BELLASENO

Master project - 4

About us:

BellaSeno GmbH is a Medical Device Startup based in Leipzig, Germany, aiming to develop, manufacture and market a new generation of PCL breast Scaffolds. Disrupting the currently prevailing paradigm of silicone implants which permanently introduce a foreign body into the patient, our highly porous scaffolds are absorbable by the body and function as mechanical support to the growth of natural tissue. Our technology platform leverages Additive Manufacturing (AM) which allows us to manufacture a range of products from cosmetic scaffolds for filling of smaller defects, breast scaffolds in a standardised size and shape as well as fully patient-specific scaffolds based on a personalised medicine approach.

3D printed high-porosity structure

FDM technology

Why work with us?

A period at BellaSeno is your opportunity to be at the forefront of the Additive Manufacturing (AM) revolution. The master student can help to support and execute upon a vision of cutting-edge manufacturing technologies. The master student will work alongside Regulatory Consultants, Plastic Surgeons, Biomedical Engineers, Mechanical Engineers and Software Developers in cross functional teams. The real opportunity here though, is to work with some of the world's largest R&D centres and to contribute to the next evolution of AM for Medical Applications.

Project Title:

Development of a systematic review on existing literature on the clinical use of PCL scaffolds for regenerating segmental bone defects and Finite Element Analysis activities on BellaSeno´s bone scaffold.

Project Brief Description:

BellaSeno´s flagship product is the absorbable breast scaffold. However, the company is aiming to expand its market to other products in the area of structural tissue regeneration.

The master student will be performing a systematic review on existing literature on the clinical use of PCL scaffolds for regenerating segmental bone defects and performing Finite Element Analysis on the stress distribution on BellaSeno's Bone Scaffolds when used in combination with metal fixation.

To fulfil the project´s requirements, the master student will need a background in 3D printing and Finite Element Analysis, willing to learn regulatory requirements and should be open to work in an international and English-speaking environment.