

Neural reinstatement reveals divided organization of fear and extinction memories in the human brain

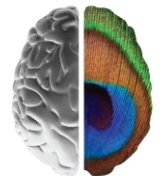
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For Learning, Memory, and Emotion at UT Austin

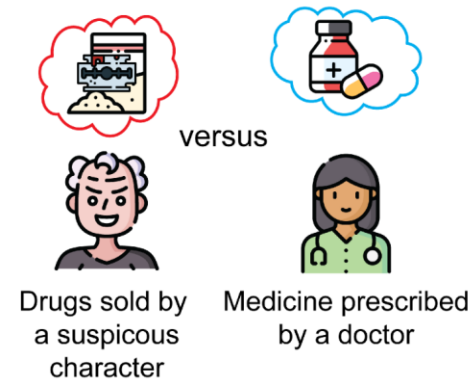


LewPeaLab

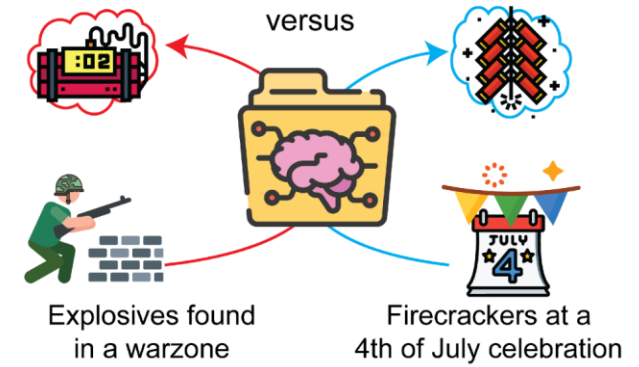
Competing representations of threat and safety



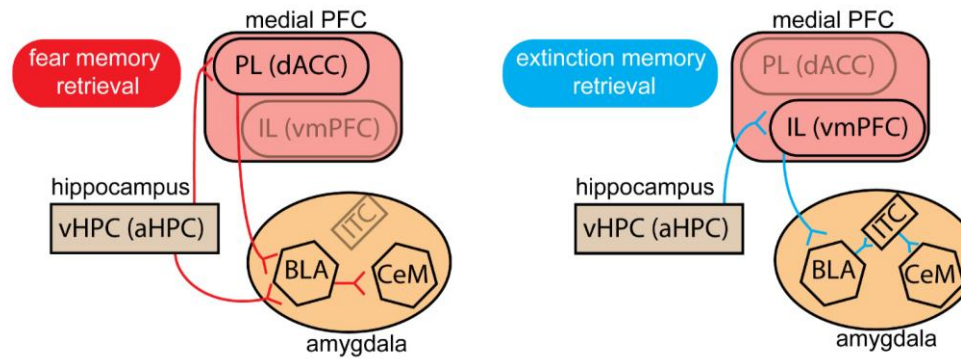
Putting threat and safety in context



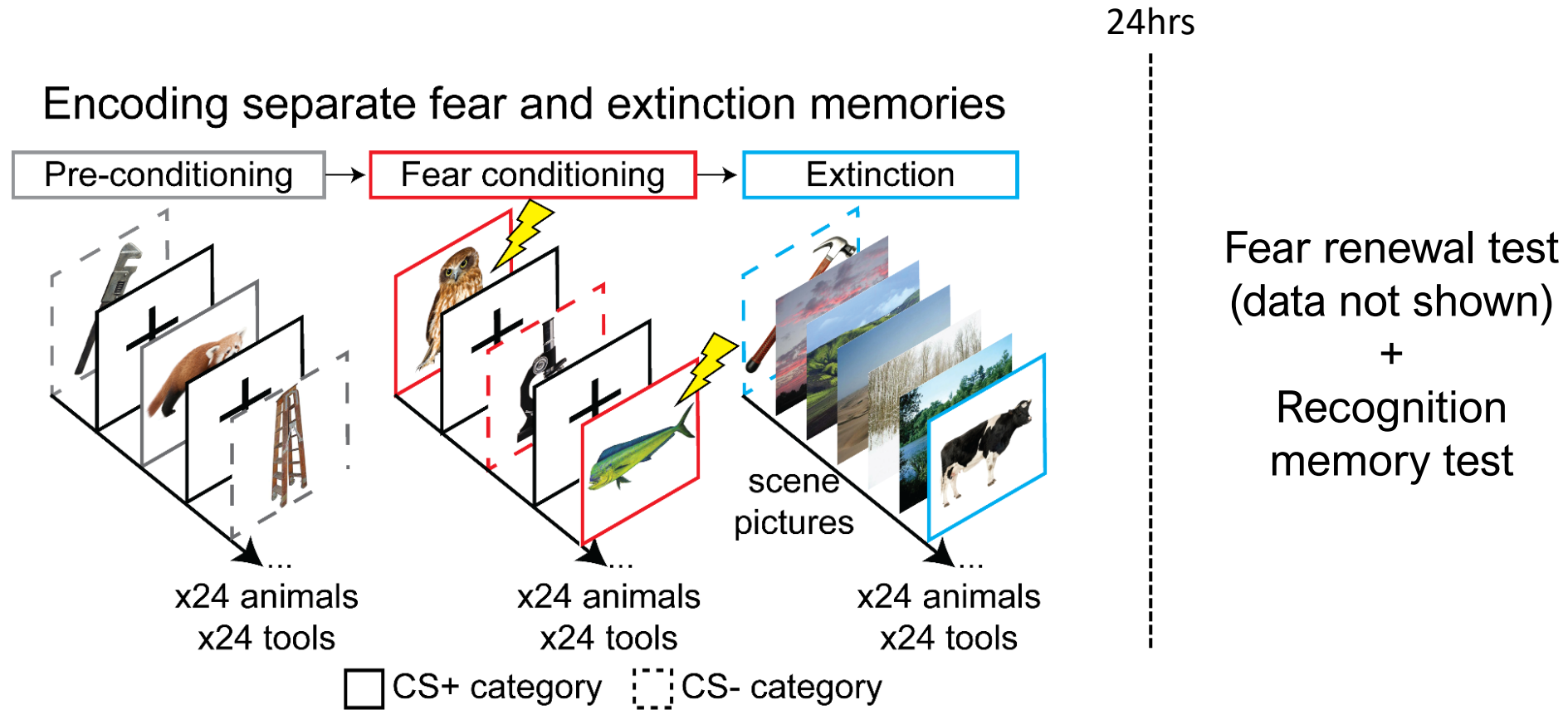
How does the brain organize these competing memories?



Simplified circuit for retrieval of opposing fear and extinction memory



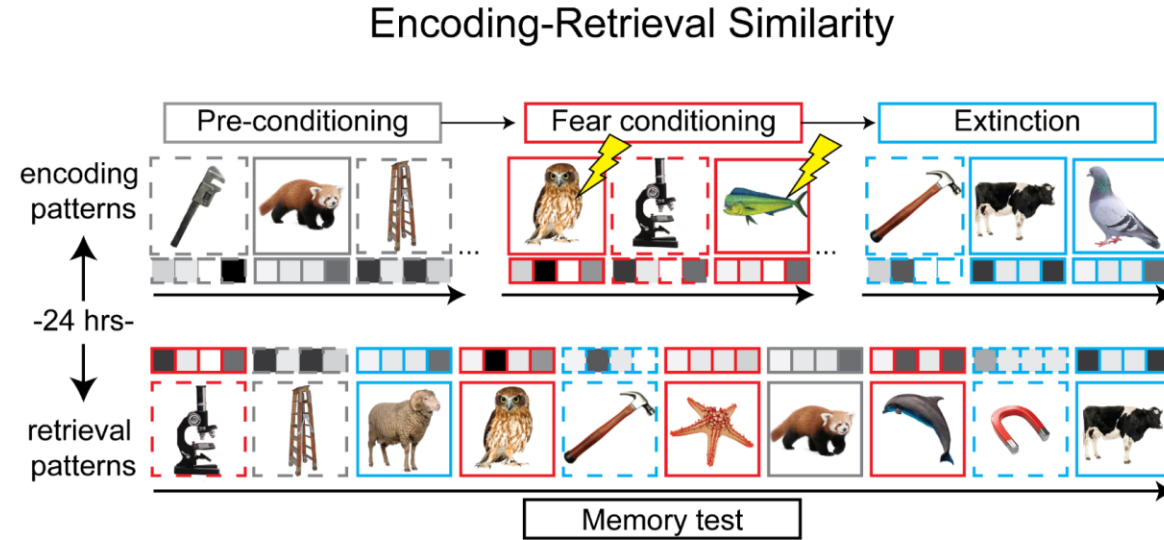
Experimental design



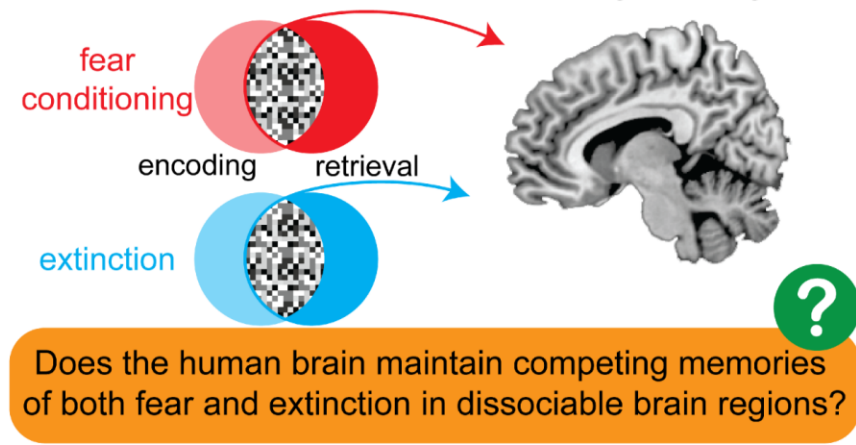
N = 24 Healthy adults

N = 24 Individuals with PTSD symptoms

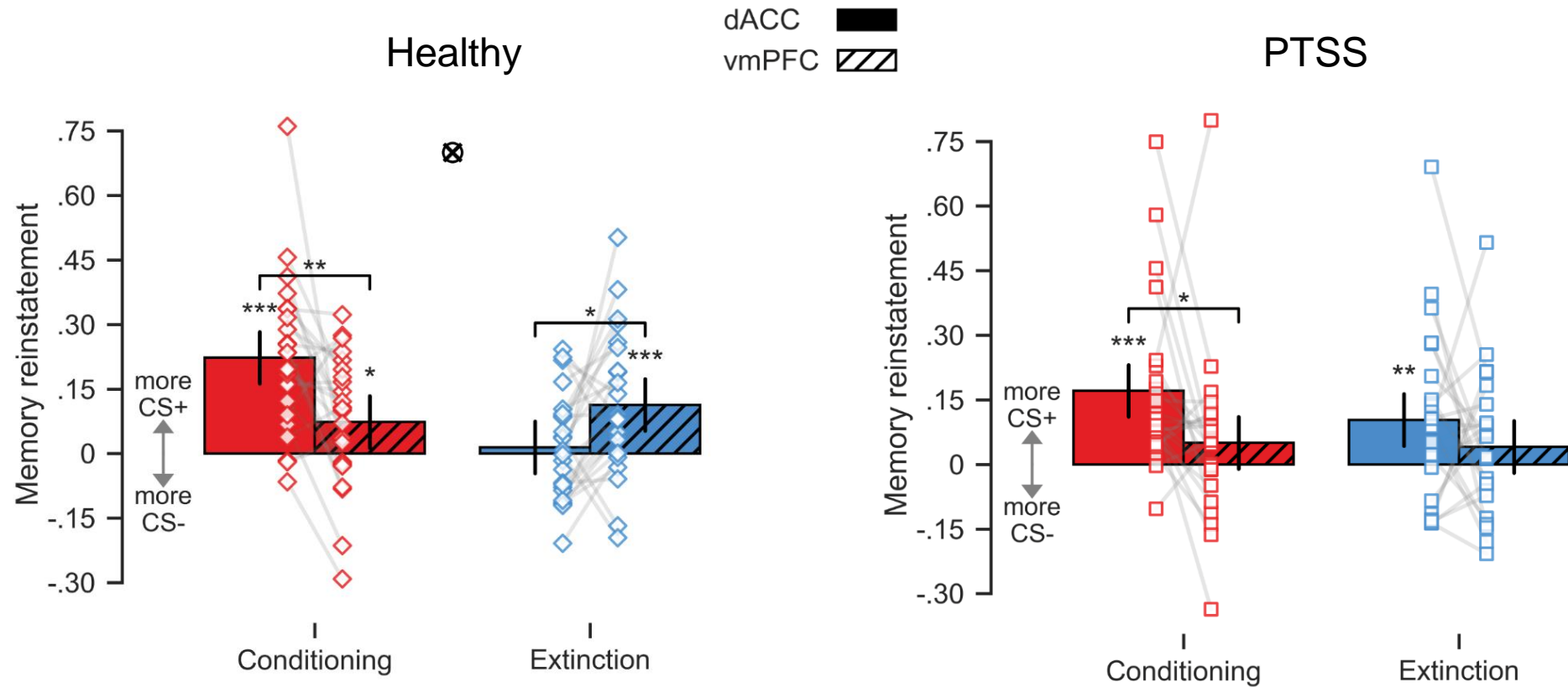
Quantifying neural reinstatement in humans



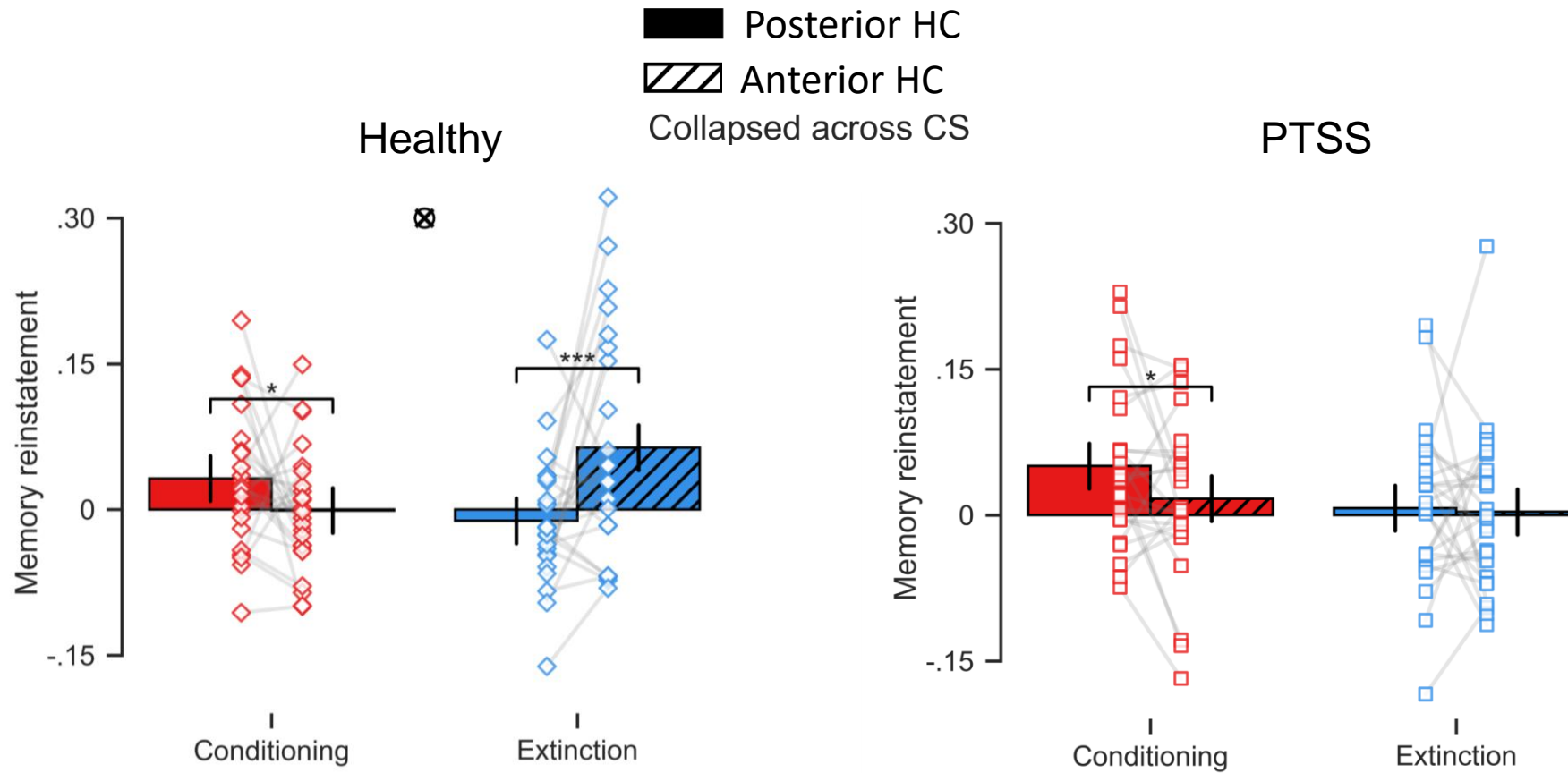
Correlated patterns of encoding-retrieval activity sensitive to **context** in which memory initially formed?



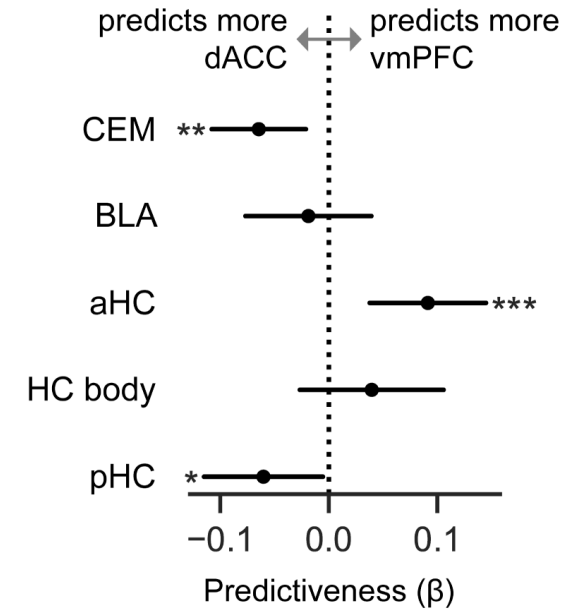
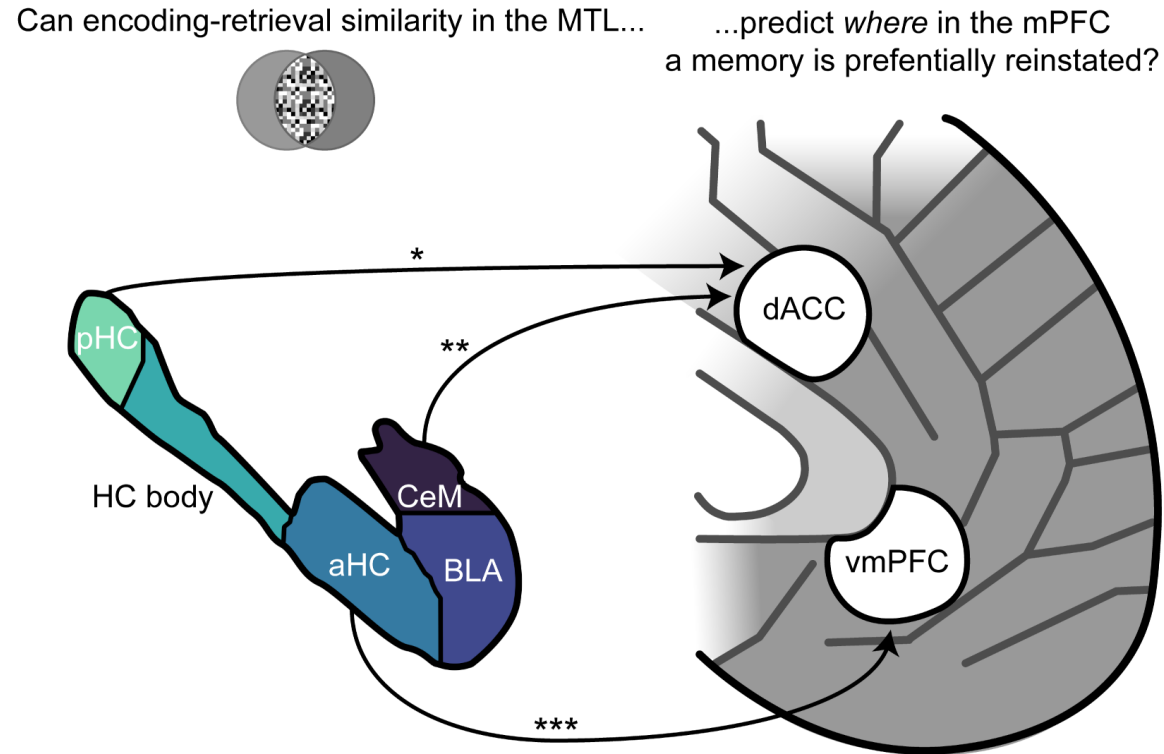
Healthy adults exhibit double dissociation of emotional memories across the mPFC



Fear and extinction are organized along the long-axis of the hippocampus



MTL reinstatement predicts locus of reinstatement in the mPFC



Stay tuned! The full paper is currently in press
at *Current Biology*

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Dr. Michael Drew

Dr. Jarrod Lewis-Peacock

Dr. Joseph Dunsmoor

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