# A Connectionist Model of Context-Based Memory Reconsolidation in the Hippocampus: The Role of Sleep



Justin Lines<sup>1</sup>, Kelsey Nation<sup>2</sup>, Jean-Marc Fellous<sup>1,2,3</sup>

### 5. Reconsolidation combined with sleep

Model (sleep): 10% object overlap and 30 set 3 items



## 6. Conclusions

Object semantic overlap as well as additional, extraneous learning can be varied to match the human and rat behavioral performance in the memory consolidation task. Overlap increases intrusions.

C Lesioning simulations suggest that the dorsal CA3 is the main layer within the trisynaptic network of the hippocampus where object and context information interact to yield intrusions.

O Our proposed mechanism of sleep, where small amounts of noise spontaneously reactivate memories and feed them back into the network, can reproduce experimental findings.

• Adding sleep to the reconsolidation paradigm decreases the need for extraneous learning.

#### . References

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# 8. Acknowledgements

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Contact Information: justinlines@gmail.com