

The evolution of affective neuroscience through the lens of neuroimaging

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The development of brain imaging techniques, particularly fMRI, has fueled a growing body of research on the neural correlates of affect. This field has flourished, with a vast literature investigating the relationship between in-vivo brain activity and the experience, inference, and regulation of emotions, contributing to the “rise of affectivism” (Dukes et al., 2021).

In this talk, I will present meta-analytic findings obtained from the analysis of ~65,000 brain mapping articles showing that affectivism represents ~11% of the neuroscientific literature. Despite this sizeable interest, I will demonstrate that brain imaging research is biased toward the study of a very small number of emotion categories, neglecting the full complexity of human affective experience. Recently, researchers began to acknowledge these issues and the broader question of ecological validity in emotion research using neuroimaging.

In this context, the introduction of naturalistic stimuli (e.g., movies, music, and narratives) has broadened the horizons of brain imaging research. In this regard, I will present studies from our and other laboratories demonstrating how the combination of naturalistic stimuli and advanced methods for the analysis of brain activity allowed the study of multifaceted emotional experiences, the relevance of contextual information in emotion elicitation, the dynamics and trajectories in the stream of affect, and the intricate relationship between emotions and sensory processing.

I will conclude by highlighting the aspects that still need to be addressed and the unprecedented opportunities to bridge the gap between basic research and real-world applications.

If you're submitting a poster, would you be interested in giving a blitz talk?

No

If you're submitting a symposium talk, what's the symposium title?

Interoception, affectivity and cognitive processes

If you're submitting a symposium, or a talk that is part of a symposium, is this a junior symposium?

No

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