

## Sleep-dependent memory consolidation - is it time for a revision?

*Wednesday, July 20, 2022 2:50 PM (20 minutes)*

Memory consolidation is a key to stabilizing the memory traces coming from learning processes such as statistical learning. It is also crucial in building representations and models. Sleep is widely believed to be essential to learning and memory consolidation. The theory of sleep-dependent consolidation suggests that after an offline period, including sleep, performance improves more than after a period without sleep. Accordingly, several studies showed the critical role of sleep in skill and procedural learning consolidation. However, recent works suggest that the data on which this theory relies may be driven by several factors that are unrelated to sleep. In this talk, I will show empirical results and methodological pitfalls that invite a reconsideration of sleep's role in the consolidation of memories, and I will discuss the consequences on statistical learning and predictive processes.

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