

Curriculum Vitae dr. Miguel Castilho

Personal details

dr. Miguel Castilho

05th of January 1984 (Date of birth)

Portuguese (Nationality)



Contact details

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Qualifications/employment history

Assistant Professor in Bioinspired materials design and fabrication (0.2 FTE)	2020-currently	Eindhoven University of Technology (TUE), The Netherlands
Assistant Professor in Additive manufacturing and Biofabrication (0.8 FTE)	2018-currently	University Medical Center Utrecht (UMCU), The Netherlands
Postdoctoral Research Fellow	2015-2018	University Medical Center (UMC) and Eindhoven University of Technology (TUE), The Netherlands
Visiting PhD student	2012	University of Würzburg, Germany
PhD in Biomedical Engineering (Cum Laude)	2011-2015	University of Lisbon, Portugal

Current Grant Income

Secured more than €1.5M Euros in competitive research funds. Below a summary of most relevant,

Grant	Total in Euros	To UMC	Year of award
NWO Open Competition Domain Science - RePrint	€50.000		2020
Eurostars: 114399 – CHIRON	€1.697.030	€221.975	2020
Horizon 2020-SC1-BHC-07-2019 - BRAV3	€8.000.000	€740.000	2020

4 best publications – Full list here <https://scholar.google.com/citations?user=sIAzjakAAAAJ&hl=en>

- **Castilho M.**, de Ruijter M., Beirne S., Villette C., Ito K., Wallace G., Malda J. (2020) Multi-technology biofabrication: a new approach for the manufacturing of more functional tissue structures? *Trends in Biotechnology* 10.1016/j.tibtech.2020.04.014
- **Castilho M.**, Mouser V., Chen M., Malda J., Ito K. (2019) Bi-layered micro-fibre reinforced hydrogels for articular. *Acta Biomaterialia* 95 297-306
- **Castilho M.** & van Mil A., Maher M., Metz C., Hochleitner G., Groll J., Doevendans P., Ito K., Sluijter J., Malda J. (2018) Melt Electrowriting Allows Tailored Microstructural and Mechanical Design of Scaffolds to Advance Functional Human Myocardial Tissue Formation. *Adv. Funct. Mater.*, 1803151.
- **Castilho M.**, Moseke C., Gbureck U., Groll J., Pires I., Vorndran E. (2014) Direct 3D powder printing of biphasic calcium phosphate scaffolds for substitution complex bone defects. *Biofabrication*, 6 015008

Miguel Castilho 22/02/2021

Biography Miguel Castillo

Miguel Castillo is currently an assistant Professor in Biofabrication at the Department of Orthopedics, University Medical Center Utrecht (UMC Utrecht) and at the Department of Biomedical Engineering, Eindhoven University of Technology (TU/e). Miguel holds a MSc degree in Mechanical Engineering and a PhD in Biomedical engineering (with high distinction) from the Technical University of Lisbon (IST, Portugal). Miguel worked & was a visiting researcher in several research groups across Europe: University of Würzburg, (Germany); University of Birmingham (UK); University of Wollongong (AU); University of Lisbon (Portugal); Eindhoven University of Technology (The Netherlands), in the field of biomaterials design and 3D printing.

Although still a junior academic, Miguel has extensive experience in the Biomaterials and Regenerative Medicine fields. Since the start of his PhD studies, he has secured approximately €1.5M in competitive scholarships, grants and prizes. He has published more than 35 peer-review articles and book chapters; >80% of his papers have been published in peer reviewed journals that are within the top 25% of their fields. Moreover, Miguel is an active member of multiple research societies, from European Society for Biomaterials (ESB) to the International Society of Biofabrication (ISBF) or the European Society of Biomechanics (ESB), where he helped organizing different symposia and international meetings (e.g. Annual Congress of the International Society of Biofabrication held in Würzburg, Germany, 2018). This underscores his international visibility in these fields. Miguel, has also extensive experience in taking academic research to the market has demonstrated by his past and recent EU Eurostars grants: E11312 – BioArchitect, 2017; E114399 – CHIRON, 2020. Finally, despite of this research activities he is also involved in teaching for the Master programme on Biofabrication and for the Master programme on Regenerative Medicine & Technology, both at Utrecht University, and more recently for Biomedical Engineering Master programme at the Eindhoven University of Technology.

Personal Statement

I have decided to apply for one of the five seats that will become available in the ESB council, due to four main reasons: 1) My current joint position as an engineer within the medical center in Utrecht and the Technical University of Eindhoven provides me with the unique position to represent and further strengthen both engineering and medical fields in the ESBiomaterials society; 2) I am actively involved in different research societies, in particular in the International Society of Biofabrication (ISBF), which I plan to bring closer to the ESBiomaterials through the organization of joint events and meetings. In an increasingly interdisciplinary field of biomaterials research, being closer to other societies will help strengthen the Biomaterials community and attract new members. 3) My experience with industrial partners will help gathering sponsors and encourage their enrolment in our society. 4) Being a junior academic with an engineer background, but also with already demonstrated experience in the field of Biomaterials and Regenerative Medicine, I will be able to help the society to tackle the challenges of a digital Europe, in particular in what relates to the field of digital biomaterials research.

Finally, I wish to express my enthusiasm to work and represent the ESBiomaterials as a council member.

From a mechanical engineer and biomaterial scientist, working at the crossroads of biomaterials development and medicine.

Best regards,

Miguel Castillo



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