



Name:

Federica Sallustio

Name of the project:

Elastin-inspired fibers for aortic heart valves

Abstract of the project:

This research project will focus on protein-based materials for Cardiovascular Tissue Engineering. This biobased material in elastin will be designed, developed and characterized for clinical needs in Cardiovascular Regenerative Medicine, i.e. heart valves. I will exploit principles of tissue engineering as well as perform *in vitro* testing for the assessment of biocompatibility and hemocompatibility, with the final purpose of pre-clinical studies.

Introduction of the ESR:

I am Federica and I come from Italy.

After the diploma in scientific high school, I earned the Bachelor's Degree in Biomedical Engineering in 2017 and the Master's Degree in Biomedical Engineering with the specialization in Biomechanics and Biomaterials in 2020, both at Politecnico di Milano.

Now I'm taking the first steps in the Biobased Value Circle project, where I have the possibility to apply my background to an exciting research.

Keywords: biomedical engineering, tissue engineering, cardiovascular regenerative medicine, biobased materials, protein-based materials, elastin-based materials, *in vitro* testing, pre-clinical studies, biocompatibility, hemocompatibility

Contact details:

- Federica Sallustio
- Technical Proteins Nanobiotechnology, S.L.
- Edificio CTTA, Campus Miguel Delibes
Parque Científico Universidad de Valladolid
Paseo Belén 9A, 47011 Valladolid – SPAIN
- +39 3280316637
- fsallustio@bioforge.uva.es
federica.sallustio@libero.it