## CV summary

My research career has been centered on unraveling resistance mechanisms associated with antitumor therapies and developing innovative therapeutic strategies for various types of cancer, with particular breast and gynecological tumors. I have acquainted a highly productive scientific career contributing to 148 scientific publications in international peer-reviewed journals (accumulated impact factor of 824,993 and 14,209 citations to date and an h-index of 61), 3 chapters, 40 congress, and 4 patents (for complete list of publications see https://www.ncbi.nlm.nih.gov/myncbi/gema.morenobueno.1/bibliography/public/). I obtained a Bs in Biochemistry and Molecular Biology-UAM and a master's degree in bioinformatics and computational biology-UCM (2005, 2012). My PhD thesis in Molecular Biology (1999) was defended with high honors. Already interested in cancer translational research, I joined the Pathology Department at La Paz Hospital in 1999 and at the Molecular Pathology Program-CNIO in 2000, where I became a Staff Scientist until 2005. During my postdoc, I was involved in multiple projects which directly contributed to the identification of new cancer biomarkers. At the end of 2005, I was awarded with the highly competitive Ramón y Cajal contract (MICINN) to work in the characterization of novel therapy resistance biomarkers in cancer. In 2007, as an independent PI, I moved to the Biochemistry Department-UAM where continued my own research group. I performed research stays in internationally renowned centers (Max Planck Institute and Texas University-MD Anderson Cancer Center). I was appointed in the Biochemistry Department at UAM, upon public examination, first as Associate Professor (2012) and as Full Professor (2022). Since 2007, I have secured uninterrupted funding from several public and private national and international agencies (ERAPermed, ISCIII, MICINN, DTS and AECC among others). I belong to the principal Spanish Cancer Research Consortiums (GEICAM, SEOM, Cancer Conexion\_CSIC), being the PI of a CIBERONC research group within the Breast and Gynecological Cancer Program. As PI, I

have authored 118 manuscripts (7 as a first author and 30 as a last or corresponding author). Moreover, I have been involved in the mentoring of numerous undergraduate, Master and PhD students as well as postdoctoral researchers. Most of the mentored PhD or postdoctoral fellows have successfully continued their career and follow their postdoctoral training at different research centers or technological companies. Additionally, I am the Head of the Translational Research Lab and the Diagnostic Unit in the MD Anderson Madrid (since 2010) as well as Adjunct Professor at the MD Anderson University of Texas, Hx US (since 2015). I am Coordinator of the Training and Mobility Program from CIBERONC (since 2021), member of the ASEICA board (since 2016, serving as Bursar since 2018 and taking on the role of coordinator for ASEICA-woman since 2023 and for ASEICA-learn since 2020), a Trustee of the AECC Scientific Foundation (since 2022), and a permanent member of the Review Panel of the Biomedicine-Cancer Area within the AEI (MICINN, since 2019). I regularly collaborate with different patient associations for spreading scientific results to the non-academic audiences and especially to cancer patients. I received the Award "With a Woman's Name" for outstanding participation in CONOCELAS 2022 and 2023 (Merck Health Foundation-ASEICA Awards for the Promotion of Scientific Vocations).