

PUBLICATIONS

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Refereed Scientific Papers

1. **Roberts MG**, Nishiura H. 2011 Early estimation of the reproduction number in the presence of imported cases: pandemic influenza H1N1-2009 in New Zealand. *PLoS One* 6:e17835.
2. Mann JL, **Roberts MG**. 2011 Modelling the epidemiology of hepatitis B in New Zealand. *Journal of Theoretical Biology* 269:266-272.
3. James A, Brown R, Basse B, Bourdot G, Lamoureaux S, **Roberts MG**, Saville DJ. 2011 Application of a spatial meta-population model with stochastic parameters to the management of the invasive grass *Nassella trichotoma* in North Canterbury, New Zealand. *Ecological Modelling* 222:1030-1037.
4. Nishiura H, **Roberts MG** 2010 Estimation of the reproduction number for 2009 pandemic influenza A(H1N1) in the presence of imported cases. *Eurosurveillance* 15, pii=19622.
5. Fryer HR, Frater J, Duda A, **Roberts MG**, The SPARTAC Trial Investigators, Phillips RE, McLean AR. 2010 Modelling the evolution and spread of HIV immune escape mutants. *PLoS Pathogens* 6:e1001196.
6. Elvin AJ, Laing CR, McLachlan RI, **Roberts MG**. 2010 Exploiting the Hamiltonian structure of a neural field model. *Physica D* 239:537-546.
7. Diekmann O, Heesterbeek JAP, **Roberts MG**. 2010 The construction of next-generation matrices for compartmental epidemic models. *Journal of the Royal Society Interface* 7:873-885.
8. Wilson N, Baker M, Jennings LC, Murdoch M, Krause K, Edwards R, **Roberts MG**, Pearce N, Douwes J, Johnston D, Rice G, Bullen

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 11. Thornley S, Bullen C, **Roberts MG**. 2008 Hepatitis B in a high-prevalence New Zealand population: A mathematical model applied to infection control policy. *Journal of Theoretical Biology* 254:599-603.
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 13. **Roberts MG**, Baker M, Jennings LC, Sertsov G, Wilson N. 2007 A model for the spread and control of pandemic influenza in an isolated geographical region. *Journal of the Royal Society Interface* 4:325-330.
 14. **Roberts MG**, Heesterbeek JAP. 2007 Model-consistent estimation of the basic reproduction number from the incidence of an emerging infection. *Journal of Mathematical Biology* 55:803-816.
 15. Heesterbeek JAP, **Roberts MG**. 2007 The type-reproduction number T in models for infectious disease control. *Mathematical Biosciences* 206:3-10.
 16. Sertsov G, Wilson N, Baker M, Nelson P, **Roberts MG**. 2006. Estimation of key transmission parameters of an institutional outbreak during the 1918 influenza pandemic by mathematical modelling. *Theoretical Biology and Medical Modelling* 3:38. Published online November 2006.
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 19. **Roberts MG**. 2004. Modelling strategies for minimizing the impact of an imported exotic infection. *Proceedings of the Royal Society, Series B* 271:2411-2415.

20. **Roberts MG**, Heesterbeek JAP. 2003 A new method for estimating the effort required to control infectious diseases. *Proceedings of the Royal Society, Series B* 270:1359-1364.
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23. Thompson RCA, **Roberts MG**. 2001. Does pet parasite prophylaxis increase the rate of selection for drug resistance? *Trends in Parasitology* 17:576-578.
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2. Swinton J, Woolhouse MEJ, Dobson AP, Ferroglio E, Guberti V, Grenfell BT, Heesterbeek JAP, Hails R, Lavazza A, **Roberts MG**, White P. 2002. Microparasite transmission and persistence. In *The Ecology of Wildlife Diseases*, edited by Hudson P, Rizzoli A, Grenfell BT, Heesterbeek JAP, Dobson AP. Oxford, Oxford University Press:83-101.
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