Title: "Understanding human brain development through somatic mutations and lineage tracing"

Sara Bizzotto – ICM, Paris Brain Institute (France)

Sara obtained her PhD in Genetics and Neurodevelopment at Sorbonne University (Paris, France) in 2016. During her PhD in the lab of Dr. Fiona Francis, she studied malformations of cortical development and characterized the role of the subcortical heterotopia gene *EML1* by focusing on a mouse model. She then joined the lab of Prof. Christopher A. Walsh at Boston Children's Hospital/Harvard Medical School (USA), where she focused on neurogenomics and genetic mosaicism. There, she applied single cell omics, and worked on somatic mosaic mutations and lineage tracing. Her main work showed how somatic mutations can be used to retrospectively trace human development from the first postzygotic cell division until brain formation. In September 2021, she obtained a European Commission MSCA reintegration fellowship and joined the lab of Dr. Stéphanie Baulac at the ICM (Paris), where she is currently working on lineage tracing in the context of normal and pathological brain development by applying single-cell technologies to human tissue as well as brain organoids.

Main publications

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