

CV

Alba is a Ramón y Cajal researcher and team leader of the Brain Plasticity Laboratory at CIMUS (Universidade de Santiago de Compostela), focused in the study of mechanisms of dynamism and resilience in the adult brain.

Her training as neurobiologist started at the same university, studying the development of the teleostean brain under the supervision of Dr. Miguel Ángel Rodríguez Díaz. After this first period in an evo-devo laboratory, she decided to broaden her training as neurobiologist in a clinical context, moving to the Health Research Institute of Santiago (IDIS) granted with a FPI contract. During her PhD, under the supervision of Drs. Francisco Campos, José Castillo and Tomás Sobrino, Alba specialized in the study of neuroprotection and repair in the context of cerebrovascular diseases, acquiring advanced training in animal microsurgery, neuroimaging or histology among others. During this period, she was also exposed to a clinical ecosystem, learning from the Neurologist's perspective, and getting involved in multiple collaborative studies. For her postdoctoral training, she decided to further specialize in the fundamental mechanisms of brain plasticity and reinforce her technical training in histology by learning about emergent techniques of tissue clearing. With this aim, in 2018 Alba joined the laboratory of Dr. Nicolas Renier at the Paris Brain Institute (ICM), a French leading research institute for Neuroscience. There, she brought her experience in cerebrovascular biology, while learning about activity-dependent plasticity and new technologies for 3D brain analysis. Part of her postdoctoral training was supported by a Marie Skłodowska-Curie Individual Fellowship from the European Commission. In 2023, she came back to Spain as a Ramón y Cajal, launching her own team at the CIMUS (USC).

Her track-record of publications includes 26 articles published in peer-reviewed journals (such as Cell, Stroke, Development, Science, Nature comm or Journal of Exp. Med...), with a h-index of 19, and cumulating more than 1700 citations (Web of Science, Nov 2025).

As an expert in tissue clearing and 3D light-sheet imaging, Alba was invited to deliver multiple lectures, participating also as instructor in advanced technical courses, such as the Kavli Neural Systems Institute iDISCO Workshop (Rockefeller University, New York; 2023 and 2025), Cajal Schools organized by the FENS Advanced Neurosciences Training program (Bordeaux School of Neuroscience, Bordeaux; 2023 and 2018 respectively), or the "I Workshop de Microscopía Lightsheet y clarificación de tejidos iDISCO+" (Universidad Mayor de Chile, Santiago de Chile; 2024). In addition to her research commitments, Alba acts also as a professor and coordinator in different courses at the USC.