

## **Livia Angeloni - CV**

After obtaining a B.Sc. in Clinical Engineering and an M.Sc. cum laude in Nanotechnology Engineering (Bio-nanotechnology track) at Sapienza University of Rome (Italy), Livia Angeloni performed her Ph.D. in joint international supervision between the Laboratory of Biomaterials and Bioengineering (LBB, Laval University, Canada) and the laboratory of Electron Microscopies and Nanoscopies (EMiNa, Sapienza University, Italy). During her Ph.D., Livia developed novel magnetic force microscopy (MFM) techniques, which were successfully applied to quantify the magnetic properties of bionanomaterials. Driven by her interest in cell mechanics, in 2018, Livia moved to the TU Delft (Netherlands). In Delft, she investigated the effects of surface topographies on the mechanical properties, viability, and fate of bone cells and bacteria. She developed AFM and Fluidic Force Microscopy (FluidFM) techniques to analyze single cells' mechanics, adhesion, and morphology. In 2019, she obtained the MCSA (Cofund) LEaDing Fellowship, allowing her to continue her collaborative research at TU Delft, working on her independent project. She developed a methodology to prepare samples for structural cell biology analysis using FluidFM and designed and fabricated novel polymeric hollow cantilevers to extract subcellular structures. In 2022, Livia joined the Department of Biomedical Engineering at TU Eindhoven (Netherlands), where she started her research line on the mechanics of immune cells and set up mechanobiology facilities that allow for the correlative use of atomic force microscopy (AFM) and optical techniques. For those activities, she was awarded the ICMS fellowship. As of September 2024, Livia joined the Department of Basic and Applied Science for Engineering of Sapienza University (Rome, Italy) as a tenure-track assistant professor.