Utrecht Summer School: '3D Printing and Biofabrication', July 2025		Program			
		Time	**Location**	**Topic**	Speaker
Monday	**14-jul**	**9.30 - 10.00**	**UMC**	Check in and coffee	
		10.00 - 10.15	**Heidelberglaan 100**	Welcome & Course Overview	Jos Malda (UMCU, Netherlands)
		10.15 - 10.40	**Blue college room**	Student Introductions	Estee Grandidier (UMCU, Netherlands)
		10.40 - 11.15		Basics of Additive Manufacturing	Riccardo Levato (Utrecht University, Netherlands)
		11.10 - 11.45		3D technology in modern healthcare	Chien Nguyn (UMCU, Netherlands)
		11.45 - 12.45		**Lunch (Included)**	
		12.45 - 13.15		Multiphoton Lithography (MPL) from High-Resolution 3D Printing to Bioprinting	Aleks Ovsianikov
		13.15 - 13.45		AI-powered bioprinting	Andrew Daly
		13.45 - 14.15		Medical 3D Planning and Printing: Optimal Medical Solutions for Better Clinical Outcomes	Arsham Makaryan (Materialise NV, Belgium)
		14.15 - 14.30		**Coffee break**	
		14.30 - 15.45		Generation of 3D anatomical models using medical data	Arsham Makaryan (Materialise NV, Belgium)
		15.45 - 16.15		Shrinking Printing – a materials approach to high resolution prints	Tina Vermonden
		16.15 - 17.00		Bioprinting at organ Scale	Mark Skylar-Scott (Stanford, USA)
		17.00 - 17.15		Explaining assignments	Jos Malda / Riccardo Levato
Tuesday	**15-jul**		**University of Applied Science**		
		9.00 – 9.30	**Location: Padualaan 99**	Introduction fablab	Joris van Tubergen
Workshop 3D Printing		10.00 - 12.00	Start workshops, choosing 1 out of 3.	1. Getting to know the firmware: introduction to gcode and using it on bioprinting, z-corp) 2. workflow introduction, 3D drawing (tinkercad) & printing 3. Hands-on machinework with different material (porcelain, chocolate, PLA)	1. Gabriel Groesbacher 2. Bram Nijhoff 3. Joris van Tubergen
		12.00 - 13.00		**Lunch with lecture about scanning for protheses**	
		13.00 – 15.30	Start workshops, choosing 1 out of 3.	1. Getting to know the firmware: introduction to gcode and using it on bioprinting, z-corp) 2. workflow introduction, 3D drawing (tinkercad) & printing 3. Hands-on machinework with different material (porcelain, chocolate, PLA)	1. Gabriel Groesbacher 2. Bram Nijhoff 3. Joris van Tubergen
		15.45 - 17.45	Start workshops, choosing 1 out of 3.	1. Getting to know the firmware: introduction to gcode and using it on bioprinting, z-corp) 2. workflow introduction, 3D drawing (tinkercad) & printing 3. Hands-on machinework with different material (porcelain, chocolate, PLA)	1. Gabriel Groesbacher 2. Bram Nijhoff 3. Joris van Tubergen
		18.00	End		
Wednesday	**16-jul**		**UMC**		
		08.30 - 09.00	**Heidelberglaan 100**	Introduction to Regenerative Medicine & Stem Cells	Bernard Roelen (Utrecht University, Netherlands)
		09.00 - 09.45	**Blue college room**	From biomedical bioprinting to biotechnology and towards space...	Michael Gelinsky (TU Dresden, Germany)
		09.45 - 10.00		**Coffee break**	
		10.00 - 10.30		Shaping matter using light for cell mechanobiology and in-vitro disease/treatment modelling	Angelo Accardo - TU Delft
		10.30 - 11.15		In situ bioprinting: is the future of biofabrication inside the human body?	Giovanni Vozzi - Pisa
		11.15 - 11.45		Electrowriting in tissue engineering and biofabrication	Tomasz Juengst
		11.45 - 13.00		Meet the expert - Lunch	
Applications of 3D biofabrication		13.00 - 13.45		Microfluidic-assisted biofabrication	Wojciech Święszkowski
		13.45 - 14.15		Regulatory aspects in biofabrication and medical 3D printing	Hanneke Later Nijland (Genome Lawyers)
		14.15 -14.45		Organ on-a-chip technologies	Andries van der Meer (Twente University, Netherlands)
		14.45 -15.00		**Coffee break**	
		15.00 - 15.30		Jammed Microgels for Fabrication of Heterogeneous Architectures	Malgorzata Wlodarczyk-Biegun (RU Groningen)
		15.30 - 16.00		Electrowriting in tissue engineering	Juergen Groll (Wuerzburg University, Germany)
		16.00 - 17.30		Work on assignment	
Thursday	**17-jul**		**Hubrecht / RMCU**		
		8.45 - 09.15	**Uppsalalaan 8**	Volumetric Bioprinting for Fabrication of Highly Complex Living Structures	Paulina Nunez Bernal (UMCU, Netherlands)
		09.15 - 9.45		Taming Multi-material Biofabrication to Influence Stell Cell Activity	Lorenzo Moroni
		9.45 - 10.00	***Auditorium 08.30 -12.45***	**Coffee break**	
		10.00 - 10.30		Printing cartilage	Jos Malda
		10.30 - 11.00		Adult Stem Cells for Advanced In Vitro Models and Whole Organ Engineering	Bart Spee (Utrecht University, Netherlands)
		11.00 - 11.30		Cardiac Tissue Engineering	Alain van Mil (UMC Utrecht)
		11.30 - 12.00		Building the kidney – from design to function	Anne Metje van Genderen (Utrecht University, Netherlands)
Applications of 3D biofabrication		12.00 - 12.45		Perspectives in the biofabrication industry	Jasper van Hoorik (BioINX), (Poietis), Eva van Ingen (ICAT), Anke de Leeuw (regenHu), Pierre-Alexandre Laurent (Cellink)
		12.45 - 14.00		**Lunch (included)**	
		14.00 - 17.15		Laboratory tour and 3D bioprinting workshop	
				Station 1 - Meet the Industry (Extrusion printing; RegenHU)	Paulina Nunez Bernal (UMCU, Netherlands)/ RegenHU
				Station 2 - Melt Electrowriting	
				Station 3 - Volumetric printing and DLP	Sammy Florczak
				Station 4 - LIFT printing	Nuria Gines Rodriguez
				Station 5 - Microfluidics and Organ-on-a-chip	Mohammad Jouy Bar
				Station 6 - Meet the Industry (BioINX)	Jasper van Hoorik (BioINX), (Poietis)
		17.15 - 18.00		Work on assignment	
Friday	**18-jul**	9.00 - 9.30	**UMC**	Key collection	Riccardo Levato
		9.30 - 10.30	**Heidelberglaan 100**	Learning from nature: inspired by regenerative axolotls	Leo Otsuki
		10.30 - 12.00	**Blue college room**	Student presentations	
Presentations Assignments Wrap up		12.00 - 12.15		Announcement of award for best presentation	
		12.15 - 12.45		Wrap-up	
		12.45 - 14.00		**Class Lunch (included)**	