

## RESEARCH PROJECT PARTICIPANT INFORMATION SHEET

**Project Title:** The effect of sleep on novel word learning in healthy adults.

**Lay Title:** Can sleep help you learn?

**Investigators:** Ms Emma Schimke<sup>1</sup>, Prof David Copland<sup>1,2</sup>, Dr Anthony Angwin<sup>1</sup>, and Dr Sjaan Gomersall<sup>1</sup>

**Investigator Affiliations:**

<sup>1</sup>School of Health and Rehabilitation Sciences, The University of Queensland

<sup>2</sup>The University of Queensland Centre for Clinical Research

**What is the purpose of this study?**

The purpose of the research is to gain a better understanding of how overnight sleep can influence learning new words.

**Why is this research important?**

This research aims to provide information about how sleep can affect learning new words. Different factors can influence how new words are learned. An increased understanding of whether learning words can be influenced by sleep can help Speech Pathologists to better understand the optimal conditions for adults to learn new words and re-learning familiar words. This could potentially lead to better outcomes for adults with language difficulties due to various pathologies (e.g. stroke).

**How does this research benefit me?**

Participation in this research will not directly benefit you, however, you will have the chance to win one of two \$100 Coles-Myer gift cards in a random prize draw. You will be entered into the draw after you have completed your final participation session. The prize will be drawn after the last participant recruited participates in their final visit. The major benefit of participating in this research will be in helping contribute to the understanding of how sleep can influence learning new words.

**Are there any risks involved?**

There are no risks associated with this study beyond those involved in everyday living. In the unlikely event that the results of the cognitive screener reveal an issue, you will be informed by a member of the research team and will be advised to follow up the results with your General Practitioner (GP). Should your GP wish to discuss the results they are welcome to contact a member of our research team by phone or email.

**What will I have to do if I agree to participate?**

If you agree to participate in this study your participation will involve completing some language learning tasks on a computer.

The tasks will require you to do the following:

- Learn a new name for unknown items when presented with pictures
- Learn a new name for known items when presented with written sentences
- Decide whether or not you recognise names
- Recall the names of pictures by typing out the names

You will also perform some general thinking and language type tasks, as well as completing some sleep-related questionnaires and keeping a log where you will record information regarding your daily sleep/wake patterns, exercise, and caffeine intake. The tasks will be completed either at the University of Queensland St Lucia campus, over the phone, or online via the internet. Short rest breaks will be provided during the sessions.

During certain periods of your participation you will be asked to avoid recreational drug and alcohol consumption, refrain from napping, maintain a regular sleep/wake schedule, and sleep for at least 6 hours per night on average.

You will also be asked to wear a movement sensor, an Actigraph accelerometer, for approximately 48 hours on one occasion. The Actigraph accelerometer is a small, non-invasive and non-intrusive monitor that measures bodily movement (see Figure 1). It is worn on your wrist on a strap at all times except when participating in water based activities (such as showering or swimming) as the monitor is not water proof. This monitor will provide an indication of your physical activity levels for the monitored period. This information will be used to verify your sleep and wake activity, in particular, the length of your overnight sleep and to confirm that you did not nap during the day.



**Figure 1.**

**What is the time commitment involved?**

This project involves two different experiments. The time commitment will involve three testing sessions that will last approximately 1-1.5 hours each in duration, over a period of approximately 24 hours.

The sessions will be either in the morning (e.g. approx. 8am) or the evening (e.g. approx. 8pm). You may be required to attend up to two 1-1.5 hour visits in the same day (e.g. one at 8am and one at 8pm). You will be able to return home between visits and participate in your usual routine. You can choose to come in for sessions either during the week or over the weekend. You will incur your own travel/parking costs for the visit and return visits. Parking at the university is free if you choose to participate on weekends.

**Will my privacy be protected?**

Your privacy and confidentiality will be maintained at all times during the project. You will be assigned a participant number that will be used to label all of your data, instead of your name. All information/data related to this study will be stored in locked cabinets or password protected computers at the School of Health and Rehabilitation Sciences. The results of the tests will not be published in a way that could reveal your identity.

**Can I access my results?**

You may request access to your personal results from the experiment or to be directed to any publications arising from the research. This request can be made to a member of the research team either verbally (by phone) or in written form (by email). A brief summary of your results will then be emailed to you.

**What if I change my mind once I have started the study?**

Your participation in this study is completely voluntary. You have the right to withdraw from the project at any time without affecting your relations with staff at the University of Queensland.

If you would like further information, or would like to clarify issues relating to any part of your participation, please feel free to contact:

- ☐ Ms Emma Schimke, Ph: 0422 073 462, Email: [e.schimke@uq.edu.au](mailto:e.schimke@uq.edu.au)
- ☐ Prof David Copland, Ph: 3346 5539, Email: [d.copland@uq.edu.au](mailto:d.copland@uq.edu.au)
- ☐ Dr Anthony Angwin, Ph: 3346 7460, Email: [a.angwin@uq.edu.au](mailto:a.angwin@uq.edu.au)

Thank you for your interest.

This study has been cleared by one of the human ethics committees of the University of Queensland in accordance with the National Health and Medical Research Council's guidelines. You are of course, free to discuss your participation in this study with project staff (indicated above). If you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Officer on 3365 3924.

## **PARTICIPANT CONSENT FORM**

**Project Title:** The effect of sleep on novel word learning in healthy adults.

**Lay Title:** Can sleep help you learn?

**Investigators:** Ms Emma Schimke<sup>1</sup>, Prof David Copland<sup>1,2</sup>, Dr Anthony Angwin<sup>1</sup>, and Dr Sjaan Gomersall<sup>1</sup>

**Investigator Affiliations:**

<sup>1</sup>School of Health and Rehabilitation Sciences, The University of Queensland

<sup>2</sup>The University of Queensland Centre for Clinical Research

1. I, the undersigned, ..... hereby consent to my involvement in the research project titled “The effect of sleep on novel word learning in healthy adults”.
2. I acknowledge that the nature, purpose, and proposed effects of the project have been fully explained to my satisfaction by the researcher and my consent is given voluntarily.
3. The detail of the procedure proposed has also been explained to me, including the anticipated length of time it will take and an indication of any discomfort which may be expected. I understand that the procedures to be undertaken are as follows:
  - Learn a new name for unknown items when presented with pictures
  - Learn a new name for known items when presented with written sentences
  - Decide whether or not you recognise names
  - Recall the names of pictures by typing out the names
4. I am aware that this project involves two different experiments. I understand that the time commitment will involve attending three testings sessions that will last approximately 1-1.5 hours each, over approximately 24 hours.
5. I understand that I will be required to wear a movement sensor, an Actigraph accelerometer on my wrist for one period of approximately 48 hours during my participation. I understand that the Actigraph is a small, non-invasive monitor that will measure my bodily movement both when I am asleep and awake. I understand that I am to wear the monitor at all times during the wear periods except when participating in water based activities (such as showering or swimming).
6. I understand that this research may not benefit me directly, however, there is the chance to win one of two \$100 Coles-Myer gift cards in a random prize draw.

7. I understand that my results will not be released to any person without my authorisation, and the results of this study will not be published in a way that would reveal my identity.
8. I understand that participation is voluntary and I am free to withdraw my consent at any time, in which event my participation in the research will immediately cease and any information obtained destroyed if requested by me without affecting my relations with staff at The University of Queensland. I understand that my request to withdraw consent can be made verbally to a member of the research team.

Signed ..... this day ...../...../.....  
(Participant)