**Title of Study:** *Investigating the neural mechanisms of the working memory protection*

**Information Sheet**

Project Supervisor: Email:

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Experimenters:

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**What is the aim of the study?**

We would be grateful to you if you could assist us by participating in our study exploring how the brain protects the visual information from being distorted by

upcoming irrelevant information.

**Can anyone take part in the study?**

We want to study 30 participants, between the ages of 18 and 45 years.

The following people *will not be able* to take part in this study:

* People who have metal in their upper body, body implants (cochlear implant, an implanted neurostimulator), medication infusion devices, cardiac pacemakers or intracardiac lines
* People who has epilepsy or has ever had a convulsion or seizure
* People who has vascular, traumatic, tumoral, infectious or metabolic lesions of the brain
* People who had more than 3 units of alcohol or recreational drugs 24 hours or less prior to the study
* Females who are pregnant, lactating or, if of reproductive age and not using a reliable form of contraception (including abstinence) will not be able to take part in the study. On the other hand, females taking the contraceptive pill or hormone replacement therapy (HRT) *are allowed* to take part.

Suitable volunteers should get enough sleep, eat and drink normally on the day you undertake the study. Volunteers experiencing significantly increased levels of stress or fatigue, having a recent fainting spell or syncope will not be able to take part in the study on that day and will be rescheduled (if still interested in participation on another day).

**What will happen to me if I take part?**

Your participation in the experiment will take approximately 90 minutes. First, you will undergo training in the working memory task outside the MRI unit, so we can ensure that you understand the task and can perform it at an accuracy level of more or equal to 60%.

Then you will be asked to enter the MRI Unit, so we can obtain pictures of your brain while you are performing the task. While we record your brain activity, we will ask you to perform the task testing your working memory for pictures of objects (tools or animals), while you are also performing a secondary distracting task during the memory retention interval. We will then look at how accurate your memory was and how quickly you could respond to the memory test when there were different distractor tasks.

**How will my data be stored?**

Your data will be assigned an anonymous number. Information linking that number to your name will be stored securely and separately from the data you provide us.

Consent forms will be kept for 2 years after the study and will be destroyed when no longer needed.

Data collected from this study (your responses on the memory task and brain activity data) will be preserved indefinitely and made available in anonymised form, so that they can be consulted and re-used by others.

**What if I want to withdraw/ I don’t want to participate?**

Taking part in this study is completely voluntary; you may withdraw at any time without having to give any reason. Please feel free to ask any questions that you may have about this study at any point.

**What if there is a problem?**

If you have a concern about any aspect of this study, you should ask to speak to the investigators who will do their best to answer your questions (see contact details at the front of this Information Sheet). If you remain unhappy and wish to complain formally, you can do this through the Project Supervisor (Dr Eva Feredoes) and the CINN Director (Professor Anastasia Christakou: a.christakou@reading.ac.uk).

**Why is this study conducted and how is it funded?**

This project is funded by the Magdalen Vernon Studentship received by Olga Leticevscaia and is being conducted in partial fulfilment towards a Ph.D.

*This application has been reviewed by the University Research Ethics Committee and has been given a favourable ethical opinion for conduct.*