

Your genes may affect how much you exercise and sleep

Time spent sitting, sleeping and moving is determined in part by our genes, University of Oxford researchers have shown. In one of the most detailed projects of its kind, the scientists studied the activity of 91,105 UK Biobank participants who had previously worn an activity monitor on their wrist for a week.

The scientists taught machines to automatically identify active and sedentary life from the huge amounts of activity monitor data. They then combined this data with UK Biobank genetic information to reveal 14 genetic regions related to activity, seven new to science, they report in Nature Communications [December 10].

The work paves the way for better understanding of sleep, physical activity, and their health consequences. Further analysis of the human genetic data showed for the first time that increased physical activity causally lowers blood pressure.

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The genetic analysis also showed overlap with neurodegenerative diseases, mental health wellbeing and brain structure, showing an important role for the central nervous system with respect to physical activity and sleep.

Dr Aiden Doherty, who led the work and is based at the Big Data Institute, University of Oxford, said: "How and why we move isn't all about genes, but understanding the role genes play will help improve our understanding of the causes and consequences of physical inactivity.

Read full, original post: [Genes play a role in physical activity and sleep](#)