

Principal Investigator

Dr Malcolm von Schantz

Address

University of Surrey, Physiology and Biochemistry, Faculty of Health and Medical Sciences, Guilford GU2 7XH

Lead Collaborators

Dr Alexandre Pereira

Dr Kristen Knutson

Collaborating Institutions and Addresses

University of Sao Paulo, Medical School, Heart Institute, Laboratory of Genetics and Molecular Cardiology, Sao Paulo - SP, 05403000

University of Chicago, Department of Medicine, 5841 South Maryland Avenue, MC6076, Chicago IL 60637, United States.

Funding body: British Council grant

Summary of research:

Cardiovascular, Circadian, Genetics, Sleep

Application Lay Summary:

1a: We aim to investigate the biological basis for individual differences in circadian rhythms and sleep, and how it relates to cardiovascular markers and health outcomes in different ethnic groups.

1b: The published literature suggests a number of links between disturbances in circadian rhythms and sleep and cardiovascular risk factors and negative health outcomes. By further investigating the nature of this link, and the underlying genetic factors, we believe that it will be possible to contribute to the prevention and/or treatment of cardiovascular disease.

1c: We will interrogate the UK Biobank's DNA marker database for associations between genetic factors and database entries related to circadian rhythms, sleep, and factors associated with cardiovascular health, and seek single associations as well as shared genetic factors. We will also use the UK Biobank

data as a replication cohort for associations found in our own cohort study in Brazil.

1d: Full cohort.