Elena Borra

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Bio sketch

My research is focused on the anatomo-functional definition of the cortical circuits involved in motor control and in cognitive motor functions. I have a background in pharmaceutical chemistry and in neuroanatomy and neurophysiology, with specific training and expertise in the neuroanatomy of non-human primates. I worked on areal definition based on architectonical and connectional features of the inferior parietal, ventral premotor, and lateral prefrontal cortex in the macaque. During my internship at RIKEN Brain Science Institute (Japan) and following collaboration with Kathleen Rockland, I worked on single axon reconstruction, cortical columnar organization, and on white matter neurons. I collaborated with G. Rizzolatti and W. Vanduffel (KU Leuven, Belgium) for the definition of the action observation network in the macaque based on combination of neural tracers and fMRI data. More recently I was interested in the definition of large-scale (cortical and subcortical) networks in macaques, with classical anatomical and MRI-based techniques, and of their human counterparts, based on comparative considerations.