



## SEMINARIO PRESENCIAL

Viernes, 18 de febrero de 2022  
12:30 h. Instituto Cajal (CSIC) Madrid

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# Searching for targets in vascular cognitive impairment and dementia

## Abstract

Vascular cognitive impairment refers to all forms of cognitive disorder associated with cerebrovascular disease, regardless of the specific mechanisms involved. It encompasses the full range of deficits on cognition from mild cognitive impairment to dementia and its characterized by alterations in different domains including attention, executive function, language, orientation, and memory. In principle, any of the multiple causes of clinical stroke can cause vascular cognitive impairment. Although more than one-third of stroke patients may develop cognitive impairment or even dementia long term after the onset, the mechanisms underlying this secondary cognitive decline remain quite unknown. Recent work highlights a role of microinfarcts, microhemorrhages, strategic white matter tracts, loss of microstructural tissue integrity, and secondary neurodegeneration. Here, we will discuss several of these mechanisms in different models of cerebrovascular disease, with special focus in both neuroimmune and neurogenic responses which may compromise long-term structural and functional brain integrity, and contribute to post-stroke cognitive decline.

## Affiliation and short bio

She is graduated in Biology (2007) and in Neuroscience (MSc) from Universidad Autónoma de Madrid in 2009. She carried out a PhD in Biomedicine in 2013 at Universidad Complutense de Madrid as FPI fellow from the Spanish Ministry. After a postdoctoral stay in the Neurovascular Research Unit co-lead by Dr Lisazoain and Moro, Maribel was granted with a postdoctoral fellowship Juan de la Cierva Incorporación and she joined to Dr. Jose Antonio Esteban's Lab at CBMSO in 2017. She is currently a senior postdoctoral researcher in the laboratory of María Ángeles Moro in the Neurovascular Pathophysiology unit at Centro Nacional de Investigaciones Cardiovasculares (CNIC, Madrid) As a researcher, Maribel has studied different aspects of the pathophysiology of stroke and vascular cognitive impairment, specially, the immune response and the SVZ and SGZ neurogenic burst that take place after cerebrovascular events. She has a total of 32 publications in the field, including research articles in high-impact journals (Circulation, Science, Immunity, JCI, Nat Communication) with an H-index of 19 and a total number of 1570 citations.