



# Speaker Series

## Guest Speaker

“Investigating the mediating role of molecular mechanisms in common complex diseases using epidemiological tools”



**Caroline Relton, PhD**

**Professor**

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**University of Bristol**

Molecular phenotyping promises to shed light on mechanistic pathways linking environmental, lifestyle and health behaviour exposures to disease risk. Although deep phenotyping of large study samples can uncover interesting associations, observational approaches are commonly hampered by confounding and reverse causation, presenting challenges for valid causal inference. We describe the application of Mendelian randomization as a tool to circumvent these problems and its use to provide evidence of causal pathways as well as potential targets for therapeutic intervention. Using data from large scale analysis primarily from of genetic and epigenetic profiling of human populations we will describe the rationale and illustrate the application of Mendelian randomization for molecular mediation.

**Monday, October 21, 2019**

**11:00am – 12:00pm**

**Gonda Building 1st Floor Conference Room, 1357**

*Light snacks will be provided*

To meet with Dr. Caroline Relton, please contact:  
Host: Dr. Steve Horvath, [shorvath@mednet.ucla.edu](mailto:shorvath@mednet.ucla.edu)

To receive seminar notices, contact Charina McDonald ([cmcdonald@mednet.ucla.edu](mailto:cmcdonald@mednet.ucla.edu))  
Upcoming speakers, <http://www.genetics.ucla.edu/speakers/>