

Mélanie Paillard is an Inserm Associate Professor at CarMeN laboratory (France) and is involved in the COST action EU-METAHEART. She pursues a translational research for the development of protective strategies targeting mitochondria during cardiometabolic diseases (diabetic cardiomyopathy, HFpEF, myocardial infarction and stroke). Combining live fluorescent imaging microscopy, proteomics and in vivo murine models up to translational level (patient cardiac biopsies), she focuses on mitochondrial Ca^{2+} regulation in the excitation-metabolic coupling. Mélanie graduated from the Ecole Normale Supérieure of Lyon in 2008, obtained her PhD in Physiology in 2012 (University Claude Bernard Lyon1) and joined the MitoCare center of Pr Gyorgy Hajnoczky in 2013 (Philadelphia, USA) for a postdoc. Her works identified a role for the sarcoplasmic reticulum-mitochondria Ca^{2+} coupling in the mechanisms of cardiomyocyte death during ischemia-reperfusion, and during diabetic cardiomyopathy. She also participated to the discovery of the physio-pathological role of MICU1, a key regulator of the mitochondrial uniporter.