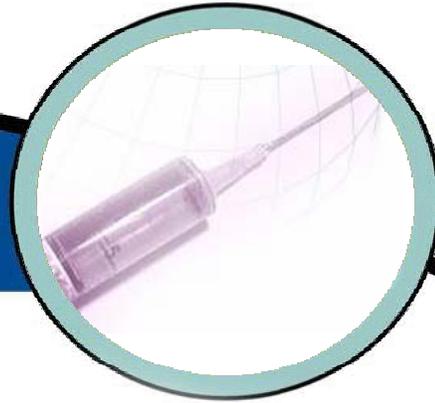


# IMS Public Lecture



## The Epidemic Clockwork: Exploring the Population Dynamics of Infectious Diseases

**Speaker:** Professor Bryan T. Grenfell  
Pennsylvania State University

**Date:** Tuesday, 23 August 2005

**Time:** 6:30 p.m. – 7:30 p.m.

**Venue:** LT 31 (Faculty of Science Auditorium)  
Blk S16, Level 3, 3 Science Drive 2  
National University of Singapore  
Singapore 117543

FREE  
ADMISSION

### Abstract

Infectious diseases have exerted a huge toll on human and animal populations, both historically and up to the present. Starting with measles as an example, this lecture explores how the pattern of epidemics in space and time depends on a balance between the spread of infection, the natural 'herd immunity' of the population and our efforts to control the infection by vaccination and other means. The speaker will discuss how the evolution of influenza and other disease causing organisms affect the pattern of epidemics and our ability to control them.



### About the Speaker

Professor Bryan Grenfell is a population biologist, focusing in particular on the dynamics of infectious diseases in space and time. He combines the development of theory with pioneering analyses of empirical data sets from a range of diseases: from measles to Foot and Mouth Disease and influenza.

Originally trained as a zoologist, Professor Grenfell has worked on the dynamics of epidemics since 1980. He recently moved from Cambridge University, UK, to the Center for Infectious Disease Dynamics in Pennsylvania State University, USA. Professor Grenfell was awarded the Order of the British Empire in 2002 and is a Fellow of the Royal Society of London.

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