



Manal Barrou

Manal Barrouhou was born in Barcelona (Catalonia, Spain) in 2001. She received her B.Sc. degree in Biomedical Engineering in 2023 and her M.Sc. degree in Computational Biomedical Engineering in 2024, both from Universitat Pompeu Fabra (UPF). Throughout her academic journey, she has specialized in computational simulations for cardiovascular applications and implantable cardiac devices. Her experience includes working as a research assistant, where she collaborated with researchers and clinicians to enhance cardiac models for in-silico testing. Her expertise ranges from transcatheter aortic valve implantation fluid-structure

interaction models to fluid dynamics modeling in the left atrium and left atrial appendage occluder devices. In 2024, she enrolled in the PhD program at Universitat Pompeu Fabra, where her research focuses on advanced computational modeling techniques to ultimately estimate thrombogenic risk following atrial fibrillation and device implantations.