

Warwick Public Lectures In Mathematics and Statistics



The Genetic Revolution

Peter Donnelly *FRS*

(University of Oxford and Oxford Wellcome Trust)

Peter Donnelly is Professor of Statistical Science at Oxford. His maths background has led him to make major advances in genetics.



Genetic factors are responsible for a substantial part of the susceptibility to all of the common diseases afflicting humans, including heart disease, diabetes, arthritis, depression, and many cancers and infectious diseases. Recent advances in genomic science have dramatically altered our ability to “read” genetic differences between people, leading to an explosion in our understanding of the genetic basis of most common human diseases. These new tools have led to an explosion in the amount and nature of genetic data available, with statistical analysis methods critical to the scientific progress. It won't be long before these changes have an impact on the practice of clinical medicine. Over a longer timeframe, they offer hope for new treatments for disease, and genetics is likely to become routine in some parts of medicine. The talk, aimed at a general audience, will give a sense of the excitement of the science and some of the statistical challenges, as well as the opportunities and challenges for our health and society.

Date: **Wednesday 2nd May 2012**

Time: **6.15pm**

Venue: **MS.01, Zeeman Building (Maths and Statistics, University of Warwick)**

Refreshments will be served in the Main Atrium, Zeeman Building after the lecture.
Free car parking available in Car Park 15, please contact Lynn.Clarke@warwick.ac.uk
For more details see www.warwick.ac.uk/go/wplms

Warwick Public Lectures in Mathematics and Statistics are aimed at a general audience