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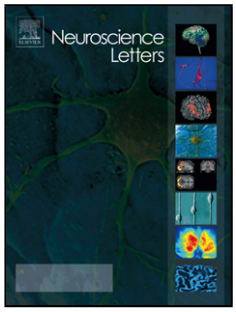

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The hippocampus and related neocortical structures in memory transformation

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Research Highlights

- Recent evidence on memory consolidation and transformation in humans and rodents is reviewed and theories are evaluated.
- The evidence indicates that memory transformation with time and experience is accompanied by corresponding changes in their neural representation.
- A model is presented with a focus on specialization of the long axis of the hippocampus and its related structures.
- The posterior hippocampus mediates local details, the anterior hippocampus, gist or global context, and medial prefrontal cortex, schemas.
- As richly detailed memories are transformed to gist or schematic memories, there is a shift in representation from the posterior hippocampus to anterior hippocampus and medial prefrontal cortex.