

Innovation grant – final report

Norman Beischer Medical Research Foundation

Title: Shift work and changes to breast milk composition

Principal Investigator

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Conclusion

The findings suggest that there is a potential effect of maternal circadian rhythm disruption from shift work on breast milk melatonin levels. As a result, larger, longitudinal studies are required and the expansion of this research to other circadian rhythm misalignment sleep disorders is highly recommended.

Next steps

This project helped to gather the evidence and traction needed for future grant submissions to continue exploring this important topic. It is hoped that this project paves the way for:

1. future trials to substantiate results and explore the long-term impact of circadian disruption from mistimed breast milk on an infant.
2. help inform best practice guidelines and policy regarding the handling, storage, and provisioning regarding the circadian changes in breast milk composition over the day.
3. increase community awareness of mistimed breast milk feeding and the impact on infant sleep, and the adoption of new practices.

Thank you

Thank you to the NBMRF for giving the team the opportunity to test and gather evidence to show that this novel idea warrants further exploration. The team are working hard to submit applications for further funding to continue this work.