

Principal Investigator

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Funding body: NOTE - Applicant PI has own project budget so payment has been made by the University of Exeter.

Summary of research

Environment, Epidemiology, Geography, Health, Physical Activity

Application Lay Summary:

1a: Our research aims to investigate associations between the environmental characteristics of participants' place of birth and current home location, and health outcomes (e.g. mental health and wellbeing, diabetes, cardiovascular disease and physical activity). We will focus on specific key questions:

1. Do individuals living in closer proximity to greenspace or blue space participate in more physical activity?
2. Does proximity to greenspace or blue space influence mental health and wellbeing? Does physical activity mediate this?
3. Are there associations between participants' place of birth and/or current living environment, and physical disease (specifically cardiovascular disease and diabetes)?

1b: Growing evidence states that where you live can influence both your mental and physical health. We will focus our analysis on mental health, diabetes, cardiovascular disease, obesity and physical activity. These are critical modern public health problems costing the UK billions of pounds per annum. Our research will result in a better understanding of the geographical factors that contribute to improved health and wellbeing which is essential for appropriate policy changes. Further, we aim to understand the factors that mediate the relationship between the natural environment surrounding an individual and their physical and mental health, which are currently poorly understood.

1c: We propose to perform geographical analysis on the UK Biobank data. We will use the current home and place of birth location grid references from the UK Biobank to gain an understanding of the area(s) in which participants lived or currently live. We will then utilise statistical techniques to investigate associations between the participants' surrounding environment (i.e. proximity to bluespace/greenspace, and area deprivation) and a number of outcomes including physical health, mental health and physical activity. The size of the UK Biobank provides a powerful opportunity to investigate how a person's environment influences their health and wellbeing.

1d: Full cohort