

DANDRITE LECTURE

Choosing Between Artificial and Natural Rewards: How Accumbal Dopamine Instructs the Preference

We will show that an individual's choices between natural and artificial rewards are guided by personal preference. Cues signaling for powerful artificial rewards—such as cocaine or optogenetic stimulation of dopamine neurons in the VTA—trigger larger dopamine surges than cues for natural food rewards in the N. accumbens of mice. These dopamine signals, which develop during learning, represent the subjective value of a reward. The larger the difference in dopamine responses between artificial and natural cues, the stronger an individual's overall preference. Moreover, once established, these dopamine signals remain consistent over time. Notably, mice that choose artificial rewards even when facing punishment risk tend to develop compulsive behavior.

Host: Group Leader Anna Mathia Klawonn



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Date: **Wednesday 7 May 2025**
Time: **12:00 – 13:00**
Venue: **1324-011**
Address: **Bartholins Allé 10
8000 Aarhus C**

OPEN TO ALL INTERESTED.

