Dr. María Elena Rodríguez

Senior researcher and Head of Research Line in Thyroid Cancer





Dr. Maria ER Garcia-Rendueles' career has been devoted to investigating thyroid tumorigenesis and tumor progression by using multidisciplinary genetic, biochemical, and cell biological approaches to understand the functional consequences of the key drivers of the disease. She has been focused on identifying potential targets and new approaches based on this dependency on new therapies. She obtained her Ph.D. with honors in 2011 by Universidad de Santiago de Compostela, Spain. In 2012, she received a Postdoctoral Fellowship from the Ministry of Education of Spain and joined Memorial Sloan Kettering Cancer Center (MSKCC) in New York, where she was promoted to Research Associate in 2016. She has published in highest impact journals, including Cancer Discovery, JCI, Oncogene, or Clinical Cancer Research. She joined IMDEA in september 2020 as an independent investigator where she continues investigating the pathogenesis and the biology of thyroid cancers to identify new molecularbased therapies, under the funding of a Talento's Fellowship.

Objectives

- Study the role of YAP in thyroid tumorigenesis and progression.
- Study YAP as a mechanism of drug resistance: YAP-dependent mechanism of adaptive resistance of BRAF-mutant thyroid cancers to RAF inhibitors.
- Study weather YAP regulates the expression of thyroid marker genes implicated in the iodine uptake and metabolism and weather restore thyroid marker genes expression after MAPK inhibitors, improving the RAI therapy in thyroid cancer patients.
- Determine the effect of YAP activation on the tumor microenvironment

Project in focus

YAP in thyroid cancer: role in tumorogenesis and progression of the disease and its implication in drug response.

Reference: YAP in thyroid cancer_2019-T1/BMD-13039_MER Funding Institution: Atraccion de Talento Madrid Modalidad 1

Period: 2020-2024