
Role of dopaminergic system in exploratory behaviour

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Abstract

Dopamine (DA) carries information about beliefs and rewards, and therefore plays an important role in decision-making, learning and exploration. Exploration is central to the organisation of behaviours. In the decision-making framework, the concept of exploration is opposed to that of exploitation with respect to a known reward source. We designed a task where mice perform a sequence of choices between explicit locations to obtain rewards (intracranial self-stimulation). I will characterise the behaviour of the animals and the dynamics of the DA system during this task and will analyse the effect of manipulations of the DA VTA cells on exploratory behaviours.

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