

## AXE NEUROSCIENCES

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### *Astrocytic Encoding of Anxiety in the Basolateral Amygdala*

The basolateral amygdala (BLA) has long been implicated in threat detection and the generation of anxiety states. While previous experiments have demonstrated the important role of BLA principal neurons in driving anxiety-related behaviors, population-level recordings suggest that principal neurons encode broad exploratory states rather than anxiety per se. This discrepancy questions whether anxiety is indeed represented within the BLA, or if the BLA reflects a broader representation of behavioral states. Here, using simultaneous in vivo calcium recordings in both astrocytes and principal neurons in the BLA we find that in contrast to neurons, astrocytic activity provides a stable and scalable representation of threat-induced anxiety across an array of behavioral tasks. We find that the magnitude of astrocyte response to threatening stimuli is modulated by the individual anxiety levels of animals, and that exploration of anxiogenic environment can be decoded across multiple tasks using astrocyte activity alone. Our results shed light on a specialized encoding property of BLA astrocytes and establish these cells as key computational elements of threat processing in anxiety circuits.

**Vendredi 23 janvier 2026**

**12h à 13h**

**A02.9209 AB**

L'AUDACE DE  
CHERCHER  
PLUS LOIN

Séminaire organisé par Nicole Leclerc

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