Name	Beatriz García Díaz
Affiliation	Biomedical Research Institute of Malaga (IBIMA). Team of Neuroimmunology and Neuroinflammation.
Scientific expertise, up to 5 key words	Neurodegenerative diseases, myelin, oligodendrocytes, Lysophosphatidic Acid, Pelizaeus-Merzbacher disease
Motivation for participation in WG3	As an emerging principal investigator I intend to open a new line in my group and institute. Part of this new line will involve the study of the Nrf2 as a target of the LPA in the treatment of neurodegenerative disease, above all those with myelin impairments, and develop a novel therapeutic approach for the mouse model I perform in my team. Nrf2 is not one of the factors studied in my lab. For this reason, I will benefit from this Action to find new collaborations to launch my projects and boost their scientific and translational impact.
Short narrative biosketch, including scientific background/ education/major achievements etc.	During my scientific career, I have pursued to better understand the pathogenesis of myelin disorders of the central nervous system (CNS) aiming to design novel therapeutic approaches. I obtained my joint PhD in Neuroscience in 2010 (at both Universities of Malaga, and Hasselt (Belgium)). During my PhD at the Biomedical Research Institute of Málaga (IBIMA), I studied the role of lysophosphatidic acid (LPA) in myelination and inflammation therefore relating it to the pathogenesis of dys/demyelinating disorders (Garcia-Diaz et al, 2015), specially multiple sclerosis, under the supervision of Dr Guillermo Estivill and Dr Oscar Fernández (Málaga) and Dr Niels Hellings (Hasselt). At my first postdoctoral stage, in Columbia University (NY, US), I study the physiology and pathology of mitochondrial diseases and the consequences of their impairment, such as myelin alterations (Garcia-Diaz et al, 2012, 2014, 2015; Garone, Garcia-Diaz et al, 2013, 2014; Emmanuele, Kubota, Garcia-Diaz et al 2015, Lopez-Gomez.. Garcia-Diaz et al, 2017). To add, I participated in the validation of a FDA-approved therapy. In my last postdoctoral stage. I resumed the study of myelin in the context of remyelination at ICM (Paris, France). There, I was granted with a project as PI (Talent Hub Programme for International Mobility of Researchers, EU -7FP- and Andalusian Government) in collaboration with Dr. Estivill (IBIMA, CMU Neuroscience) to study novel strategies to improve cell therapy in demyelinating diseases. This project unveiled a new route of migration for myelinating cells during CNS remyelination (Garcia-Diaz et al., 2019; 2020). Among other publications (Mozafari et al, 2020, Deboux et al, 2020), I collaborated with Dr. Verfaillie (Leuven, Belgium) and Dr. Garcia-Leon (Malaga University) to test the myelinating capacity of human glial cells of a new protocol to diferentiate hiPSC into human OPC (Garcia-Leon, Garcia-Diaz et al, 2020) and I coordinated a study between the team of Dr. Estivill (IBIMA, Malaga) and Dr. Zujovic (ICM, Paris) about the role of LPA in macrophages activation (Fransson et al, 2021). To date, I am part of the consolidated group C01 Neuroinmunology and neuroinflammation of IBIMA (Málaga).
Current research topics/ongoing projects	- Blood vessels as metabolic regulators of remyelination by oligodendrocyte metabolic reprogramming - The Lysophosphatidic acid pathway modulation to treat the Pelizaeus-Merzbacher disease
Nfr2-related methodologies/ infrastructure/	None

equipment	
Available sample collections/datasets; interested in sharing; yes/no	None
Available cohorts/ ongoing/planned human studies/grant applications	No human studies
Interested in STSM: outgoing/hosting (year 1/later); yes/no	Later