



# BHF CRE sponsored 1-day Training Workshop



## Introduction to Genetic Epidemiology and its Applications

This 1-day training workshop will provide an introduction to genetic epidemiology and the exciting opportunities genomic studies can offer in human disease research. Participants will be introduced to the main concepts, principles and approaches used in human genetic epidemiological studies, and will develop an understanding of the impact of human genetic variation on disease and how well-designed genetic studies can be used to explore this. This workshop is aimed at those with little or no background in genetic epidemiology but who have an understanding of general epidemiological and statistical principles.

**Date:** Wednesday 14<sup>th</sup> October 2015

**Venue:** Richard Doll Lecture Theatre, Richard Doll Building, Old Road Campus, Roosevelt Drive, Oxford, OX3 7LF

**Organiser:** Assoc Prof Jemma Hopewell

### Programme

<b>Session 1: Basic Principles and Approaches in Genetic Epidemiology</b>		
9.00-9.15	<i>Registration and tea/coffee</i>	
9.15-9.30	Welcome and introductory remarks	
9.30-10.00	Fundamental concepts in genetic epidemiology	<i>Dr Iona Millwood</i>
10.00-10.45	Principles of genetic association studies, family-relatedness & population stratification	<i>Dr Geraldine Clarke</i>
10.45-11.30	Genetic resources and genotype imputation	<i>Dr Luke Jostins</i>
11.30-12.00	<i>Tea/coffee break</i>	
12.00-13.00	Candidate & genome-wide association studies	<i>Assoc Prof Krina Zondervan</i>
13.00-13.30	Beyond GWAS	<i>Assoc Prof Jenny Taylor</i>
13.30-14.30	<i>Lunch</i>	
<b>Session 2. Genetic Epidemiology and Applications to Complex Disease Research</b>		
14.30-15.00	Cancer genetics	<i>Assoc Prof Ruth Travis</i>
15.00-15.30	Cardiovascular genetics	<i>Prof Martin Farrall</i>
15.30-16.00	Mendelian randomization and assessing causal relationships	<i>Assoc Prof Jemma Hopewell</i>
16.00-16.15	Questions & concluding remarks	