

Biosketch

Mónica Alvarez-Fernández obtained her degree in Biochemistry by the University of Oviedo in 1998. Then she moved to the Oncology Research Institute (IRO) in Barcelona, and, later on, to the Centre for Genomic Regulation (CRG), also in Barcelona, to perform her doctoral thesis, under the supervision of Dra. Susana de la Luna. There, she obtained her PhD in Biochemistry (2004), working on the functional characterization of the Down Syndrome-related kinase DYRK1A (*J.Cell.Sci.*,2003; *Mol.Biol.Cell*, 2007).

In 2006, she joined the group of Prof. Dr. Rene Medema at the Medical Oncology Department of the University Medical Centre (UMC), in Utrecht (The Netherlands), as a postdoctoral fellow. Since then, her work has been focused in several aspects of cell cycle regulation and the DNA damage response. During that period, she made important contributions to the DNA damage cell cycle checkpoints, focusing on the role of the FoxM1 transcription factor and Cyclin-dependent kinases or CDKs (*EMBO Rep.*, 2010; *J.Biol.Chem*, 2011; *Sci.Signal.*, 2013...).

In 2011, she returned to Spain as staff scientist in the Cell Division and Cancer group, led by Dr. Marcos Malumbres, at the National Cancer Research Centre (CNIO) in Madrid, with the support of an intra-European Marie Curie grant and, later, a MINECO-JIN contract for young researchers. During that period her research has focused on the identification and characterization of new cell cycle targets for cancer treatment, including mitotic kinases such as MASTL/Greatwall or G1/S transition CDK4/6 kinases (*PNAS*, 2013; *Bioessays*, 2014; *Cell Death and Diff.*, 2017; *Cancer Cell*,2020; *EMBO J.*, 2022, *EMBO J.* 2023...).

Since 2020, she leads her own group within the Head and Neck Cancer Research Unit at the Institute for Health Research of Asturias (ISPA), supported by a research grant from the Scientific Foundation of the Spanish Association Against Cancer. Currently, her work is focused on the study of resistance mechanisms to chemotherapy and radiotherapy in head and neck tumours, and the development of new therapeutic strategies based on cell cycle targets in this type of tumours.