Using fMRI pattern classification of recollection and familiarity to predict false alarms in recognition memory

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60 of 10 subjects show cross-run generalization above 60% for recollection and familiarity (63%-73%).

As predicted, we found a selective reduction of related lure false alarms when the classifier guessed "recollection state" compared to when it guessed "familiarity state".

Pattern classification can measure and distinguish states elicited by recollection and familiarity during unconstrained testing that predict relatively greater presence of recollection and familiarity

The most consistent difference was greater importance of visual areas in recollection; may reflect retrieval of mental images of items formed at study.

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