

Enabling technologies: imaging, modeling, fluidics

Aurélie Carlier

Aurélie Carlier (DOB 22.09.1987) is tenure track assistant professor at the MERLN Institute for Technology-Inspired Regenerative Medicine in Maastricht, the Netherlands. She received her MSc in Biomedical Engineering in 2010 and her PhD degree in Biomedical Engineering in 2014, both at the KU Leuven, Belgium. During her PhD she also visited the Systems Biology Laboratory at the Johns Hopkins University in Baltimore, USA. Her research interests encompass the multiscale computational modelling of biological processes, with a particular focus on bone tissue engineering applications and cell-biomaterial interactions and using a range of data-driven to mechanistic modelling approaches. Aurélie Carlier is the author of 19 ISI indexed journal papers, 2 book chapters and over 70 full conference proceedings and abstracts. Her research achievements have been awarded with a number of distinctions, including the Student Award of the European Society of Biomechanics (ESB, 2012), the Reinhart Heinrich Doctoral Thesis Award by the European Society for Mathematical and Theoretical Biology (ESMTB, 2015) and the Best Doctoral Thesis Award by the European Society of Biomechanics (ESB, 2015). She has also been elected as member of the Tissue Engineering Young Investigator Council (TEN YIC, 2016) and received a prestigious VENI career development grant (0.25 M€) from the Dutch Science Foundation. Besides her research, she is co-founder and vice-chair of FEM (Female Empowerment Maastricht University), a network to discuss and tackle gender issues.

Vytautas Kucikas

Vytautas Kučikas received his B.S. in physics (2012) and M.S. in laser physics and optical technologies (2014) in Vilnius University. During his studies and after graduation he worked in business sector designing and engineering laser projectors. In 2019 started his PhD in RWTH Aachen University, where he is exploring multiphoton imaging techniques and their application in tissue engineering under the guidance of Prof. M. van Zandvoort. Combining the knowledge of laser technology and photonics with the practical solutions of the industry, he is now working on innovative multiphoton endoscopic solutions in collaboration with XLIM institute of Limoges University and Fresnel institute of University Marseille.

Pedro Costa

Dr. Pedro Costa is a researcher, inventor, educator and entrepreneur. He is the founder and CEO/CTO of the company BIOFABICS, which is specialized in the creation of 3D Biotissue Analogues. Before that, he was the coordinator of the world's first MSc Programme in Biofabrication at Utrecht University, manager of the Utrecht Biofabrication Facility and postdoctoral researcher at the University Medical Center Utrecht (Netherlands). Dr. Costa can be described as a biologist by training and engineer/maker by heart, given his undergraduate studies in Applied Biology followed by a PhD in Biomedical Engineering where he specialized in the combination of highly automated tools such as 3D (bio)printing and bioreactor technologies in the field of tissue engineering and regenerative medicine. He has previously worked in both academic and industrial environments in places such as Germany (Technical University of Munich), Australia (Queensland University of Technology), Belgium (Materialise NV) and Portugal (University of Minho). Dr. Costa has received several awards for his work, among them the 2014 Translational Award (European Society for Biomaterials) and the 2016 Young Investigator Award (International Society for Biofabrication). In 2018 he was also awarded with a Marie Skłodowska-Curie Individual Fellowship from the European Union's Horizon 2020 research and innovation programme. Furthermore, Dr. Costa currently acts as expert evaluator and as principal investigator in several EU-funded research & innovation projects.