

Assoc. Prof., Dr. Kerstin HOEDLMOSER

PERSONAL DATA

Present address: Centre for Cognitive Neuroscience, University of Salzburg
Laboratory for ‘Sleep, Cognition and Consciousness Research’
Hellbrunnerstr. 34, 5020 Salzburg, Tel: +43-662-8044-5143

Email: kerstin.hoedlmoser@plus.ac.at

Websites: <http://www.sleepscience.at>

Born: 28.04.1980, Gmunden, Austria

Citizenship: Austrian

ORCID: 0000-0001-5177-4389

LIST OF ACADEMIC MILESTONES

05/2018 Habilitation in Psychology ‘Functional impact of sleep on declarative and motor memory over the lifespan’ (reviewers: Eus van Someren, Rebecca Spencer, Derk-Jan Dijk)

04/2007 Graduation with Doctor of Science (PhD; ‘Dr. rer. nat.’) in Psychology (summa cum laude) at the University of Salzburg (Austria); PhD thesis: ‘The significance of sleep related theta synchronization for general memory abilities and the impact of neurofeedback on sleep’ (reviewers: Wolfgang Klimesch & Pierre Maquet)

10/2007 – 06/2011 Curriculum ‘Cognitive- behavioral psychotherapy’ (AVM)

03/2005 – 07/2006 Curriculum ‘Clinical- and health psychology’ (BOEP)

11/2004 Graduation with Master of Science (M.S.; ‘Mag. rer. nat.’) in Psychology (summa cum laude), Univ. Salzburg (Austria); Master thesis: ‘EEG Alpha und Theta Power im Zusammenhang mit Intelligenz’

10/1999 – 11/2004 Psychology, Sports Science & Kinesiology, Univ. Salzburg (Austria)

09/1998 – 06/1999 International language school (Cairns, Australia)

LIST OF RELEVANT POSITIONS

06/2018 – present Associate Professorship at the University of Salzburg (Austria)

05/2018 – 09/2018 Fulbright Research Scholarship at the University of California, Berkeley (Prof. Matthew Walker)

10/2013 – 05/2018 Assistant Professorship at the University of Salzburg (Austria)

MAIN AREAS OF RESEARCH

Sleep and memory consolidation over the lifespan (children, adolescents); motor learning, psychology of sports and exercise; Chronic Insomnia; Impact of Smartphone-usage on sleep and memory

TEN MOST IMPORTANT ACADEMIC PUBLICATIONS

Höhn, C., Hahn, M. A., Gruber, G., Pletzer, B., Cajochen, C., & **Hoedlmoser, K.** (2024). Effects of evening smartphone use on sleep and declarative memory consolidation in male adolescents and young adults. *Brain Communications*. <https://doi.org/10.1093/braincomms/fcae173>

Höhn, C., Hahn, M. A., Lendner, J. D., & **Hoedlmoser, K.** (2024). Spectral Slope and Lempel-Ziv complexity as robust markers of brain states during sleep and wakefulness. *ENeuro*, 11(3). <https://doi.org/10.1523/ENEURO.0259-23.2024>

Ameen, M. S., Petzka, M., Peigneux, P., & **Hoedlmoser, K.** (2023). Post-training sleep modulates motor adaptation and task-related beta oscillations. *Journal of Sleep Research*, e14082. <https://doi.org/10.1111/jsr.14082>

Hahn, M. A., Bothe, K., Heib, D., Schabus, M., Helfrich, R. F., & **Hoedlmoser, K.** (2022). Slow oscillation-spindle coupling strength predicts real-life gross-motor learning in adolescents and adults. *eLife*, 11, [e66761]. <https://doi.org/10.7554/eLife.66761>

Hoedlmoser, K., Peigneux, P., & Rauchs, G. (2022). Recent advances in memory consolidation and information processing during sleep. *Journal of Sleep Research*. <https://doi.org/10.1111/jsr.13607>

Hahn, A. M., Heib, D., Schabus, M., **Hoedlmoser, K.**, & Helfrich, R.F. (2020). Slow oscillation-spindle coupling predicts enhanced memory formation from childhood to adolescence. *Elife*, e53730. doi: 10.7554/eLife.53730.

Bothe, K., Hirschauer, F., Wiesinger, H.-P., Edfelder, J., Gruber, G., Birklbauer, J., & **Hoedlmoser, K.** (2019). The impact of sleep on complex gross-motor adaptation in adolescents. *Journal of Sleep Research*, 28(4), e12797. doi.org/10.1111/jsr.12797

Hahn, H., Joechner, A., Roell, J., Schabus, M., Heib, D.P.J., Gruber, G., Peigneux, P. & **Hoedlmoser, K.** (2019). Developmental changes of sleep spindles and their impact on sleep dependent memory consolidation and general cognitive abilities – a longitudinal approach. *Developmental Science*, 22(1), e12706. doi.org/10.1111/desc.12706.

King, B.R., **Hoedlmoser, K.**, Hirschauer, F., Dolfen, N., & Albouy, G. (2017). Sleeping on the motor engram: The multifaceted nature of sleep-related motor memory consolidation. *Neuroscience and Behavioral Reviews*, 80, 1–22. doi:10.1016/j.neubiorev.2017.04.026

Hoedlmoser, K., Heib, D., Roell, J., Peigneux, P., Sadeh, A., Gruber, G., & Schabus, M. (2014). Slow sleep spindle activity, declarative memory and general cognitive abilities in children. *SLEEP*, 37(9), 1501-1512. doi:10.5665/sleep.4000

RESEARCH PROJECTS

05/2023 – present: FWF-project (University of Salzburg, Austria): SLORY – MUM: “Sleep-related memory consolidation during pregnancy” (€ 399.945,84; Principal investigator: Dr. Hoedlmoser)

02/2023 – present: FWF-project (University of Salzburg, Austria; University of Lyon): Effects of sleep on motor sequence learning by motor imagery in young and older adults (€ 253.932; Principal investigators: Dr. Hoedlmoser, Dr. Saimpont)

05/2019 – 07/2023: FWF-project (University of Salzburg, Austria): The impact of blue-enriched smartphone light exposure before falling asleep on sleep-dependent memory consolidation in adolescents (€ 378.908,86; Principal investigator: Dr. Hoedlmoser)

03/2019 – 02/2024: Jacobs Foundation-project (University of Salzburg, Austria & University of California, Irvine/USA): Tackling the Paradox of Sleep and Technology Through Near Peer Relationships (€ 26.451,31; Principal investigators: Dr. Hoedlmoser and Dr. Schueller)

9/2012 – 2/2018: FWF-project (University of Salzburg, Austria): Sleep 'n' cycle - Sleep and gross-motor learning in school aged children and adults (€323.657; Principal investigators: Dr. Hoedlmoser and Dr. Birklbauer)

12/2012 – 5/2016: Jacobs Foundation-project (University of Salzburg, Austria): Sleep'n'cycle in children funded by the Jacobs Foundation (€33.231, Principal investigator: Dr. Hoedlmoser).

10/2009 – 1/2013: FWF-project (University of Salzburg, Austria): Sensorimotor conditioning as a primary insomnia treatment funded by the FWF (€308.949; Co-applicant with Dr. Schabus)

1/2009 – 1/2012: FWF-Hertha-Firnberg -project (University of Salzburg, Austria): Sleep and cognitive performance in children funded by the FWF (€186.540; Principal investigator: Dr. Hoedlmoser).

1/2009 – 12/2011: FGÖ -project (University of Salzburg, Austria): Fit4School - Sleep and cognitive performance in children funded by the Fonds Gesundes Österreich (€19.807; Principal investigator: Dr. Hoedlmoser).

PRIZES AND AWARDS

09/2023 ‘Kurt-Zopf-Prize’

11/2019 ‘Kardinal Innitzer Prize’

01/2017 ‘Fulbright-Research-Grant’ (University of California, Berkeley, Prof. Matt Walker)

09/2014 ‘Young Scientist Award’ (22nd European Sleep Research Society)

05/2014 ‘Teaching Award’ (University of Salzburg)