

Neuroscience Seminar Series

Friday, December 8th, 2017 at 11:30

Salle des Conférences (R229)

Centre Universitaire des Saints-Pères

45 rue des Saints-Pères, 75006 Paris

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Neural mechanisms of memory re-evaluation: where did that memory go?

*Animals must constantly reassess the reliability of the things they have learned so that their behaviour best reflects their most up-to-date knowledge. When experience suggests that a learned prediction is inaccurate the behaviour driven by the initial memory is reduced, by a process called extinction. Extinction is a conserved feature of memory in all animals but it is poorly understood. I will present mechanistic evidence from *Drosophila* that shows that when flies experience that an expected reward is missing they form a new aversive memory that competes with, and neutralizes, the initial food-seeking memory. In contrast, flies code omission of expected punishment as a good experience and form a competing reward memory. We propose that by retaining memories for the old and new experience, flies can more reliably track the likelihood of expected events.*

Those interested in meeting with the speaker please contact
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