

## Sleep and circadian rhythm disruption addressed with new Oxford spinout Circadian

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Credit: AI-generated image (disclaimer)

Circadian Therapeutics, a life sciences spinout of Oxford University, has been established to identify and bring to market pharmaceutical and diagnostic platforms for the effective management of physiological and pathological conditions through their ability to modify the body's



circadian rhythms.

Today, there are no safe, effective and fast-acting treatments that provide benefit to patients through modulation of <u>circadian rhythms</u>.

To address this, Circadian Therapeutics has identified drug candidates and is looking to study their effects on circadian rhythms in clinical trials. Simultaneously, the company is aiming to replace hospital-based, expensive diagnostics through the development of a home-based ambulatory electroencephalogram (EEG) device that will provide accurate and minimally intrusive measurement of brain function and circadian rhythms. The home-based monitoring of patients is vastly more cost effective and enables patient monitoring at scale, allowing for more precise and personalised medication. The combination of such products and technologies could be used for interventions across the health spectrum.

Circadian's intellectual property draws on the input of the Nuffield Department of Clinical Medicine, the Department of Pharmacology, and the Institute of Biomedical Engineering, and builds on research supported by the Wellcome Trust. Circadian Therapeutics raised investment to fund development of their lead pre-clinical programme and will be looking to raise additional money to fuel proof-of-concept studies aiming to improve the lives of those impacted by disrupted circadian rhythms.

Professor Russell Foster, Head of the Sleep and Circadian Neuroscience Institute at Oxford University, said: 'It is exciting that something is finally being done about circadian rhythms. By applying the knowledge acquired for fundamental research, we can understand the way sleep is regulated, and provide evidence-based interventions in an area that has been ignored for too long.'



Circadian Therapeutics was established by Oxford University Innovation (OUI), the research commercialisation company of Oxford University. The company has raised £2m from Oxford Sciences Innovation (OSI), the patient capital investor for Oxford University. Dr Chris Blackwell, former CEO of Vectura Group, is Chairman of Circadian Therapeutics.

Zachary Yerushalmi, Principal at OSI, said: 'We see an imbalance between the fundamental role circadian rhythms play in our biology and the total lack of therapeutic interventions to address the problems caused by their misalignment. Backed by the best science and team in the world, Circadian Therapeutics has a fantastic shot at overcoming a challenge that affects all of us.'

## Provided by University of Oxford

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