

## ICB PhD public presentations

# DEVELOPMENT OF TECHNOLOGIES TO ADVANCE SCALABLE PRODUCTION OF EXTRACELLULAR VESICLES

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Supervisor: Prof. Dr. Paolo Arosio

Co-examiner: Prof. Dr. Inge Herrmann

**10/11/2022, 2 pm, HCI D2  
and on Zoom (ID: 641 2633 8476 )**



**Project Summary:** Extracellular vesicles (EVs) are attracting increasing interest as novel therapeutics and drug delivery tools for many human diseases. Despite the promising results, the field is currently facing significant challenges in bringing EV-based products to the clinics. The low-throughput manufacturing methods, the complex sample heterogeneity and the limited knowledge of the therapeutic components are hampering production of clinically suitable samples. Currently, there is still a lack of technologies to remedy these problems. In this work, we develop a new set of tools to help fill these technological gaps. We present technologies to improve analysis, upstream and downstream processing of EVs.

**CV:** Carolina obtained a M.Sc. degree in Chemical Engineering from Politecnico di Milano in 2018. During her Master's studies, she spent six months as an exchange student at TU Delft and performed her thesis in Prof. Morbidelli's group at ETH Zurich. She began her doctoral studies at ETH Zurich under the supervision of Prof. Arosio in September 2018.