

Functional and structural connectivity of the cingulate sulcus visual (CSv) area in macaque monkeys

Introduction

Recently, we described the cortical network involved in processing egomotion-compatible optic flow using functional MRI in 3 awake macaque monkeys (Cottereau et al, 2017). In all the animals, a significant selectivity was observed in several areas previously associated with optic flow processing, and NPS. We also observed selective responses in a new region of the cingulate sulcus that may be homologous with the cingulate sulcus visual (CSv) area evidenced in humans using the same protocol (Wall and Smith, 2008). To further characterize this potential homology, we aim at describing the connectivity of this monkey cingulate region, as recently achieved for CSv in humans (Smith et al, 2017).





De Castro V^{1,2*}, Leguen C^{1,2*}, Héjja-Brichard Y^{1,2}, Audurier P^{1,2}, Cottereau BR^{1,2}, Durand JB^{1,2} ¹ Université de Toulouse, Centre de Recherche Cerveau et Cognition, Toulouse, France.² Centre National de la Recherche Scientifique, Toulouse Cedex, France. * Equal contribution.

