



## CCM \\ CEREBRAL CAVERNOUS MALFORMATIONS. FROM PATHOBIOLOGY TO THERAPEUTIC STRATEGIES.

Austria \ Canada \ Finland \ France \ Germany \ Italy \ Israel \ Luxemburg \ Poland \ Romania \ Spain

## FUNDED PROJECTS

Cerebral Cavernous Malformations (CCM) are among the most common blood vessel malformations of the brain, particularly in young people. Such cavernomas can give rise to epileptic seizures and brain hemorrhages (stroke). CCM lesions which are located deep in the brain stem or the spinal cord may lead to severe morbidity and novel pharmacological approaches are desperately needed for those severe forms of the disease which do not benefit from neurosurgery.

The genes responsible for the hereditary CCM form have been identified. However, there are still many unknowns about the function of the CCM genes and consequently about the biology of this disease. Our teams have contributed to the understanding of CCM biology, and propose now to decipher the functions of CCM proteins using an integrated approach. We will study all three CCM genes at a time, and combine in vitro approaches and advanced animal models. This way, we intend to assess possible therapeutic strategies that could be implemented in human patients afterwards.



COORDINATOR | ANDREAS FISCHER

### PROJECT PARTNERS:



**Andreas Fischer**

German Cancer Research Center Heidelberg, Mannheim, Germany



**Elisabeth Tournier-Lasserre**

INSERM, Paris, France



**Corinne Albiges-Rizo**

INSERM, Grenoble, France



**Juan Zalvide**

University of Santiago de Compostela, Santiago de Compostela, Spain