

BIOSKETCH - Gianluca Cidonio, PhD

Dr Gianluca Cidonio is a research scientist and a bioengineer, graduated (BSc and MSc) in Biomedical Engineering from Sapienza University of Rome.

During his MSc studies, Gianluca investigated composite hydrogels for 3D printing and, ultimately, cardiac regeneration and drug delivery (Trombetta Lab at University of Rome “Campus Biomedico”) with Dr Rainer.

He was found successful recipient of a bioengineering scholarship to study at Temple University (Philadelphia, PA, USA) during his last year of graduate studies. He worked as a student in the Suh lab (Temple University) generating new cell-penetrating peptides (CPPs) for the delivery of drug cargos within living cells.

In 2015, Gianluca joined the Bone and Joint Research Group led by Prof Richard Oreffo at the University of Southampton. Gianluca focused on the study of 3D bioprinting technologies to guide skeletal tissue regeneration. He worked extensively on the development of novel nanocomposite bioinks (e.g. using clay nanoparticles) for the printing of living human bone marrow stromal cells and the regeneration of bone tissue. He developed expert skills in building and analysing engineered tissue-like implants both in vitro, ex vivo and in vivo. In 2018, he defended his PhD thesis in tissue engineering and got his first fellowship (EPSRC Doctoral Prize Fellowship) to develop multiple research projects for the fabrication of functional constructs using novel bone extracellular matrix material.

Dr Cidonio joined the Center for Life Nano Science (CLNS) in IIT during late 2019, to work a novel microfluidic-bioprinting technology towards the fabrication of complex and physiological tissue substitutes.