Teresa Cardoso Delgado

Liver Disease Laboratory

CIC bioGUNE, Spain

Teresa Cardoso Delgado obtained her PhD in Biochemistry in 2009 from the University of Coimbra, Portugal. During her PhD, she mainly centred in the development of novel magnetic resonance spectroscopy and imaging-based applications to assess liver intermediary carbohydrate and lipid metabolism both *in vivo* and *ex vivo*. After this period, she moved to the University of Pittsburgh Medical Center, PA, USA, as a post-doctoral researcher to address both the mechanism of nutrient-mediated regulation of liver metabolism together with the actions of anti-diabetic drugs in the regulation of liver lipid metabolism fluxes in response to insulin signaling.

In 2013, Teresa Cardoso Delgado was awarded the prestigious fellowship from the Spanish Association against Cancer (AECC) and integrated in the Liver Disease Laboratory headed by Dra. Martínez-Chantar at the CIC bioGUNE, Bizkaia, Spain, a group member of the Spanish Ciberehd (Centro de Investigación Biomédica en Red- Enfermedades Hepáticas y Digestivas). For the last years, she has been using targeted and untargeted Mass Spectrometry-based metabolomics and proteomics to address the impact of ubiquitin and ubiquitin-like proteins-mediated modifications in the regulation of key metabolic regulators involved in liver disease progression. In addition, she has gained great expertise in the study of the role played by mitochondrial dysfunction in the pathogenesis and progression of liver disease through the disruption of cell energetic metabolism. Since 2015, Teresa Cardoso Delgado has been involved as a teaching staff in the Molecular Biology and Biomedicine Master Program of the University of the Basque Country (UPV/EHU).

More recently, Teresa has initiated a new research line, where by using pre-clinical mouse and cell models as well as clinical samples collected from a Spanish network of Hospitals, she aims to study the relevance of microRNAs in the pathogenesis and progression of paediatric and adult cholestatic disease. miRNA is an emerging class of highly conserved, noncoding small RNAs that regulate gene expression either by RNA silencing or at the post-transcriptional level. In particular, she proposes to study the miRNA miR-873-5p, known to target the main regulator of the cellular transmethylation flux -glycine N-methyltransferase (GNMT)-, as a novel non-invasive biomarker in cholestasis disease and, more importantly, as a potential therapeutic target for adult and paediatric genetic cholestastic disease clinical management.