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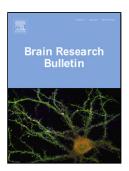
Title: Error Blindness and Motivational Significance: Shifts in Networks Centering on Anterior Insula Co-Vary with Error Awareness and Pupil Dilation

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### ACCEPTED MANUSCRIPT

# **Error Blindness and Motivational Significance:**Shifts in Networks Centering on Anterior Insula Co-Vary with Error Awareness and Pupil Dilation

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#### Abstract

This investigation aims to further our understanding of the brain mechanisms underlying the awareness of one's erroneous actions. While all errors are registered as such in the rostral cingulate zone, errors enter awareness only when the anterior insula cortex is activated. Aware but not unaware errors elicit autonomic nervous system reactivity. Our aim is to investigate the hypothesis that activation in the insula during error awareness is related to autonomic arousal and to inter-regional interactions with other areas of the brain. To examine the role of the

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