

The project makes use of available life-course longitudinal epidemiological data to investigate if epigenetic markers mediate early life risk factors and obesity. Attention will be given to the relationship between socio-economic status and obesity in early life, childhood and adulthood. Analysis of longitudinal epidemiological data will yield insight to the important exposures related to obesity in the birth cohorts; Thousand Families and Gateshead Millennium studies. Methylation array (Illumina Infinium 450k) data from the Avon Longitudinal Study of Parents and Children (ALSPAC) will be utilised to uncover specific loci with altered methylation in response to specific early life exposures, with these targets then investigated in the original cohorts.