



Mélanie Paillard, PhD
(Lyon, France)

Dr. Mélanie Paillard is an INSERM (French National Institute of Health and Medical Research) Associate Researcher in the IRIS (Ischemia-Reperfusion Injury Syndromes) team at CarMeN (Cardiovascular Diseases, Metabolism, Nutrition) laboratory from the University Claude Bernard Lyon 1 in Lyon, France. Her main research focus consists in pursuing a translational research for the development of new protective strategies targeting mitochondria during cardiometabolic diseases (including diabetic cardiomyopathy, metabolic HFpEF, myocardial infarction and stroke). Dr. Paillard graduated from the Ecole Normale Supérieure of Lyon in 2008 and obtained her PhD in Physiology in 2012 from the University Claude Bernard Lyon. Her PhD work focused on the role of some mitochondrial functions in the mechanisms of cardiomyocyte death during ischemia-reperfusion, notably the reticulum-mitochondria Ca^{2+} coupling (Paillard et al., *Circulation* 2013). Mélanie joined the MitoCare center of Professor Gyorgy Hajnoczky in 2013 (Philadelphia, USA). During her post-doctoral training, her research led to the discovery of the pathophysiological role of MICU1, a key regulator of the mitochondrial uniporter (Antony, Paillard et al., *Nat Commun* 2016; Paillard et al., *Mol Cell* 2018), for which she received the Young Bioenergeticist Award in 2017. Thanks to the combination of state-of-the-art techniques in live fluorescent imaging microscopy, proteomic analyses and *in vivo* mouse models up to the translational level in patient cardiac biopsies, she is now conducting a translational research focusing on mitochondrial Ca^{2+} signaling regulation in the excitation-metabolic coupling, notably in metabolic HFpEF (Dia et al., *Basic Res Cardiol* 2020).