

## 2 PhD positions within the FWF project **SLORY – MUM: “Sleep-related memory consolidation during pregnancy”**

University of Salzburg, Department of Psychology, Centre for Cognitive Neuroscience, Laboratory for Sleep and Consciousness Research - **Assoc. Prof. Dr. Kerstin Hoedlmoser**

Pregnant women often report impaired sleep and cognition both during and after pregnancy. Considering the beneficial effects of sleep on the consolidation of newly encoded memory contents, we hypothesize that memory deficits emerging during pregnancy are not only related to physical and hormonal changes but also to changes in sleep. Furthermore, there is growing evidence that pregnancy-related increases in sex steroids and stress hormone levels drive memory impairments. In general, the idea that pregnant women suffer from sleep problems and memory deficits during and especially after pregnancy is widespread but has been poorly investigated. We therefore strive for a longitudinal investigation of the question whether changes in sleep and hormone levels during pregnancy (1st-3rd trimester) compared to post-pregnancy (3- and 6-months follow-up) as well as compared to non-pregnant controls are associated with deficits in memory performance. The investigation is led by a multi-professional team including sleep scientists and cognitive psychologists (Kerstin Hoedlmoser, Christina Plamberger), psychoneuro-endocrinologists (Manfred Hallschmid, Hubert Kerschbaum, Belinda Pletzer), an expert on Obstetrics and Gynaecology (Sarah England) as well as a statistician (Wolfgang Trutschnig). Overall, this project will greatly contribute to our understanding of the role of sleep and hormones for brain activity during sleep and wakefulness across a relatively short but very special period of a woman's life: pregnancy.

We offer two 3-year PhD positions for bright, motivated and energetic students with a master's degree. Earliest start date May 2023, latest October 2023.

### **Qualifications requested:**

- Master's degree in cognitive (neuro-)science, psychology, biology, medicine/neurology, computational neuroscience, or related fields
- Research skills in EEG, polysomnography and hormone analyses
- Statistical and IT skills as well as programming experience are an advantage
- Excellent communication skills with the ability to communicate in an open, appreciative, and empathetic manner and in particular to address the specific needs and concerns of the target group - pregnant women - are essential.
- Independent working style and strong organizational skills
- English proficiency (essential)
- Flexible working hours (required because sleep is recorded overnight)

The programme strives for equal representation of female PhD students. Therefore, women are especially encouraged to apply.

**Deadline for applications: April 1, 2023**

To apply, please send a motivation letter, CV, publication list, 2 letters of recommendation to [kerstin.hoedlmoser@plus.ac.at](mailto:kerstin.hoedlmoser@plus.ac.at)