



Molecular and Neural Correlates of Memory and Cognition

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Session 3

Subcortical contributions to memory and cognition

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Subcortical coding of statistical learning

Statistical learning is a form of associative learning that takes place in the absence of a reinforcer. This learning is essential for predictive coding, since it detects patterns in the world in which the animal lives. It is likely that an interplay between subcortical and cortical processing underlies statistical learning. I will describe a model to study statistical learning in mice, and show data implicating the auditory midbrain in this type of learning. Behaviour and electrophysiology are combined to understand the circuit underlying a form of memory that, itself, does not change behaviour.

