

## FERNANDO CALVO

After completing his degree in Biochemistry from the University of the Basque Country, Fernando obtained his PhD with Piero Crespo in Santander (Spain) studying Ras GTPases. He then carried out post-doctoral work in London (Erik Sahai) where he studied cancer metastasis and the tumour microenvironment. In 2013, he set up his own independent group at the ICR (London, UK). In 2018, Fernando returned to Santander where he leads the Tumour Microenvironment Team at the IBBTEC. His group uses a wide range of techniques from conventional cell and molecular biology, through *in vivo* models and analysis of clinical material, to study the role of the tumour microenvironment in cancer progression. Fernando's work has led to 37 publications, including 17 as first/corresponding author and articles in prestigious journals such as *Cancer Cell*, *Nat Cell Biol*, and *Nat Commun*. In addition, Fernando has obtained competitive funding at all stages of his career including the FPU Studentship, CRUK Postdoctoral Fellowship, Worldwide Cancer Research Grant, CRUK Collaborative Award, Ramón y Cajal Fellowship, Lab-AECC, Proyectos Coordinados AECC, *Plan Nacional* Projects and ERC-CoG (9 major grants as PI in UK and Spain). Additional indicators of esteem include 49 seminars at Universities and Conferences and peer-reviewing at top journals and funding agencies. He has directed one PhD Thesis (plus 7 ongoing) as well as numerous MSc and BSc students.

<https://web.unican.es/ibbttec/es-es/sobre-el-ibbttec/equipo/directorio/detalle-miembro?d=FernandoCalvoLab>

## MARÍA LUCAS

María Lucas is a professor in the Molecular Biology Department at the University of Cantabria and leads the “Structural Biology of Macromolecular complexes” group at IBBTEC.

After completing her degree in Biochemistry from the University of the Basque Country in 1999 she pursued her PhD degree in Molecular Biology from the University of Cantabria in Dr. Fernando de la Cruz's group, where she studied the function and structure of relaxases in bacterial conjugation (2000-2006). Driven by her passion for structural biology, she embarked on her initial postdoctoral work at CIC bioGUNE in Dr. Alfonso Martínez's laboratory, where she specialized in x-ray crystallography and characterized structurally CBS domains. Then, she continued her scientific career abroad in Dr. Karl-Peter Hopfner's laboratory at the University of Munich LMU. Her work there centered on the Mre11-Rad50 complex, which detects and repairs double-strand DNA breaks. In 2012, she returned to CIC bioGUNE, where she worked in Dr. Aitor Hierro's group investigating virulence factors of *Legionella pneumophila* and endosomal trafficking complexes (2012-2017). In 2018, she joined the IBBTEC institute of the University of Cantabria as an independent investigator and since 2023 holds a permanent position as professor. Currently, her main research line is the study of intracellular trafficking and its implication in neurodegenerative disorders and viral infections.

María Lucas has received several prestigious awards, including an FPU and a Marques de Valdecilla predoctoral fellowship, a postdoctoral fellowship from the Basque Government, and a Ramón y Cajal contract. She is the author of 25 research articles, some of which have been published in high-impact journals such as Cell, Nature Structural and Molecular Biology, PNAS, Current Biology, EMBO Journal, and PLOS Pathogens.

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## **AMAIA ARRUABARRENA**

Doctor in biomedicine and molecular biology with more than 10 years of experience in cancer metabolism and epigenetic regulation. She joined the laboratory of Prof. Carracedo in 2012 to devote her PhD studies to cancer research, identifying metabolic drivers of prostate cancer. During this time, she described that aberrant PI3K-mTORC1 signaling in PCa (>70% of the cases) mediates overexpression of AMD1 and increases production of the oncometabolite dcSAM (*Zabala-Letona\**, *Arruabarrena-Aristorena\* et al.*, *Nature* 2017; *Arruabarrena-Aristorena\**, *Zabala-Letona\* et al.*, *Sci Adv* 2018). After graduating, motivated by the goal of achieving personalized therapy for cancer patients, she pursued her post-doctoral training at a lab focused on bench-to-bedside research. To this end, she moved to New York to work at the Memorial Sloan Kettering Cancer Center (MSKCC), one of the top cancer research centers worldwide. She joined the Baselga-Scaltriti lab as a research fellow for almost 4 years. She devoted her research to the study of recurrent genetic alterations on FOXA1 and their impact on the epigenetic landscape and therapy response in breast cancer. Her work provided mechanistic insights into how FOXA1 mutations are associated with worse outcome to standard of care aromatase inhibitors. These findings positioned FOXA1 alterations as potential biomarkers of endocrine therapy response and targets for the treatment of metastatic ER+ breast cancer (*Arruabarrena-Aristorena et al.*, *Cancer Cell* 2020; *Arruabarrena-Aristorena and Toska, Onc* 2022).

In September 2020, she returned to the Basque Country to join CIC bioGUNE funded by a Juan de la Cierva Incorporacion fellowship. During 2 years in the Cancer Cell Signaling and Metabolism lab, she led a project aiming to elucidate the nuclear regulation of epigenetically relevant metabolites. In this short time, she was awarded the Ikerbasque Research Fellow, the Junior leader La Caixa, and the Ramon y Cajal Investigator grants as a PI. In 2023, she established herself as an independent researcher to study *the crosstalk between metabolism and epigenetic regulation in breast cancer* at the Genetics, Physical Anthropology and Animal Physiology department at the University of the Basque Country (UPV/EHU). Since then, she has been awarded a L’Oreal-Unesco For Women in Science 2022 Award and her research line has been funded by a “Generación de Conocimiento 2022” project by the Ministry of Science and Innovation.

<https://www.ikerbasque.net/es/amaia-arruabarrena-aristorena>

## **ANGEL BORJA**

Ángel Borja is PhD in Marine Ecology (1984, University of the Basque Country, Spain); Doctor in Sciences (Honoris Causa) (2015, Hull University, UK). Principal Investigator at AZTI (Spain, 1985) and Distinguished Adjunct Professor at King Abdulaziz University (2020-2022, Saudi Arabia). His main work is making marine ecology research useful for policy-makers and managers, studying the effects of human activities on marine ecosystems, the recovery of marine systems after impact, protection and conservation of the ocean, effects of climate change on coasts and marine waters, monitoring and assessment of marine status, under European directives (i.e. Water Framework Directive; Marine Strategy Framework Directive), as well as integrative methods under the ecosystem-approach. The assessment methods he has developed, together with his team, are used worldwide, contributing to conserve and protect the ocean (e.g. AMBI, M-AMBI, AFI, NEAT, etc.). He was member of the Scientific Committee of the European Environment Agency (2013-2020) and several international organizations and EU projects, related to the ocean. Author of >400 papers (Hindex: 79, SCOPUS; 96, Google Scholar), Highly Cited Researcher 2018-2022 (Web of Science). He is Chief Editor of *Frontiers in Ocean Sustainability* and Associate Editor of *Continental Shelf Research*, as well as member of the editorial board of five international journals. He has chaired/organized >50 international conferences/sessions, being key-note speaker in >100 international conferences. He has participated in more than 120 European and international projects, leading some of them (currently GES4SEAS).

<https://www.azti.es/en/team/angel-borja/>