S1 File. English translation of the recruitment announcement for the fMRI sleep study sent to the student mailing lists of Lyon 1 and Lyon 2 Universities.

Hello,

As a part of a cognitive neurosciences research project on sleep, we are currently looking for participants for a neuroimaging study (functional magnetic resonance imaging, fMRI) that will be taking place from January to April 2016. fMRI is a harmless and non-invasive technique that is often used in both research and clinical settings to measure brain activity.

The general purpose of this study is to identify the brain areas that are active in the minutes following awakening from sleep. In order to increase sleep pressure and thus facilitate sleeping in the MRI scanner, the study includes a partial sleep deprivation on the night before the MRI acquisition.

Participants will be reimbursed 180 euros.

The inclusion criteria for this study are:

- Being right-handed
- Being 18 to 65 years old
- Being of French mother tongue

The exclusion criteria for this study are:

- Suffering from psychiatric, neurologic or sleep disorders
- Using psychotropic substances (sleeping pills, cannabis, antidepressants)
- Pregnancy
- Having contraindications to MRI: claustrophobia, ferromagnetic metal body implant, heart pacemaker

Course of the study:

Day 1 – Partial sleep deprivation

You will spend the night before the MRI examination in the Sleep Unit of Le Vinatier Hospital (Bron, France). From 8pm to 10pm, you will perform several behavioral tests (attention, memory, arithmetic, creativity, personality). You will be allowed to sleep between 5am and 8 am in a unit bed. From 10pm to 5 am, you will be under the constant supervision of nurses.

Day 2 – MRI examination

Shower and breakfast will be offered in the morning after awakening. You will have free time until lunch at 11.30 am (not supplied). At noon, you will be taken to the neuroimaging center (CERMEP) to go through the 2 hours MRI examination. First, the experimenter will set-up electrodes on your scalp to record the electro-encephalographic (EEG) signals, and on your neck and face to record electro-myographic (EMG) and electro-oculographic (EOG) signals respectively. These signals allow to determine in real-time the vigilance state (i.e. wakefulness or sleep) while lying in the MRI scanner. You will be asked to perform the arithmetic task practiced on the night before, and your brain will be subsequently scanned while you are resting with the eyes open. You will then be allowed to take a nap, and you will be awakened by the experimenter after about 30 minutes of sleep. Your brain will be scanned upon awakening, and you will be asked to perform the arithmetic task again.

If you are interested in participating, please answer the online questionnaire by clicking on the following link: http://crnlvote.univ-lyon1.fr/index.php/592145?lang=fr

Please note that we will only consider fully completed applications (be sure to click on the “Send” button after filling out the questionnaire). Not receiving a reply within two weeks implies either that your profile do not correspond to our criteria or that we have no more available slots.