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The thalamo-habenula projection revisited

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Abstract

The thalamus is one of the most highly connected hubs of the vertebrate brain, with roles in perception, arousal, navigation, memory and consciousness. One connection that is missing from contemporary maps is a link to the habenula. This link was reported in the early part of the last century, but appears to have slipped into obscurity. Here, I review the evidence for the existence of this innervation and consider the potential roles it could play. In particular, the possibility that this pathway is involved in non-visual responses to ambient illumination is examined.