

Utrecht Summer School: '3D Printing and Biofabrication', July 2026			Program				
Date	Time	Location	Topic	Speaker			
Monday	13-jul	UMC Heidelberglaan 100 Pink college room	Check in and coffee				
			10.00 - 10.15	Welcome & Course Overview	Jos Malda (UMCU, Netherlands)		
			10.15 - 10.40	Student Introductions	Estee Grandidier (UMCU, Netherlands)		
			10.40 - 11.15	Basics of Additive Manufacturing	Riccardo Levato (Utrecht University, Netherlands)		
			11.15 - 11.45	3D technology in modern healthcare	Joëll Magré (UMCU, Netherlands)		
			11.45 - 12.45	Lunch (Included)			
			12.45 - 13.15	AI powered Bioprinting	Hyunho Mo (UMC Utrecht, Netherlands)		
			13.15 - 15.00	Generation of 3D anatomical models using medical data	Arsham Makaryan (Materialise NV, Belgium)		
			15.00 - 15.30	Coffee break			
			15.30 - 16.00	Shape morphing biomaterials for additive manufacturing	Tina Vermonden (Uni Utrecht)		
			16.00 - 16.45	Advanced technologies for bioprinting at organ-scale cell density	Yu Shrike Zhang (Harvard Medical School)		
			16.45 - 17.00	Explaining assignments	Jos Malda / Riccardo Levato		
			17.00	Work on assignment			
Tuesday	14-jul	University of Applied Science Location: Padualaan 99	Introduction fablab	Joris van Tubergen			
			9.00 – 9.30				
			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. Georgia van der Linden	
			12.00 - 13.00		Lunch with lecture about scanning for prostheses		
			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. Georgia van der Linden	
Workshop 3D Printing			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. Georgia van der Linden	
			18.00	End			
			Wednesday	15-jul	UMC Heidelberglaan 100 Pink college room	Introduction to Regenerative Medicine & Stem Cells	Bernard Roelen (Utrecht University, Netherlands)
			08.30 - 09.00		From biomedical bioprinting to biotechnology and towards space...	Michael Gelinsky (TU Dresden, Germany)	
Applications of 3D biofabrication			09.00 - 09.45				
			09.45 - 10.00		Coffee break		
			10.00 - 10.30		Shaping matter using light for cell mechanobiology and in-vitro disease/treatment modelling	Aleks Ovsianikov (TU Wien)	
			10.30 - 11.15		Soft robotics	Simone Schürle (ETH Zürich)	
			11.15 - 11.45		Electrowriting in tissue engineering and biofabrication	Tomasz Jüngst (Uni Würzburg)	
			11.45 - 13.00		Meet the expert - Lunch		
			13.00 - 13.45		Bioassembly of cells and materials for biofabrication	Joao Mano (Uni Aveiro)	
			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		
			14.45 -15.00		Coffee break		
			15.00 - 15.30		Printing cartilage	Jos Malda (UMCU, Netherlands)	
			15.30 - 16.00		Advances and perspectives in biofabrication	Juergen Groll (Würzburg University, Germany)	
15.45 - 17.30		Work on assignment					
Thursday	16-jul	Hubrecht / RMCU Uppsalalaan 8 Auditorium 08.30 -12.30	08.45 - 09.15	Volumetric Bioprinting for Fabrication of Highly Complex Living Structures	Paulina Nunez Bernal (UMC Utrecht, Netherlands)		
			09.15 - 09.45	Taming Multi-material Biofabrication to Influence Stem Cell Activity	Lorenzo Moroni (Maastricht Uni)		
			09.45 - 10.00	Coffee break			
			10.00 - 10.30	Adult Stem Cells for Advanced In Vitro Models and Whole Organ Engineering	Bart Spee (Utrecht University, Netherlands)		
			10.30 - 11.00	Cardiac Tissue Engineering	Joost Sluiter (UMC Utrecht, Netherlands)		
			11.00 - 11.30	Biofabrication with microgels	Laura de Laporte (RWT Aachen)		
			11.30 - 12.00	Building the kidney – from design to function	Anne Metje van Genderen (Utrecht University, Netherlands)		
			12.00 - 12.30	Perspectives in the biofabrication industry (10 min each incl discussion)	Jasper van Hoorik (BioINX), Mathieu Lose Berdot (Poietis), Maaiké Braham (ICAT), Anke de Leeuw (regenHU)		
			12.30 - 14.00	Lunch (included)			
			14.00 - 17.15	Laboratory tour and 3D bioprinting workshop			
				Station 1 - Meet the Industry (Extrusion printing; RegenHU)	Anke de Leeuw, RegenHU		
				Station 2 - Melt Electrowriting	Georgia van der Linden (UMC Utrecht, Netherlands)		
				Station 3 - Volumetric printing	Sammy Florczak (UMC Utrecht, Netherlands)		
				Station 4 - LIFT printing	Mathieu Lose Berdot (Poietis)		
	Station 5 - Microfluidics and Organ-on-a-chip	Gaja Zononi, Marie Veltman, Carolina Rodrigues (UMCU, Netherlands)					
	Station 6 - Meet the Industry (BioINX)	all industry partners					
17.15 - 18.00	Work on assignment						
Friday	17-jul	UMC Heidelberglaan 100 HVDB - 2.70/2.71	09.00 - 09.30	Key collection	Riccardo Levato (Uni Utrecht, UMC Utrecht, Netherlands)		
			9.30 - 10.30	Learning from Nature: Designing Biomimicry into Bioprinting	Sarah Heilshorn (Stanford Uni)		
			10.30 - 12.00	Student presentations			
			12.00 - 12.15	Announcement of award for best presentation			
			12.15 - 12.45	Wrap-up			
			12.45 - 14.00	Class Lunch (included)			