

# The genetic overlap between type 2 diabetes and depression

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## *Abstract*

Type 2 diabetes and depression are global public health concerns. A bidirectional relationship between type 2 diabetes and depression has been consistently reported. It is associated with worse biomedical outcomes and increased mortality. The mechanisms underlying the type 2 diabetes and depression association remains unclear. One possible question is whether the co-occurrence of type 2 diabetes and depression is due to common genetic and/or common environmental vulnerabilities.

In this presentation, Dr. Carol Khan will discuss two complementary approaches in examining and quantifying the genetic overlap between the type 2 diabetes and depression using twin data from population registries and genome wide association study data. A genetic correlation between type 2 diabetes and depression will provide evidence supporting a common biological pathway to both disorders while identifying shared genetic variants might advance our knowledge of their pathogenesis. Secondary analyses using potential moderators (for example gender, age of onset, severity of disorders) will contribute to the theoretical understanding of subtypes of depression.

## *Biography*

Dr Carol Khan graduated in medicine from University of Cambridge and Imperial College London. After completing her core psychiatric training at South London & Maudsley Trust, Carol was awarded the NIHR funded Biomedical Research Centre Preparatory Clinician Fellowship at the Institute of Psychiatry in 2012. She has recently started her Clinical Research Fellowship, funded by Novo Nordisk UK Research Foundation. Her academic interests include genetic epidemiology, depression, disordered eating and their relationships to physical health.