The First Night: A quantitative investigation of Resident Medical Officer preparation for night shifts in Aotearoa New Zealand

Information Sheet for Participants

Joint Principal Investigators:

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Thank you for showing an interest in this project. Please read the following information sheet carefully. If you decide to participate, we thank you. If you decide not to take part there will be no disadvantage to you and we thank you for considering our request.

What is the aim of this research project?

This project aims to understand how sleep scheduling and other preparation strategies prior to starting a block of night shifts influence sleep and night shift sleepiness. The ultimate aim of this project is to inform up to date guidelines and/or interventional work.

Who is funding this project?

This research is funded by the New Zealand Resident Doctors' Association Education Trust.

Who are we seeking to participate in the project?

You are invited to take part in this study if you are a Resident Medical Officer who is Postgraduate Year 1 (PGY1) or above, rostered to work ≥1 block of night shifts within the next five months, and live in Aotearoa New Zealand.

You are not eligible to participate in this study if you expect to be able to sleep for more than 2 hours on most night shifts in a block of night shifts and/or have diagnosed sleep condition(s).

If you participate, what will you be asked to do?

If you choose to take part in the study, you will be sent a wrist-worn actigraphy device (Axivity AX3) to wear for seven days and nights, complete one questionnaire and a seven-

day sleep diary, and receive six text messages in total asking you to rate your level of sleepiness before, during and immediately after one day shift and one night shift. We will also send you a pre-paid courier bag to return the study materials to us.

As a thank you for participating, you will receive a $20 koha (supermarket voucher). If you choose, a summary of your sleep will be sent to you once your sleep information has been processed.

Is there any risk of discomfort or harm from participation?

The wrist-worn device can cause minor skin irritation or discomfort in a small number of people, but overall participation is not expected to cause inconvenience or interference with your daily activities.

What data or information will be collected, and how will it be used?

You will be asked to complete a questionnaire which includes demographic questions and the Munich ChronoType Questionnaire, and respond to six text messages asking you to rate your level of sleepiness on a scale of 1-9. You will also be provided with a short diary to record details relevant to your sleep. This information will be stored securely and in a de-identified format to maintain your privacy and confidentiality.

The sleep information collected by the wrist-worn device is held securely within the device. When the device is returned to the researchers, the data will be downloaded and stored securely.

All data will be stored securely, in locked facilities and password protected databases at the University of Otago for at least 10 years, then securely destroyed. Electronic records will be accessed by approved researchers only.

The results of the project may be published in reports and/or peer-reviewed journals and/or presented at conferences. Anonymised data could also be used in future relevant research (e.g. meta-analysis).

What about anonymity and confidentiality?

Identifiable Information

Identifiable information is any data that could identify you (e.g. your name, date of birth or address). The Principal Investigators and small team of approved researchers will have access to your identifiable information to allow researchers to contact and send study materials to you. Identifiable information will be stored securely in locked facilities and password protected databases at the University of Otago.

De-identified (Coded) Information

To make sure your personal information is kept confidential, information that identifies you will not be included in any report generated by the research team. Instead, you will be

identified by a code. The Principal Investigator will keep a secure list linking your code with your name, so that you can be identified by your coded data if needed.

The results of the study may be published in scientific journals or presented at conferences, but not in a form that would reasonably be expected to identify you.

Future Research Using Your Information
If you agree, your coded information may be used for future related and unrelated scientific research. You will not be told when future research is undertaken using your information.

Risks
Although every effort will be made to protect your privacy, absolute confidentiality of your information cannot be guaranteed. Even with de-identified (coded) information, there is no guarantee that you cannot be identified. The risk of people accessing and misusing your information is currently very small, but may increase in the future as people find new ways of tracing information.

Rights to Access Your Information
You have the right to access a summary of information about you collected as part of this project. You also have the right to request that any information you disagree with be corrected.

Māori Data Sovereignty
Māori data sovereignty is about protecting information or knowledge that is about (or comes from) Māori people. We recognise the taonga of the data collected for this study. To help protect this taonga we allow Māori organisations to access de-identified study data, for uses that may benefit Māori.

If you agree to participate, can you withdraw later?

Your participation is voluntary. You may withdraw from participation in the project at any time without having to explain why. If you decide to withdraw from the research, your data will be securely destroyed but it may not be possible to withdraw data that has already been used.

Any questions?

If you have any questions now or in the future, please feel free to contact either:

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Name: Dr Sarah Buchanan **Position:** Neurologist/Senior Lecturer Department of Medicine, University of Otago	**Contact details:** Email: sarah.buchanan@otago.ac.nz
Name: Dr Tim Lequeux **Position:** Respiratory Physician, Dunedin Public Hospital	**Contact details:** Email: Tim.Lequeux@southerndhb.govt.nz

This study has been approved by the University of Otago Human Ethics Committee (Health). If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (phone +64 3 479 8256 or email humanethics@otago.ac.nz). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.