birth-death processes. *Adv. Appl. Prob.* **23**, 683-700.

Durrett R. (1995): Ten lectures on particle systems. *Springer Lecture Notes in Math.* **1608**, 97-201.

Erdős P. and Rényi A. (1959): On random graphs I. *Publ. Math. Debrecen* **6**, 290-297.

Ethier S. N. and Kurtz T. G. (1986): *Markov Processes: Characterization and Convergence.* Wiley, New York.

Gabriel J.-P., Lefèvre C. and Picard P. (Eds.) (1990): *Stochastic Processes in Epidemic Theory.* Springer Lecture Notes in Biomath, **86**.

Geyer C. J. (1992): Practical Markov chain Monte Carlo. *Statist. Sci.* **7**, 473-511.

Gilks W. R., Richardson S. and Spiegelhalter D. J. (1996): *Markov Chain Monte Carlo in practice.* Chapman & Hall, London.

Gontcharoff W. (1937): *Détermination des fonctions entières par interpolation.* Hermann, Paris.

Greenhalgh D. and Dietz K. (1994): Some bounds on estimates for reproduction ratio derived from the age-specific force of infection. *Math. Biosci.* **124**, 9-57.

Grenfell B. and Dobson A. (1995): *Ecology of infectious diseases in natural populations.* Cambridge University Press, Cambridge.

Hamer W. H. (1906): The Milroy lectures on epidemic disease in England – the evidence of variability and persistence of type. *The Lancet* **1**, 733-739.

van Herwaarden O. A. and Grasman J. (1995): Stochastic epidemics: major outbreaks and the duration of the endemic period. *J. Math. Biol.* **33**, 581-601.

Hougaard P. (1995): Frailty models for survival data. *Lifetime data analysis* **1**, 255-

273.

Isham V. and Medley G. (1996): *Models for infectious human diseases: Their structure and relation to data.* Cambridge University Press, Cambridge.

Islam M. N., O'Shaughnessy C. D. and Smith B. (1996): A random graph model for the final-size distribution of household infections. *Statistics in Medicine* **15**, 837-843.

Jagers P. (1975): *Branching processes with biological applications.* Wiley, London.

Karatzas I. and Shreve S. E. (1991): *Brownian motion and stochastic calculus.* 2nd edn., Springer-Verlag, New York.

Keilson J. (1979): *Markov Chain Models–Rarity and Exponentiality.* Springer-Verlag, New York.

Kendall D. (1956): Deterministic and stochastic epidemics in closed populations, in *Proc. 3rd Berkeley Symp. Math. Statist. Prob.* **4**, 149-165.

Kermack W. O. and McKendrick A. G. (1927): A contribution to the mathematical theory of epidemics. *Proc. Roy. Soc. Lond. A* **115**, 700-721.

Kesten H. (1982): *Percolation theory for mathematicians.* Birkhauser, Boston.

Kurtz T. G. (1981): *Approximations of Population Processes. CBMS-NSF Regional Conf. Series in Appl. Math.* **36**, SIAM, Philadelphia.

Kuulasmaa K. (1982): The spatial general epidemic and locally dependent random graphs. *J. Appl. Prob.* **19**, 745-758.

Kuulasmaa K. and Zachary S. (1984): On spatial general epidemics and bond percolation processes. *J. Appl. Prob.* **21**, 911-914.

Lefèvre C. and Picard P. (1990): A non-standard family of polynomials and the final size distribution of Reed-Frost epidemic processes. *Adv. Appl. Prob.* **22**, 25-48.

Liggett T. M. (1985): *Interacting particle systems.* Springer, New York.

Lindvall T. (1992): *Lectures on the coupling method.* Wiley, New York.

Longini I. M. and Koopman J. S. (1982): Household and community transmission parameters from final distributions of infections in households. *Biometrics* **38**, 115-126.

Ludwig D. (1974): Stochastic population theories. *Lecture notes in Biomathematics* **3**.

Maki D. P. and Thompson M. (1973): *Mathematical models and applications.* Prentice-Hall, Englewood Cliffs, NJ.

McKendrick A. G. (1926): Applications of mathematics to medical problems. *Proc. Edinburgh Math. Soc.* **14**, 98-130.

Metropolis N., Rosenblutt A. W., Rosenblutt M. N., Teller A. H., Teller E. (1953): Equations of state calculations of fast computing machine. *J. Chem. Phys.* **21**, 1087-1091.

Mollison D. (1977): Spatial contact models for ecological and epidemic spread (with discussion). *J. Roy. Statist. Soc. B* **39**, 283-326.

Mollison D. (Ed.) (1995): *Epidemic Models: Their structure and relation to data.* Cambridge University Press, Cambridge.

Nåsell I. (1996): The quasi-stationary distribution of the closed endemic SIS model. *Adv. Appl. Prob.* **28**, 895-932.

Nåsell I. (1999): On the time to extinction in recurrent epidemics. *J. Roy. Statist. Soc. B.* **61**, 309-330.

O'Neill P., Balding D., Becker N., Eerola M. and Mollison D. (200?): Analyses of infectious disease data from household outbreaks by Markov Chain Monte Carlo methods. To appear in *Applied Statistics.*

O'Neill P. and Roberts G. (1999): Bayesian inference for partially observed stochastic epidemics. *J. Roy. Statist. Soc. A.***162**, 121-129.

Proschan F. and Sethuraman J. (1976): Stochastic comparison of order statistics from heterogeneous populations, with applications in reliability. *J. Multivariate Anal.* **6**, 608-616.

Rand D. A. (1997): Correlation equations and pair approximations for spatial ecologies, in *Theoretical Ecology 2.* McGlade J., Ed., Blackwell Scientific Publishing.

Rebolledo R. (1980): Central limit theorems for local martingales. *Z. Wahrsch. Verw. Gebiete.* **51**, 269-286.

Rhodes P. H., Halloran M. E. and Longini I. M. (1996): Counting process models for infectious disease data: distinguishing exposure to infection from susceptibility. *J.R. Statist. Soc. B,* **58**, 751-762.

Rida W. N. (1991): Asymptotic properties of some estimators for the infection rate in the general stochastic epidemic. *J.R. Statist. Soc. B,* **53**, 269-283.

Roberts G. O. and Smith A. F. M. (1994): Simple conditions for the convergence of the Gibbs sampler and Hastings-Metropolis algorithms. *Stoch. Proc. Appl.* **49**, 207-216.

Ross R. (1908): Report on the prevention of malaria in Mauritius. London.

Scalia-Tomba G. (1985): Asymptotic final size distribution for some chain-binomial processes. *Adv. Appl. Prob.* **17**, 477-495.

Scalia-Tomba G. (1990): On the asymptotic final size distribution of epidemics in heterogeneous populations, in *Stochastic processes in epidemic theory.* Gabriel J. P., Lefèvre C. and Picard P., Eds., *Lecture notes in Biomathematics* **86**, 189-196.

Sellke T. (1983): On the asymptotic distribution of the size of a stochastic epidemic. *J. Appl. Prob.* **20**, 390-394.

Syski R. (1992): *Passage times for Markov chains.* IOS Press, Amsterdam.

Whittle P. (1955): The outcome of a stochastic epidemic – a note on Bailey's paper, *Biometrika* **42**, 116-122.