

Utrecht Summer School: '3D Printing and Biofabrication', July 2026		Program			
	Time	Location	Topic	Speaker	
<b>Monday</b>	<b>13-Jul</b>	<b>UMC Heidelberglaan 100 Blue college room</b>	Check in and coffee		
			9.30 - 10.00	Welcome & Course Overview	Jos Malda (UMCU, Netherlands)
			10.00 - 10.15	Student Introductions	Estee Grandidier (UMCU, Netherlands)
			10.15 - 10.40	Basics of Additive Manufacturing	Riccardo Levato (Utrecht University, Netherlands)
			10.40 - 11.15	3D technology in modern healthcare	Joëll Magré (UMCU, Netherlands)
			11.10 - 11.45		
			11.45 - 12.45	<b>Lunch (Included)</b>	
			12.45 - 13.15		
			13.15 - 13.45	AI-powered bioprinting	TBA
			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	<b>Coffee break</b>	
			14.30 - 15.45	Generation of 3D anatomical models using medical data	Arsham Makaryan (Materialise NV, Belgium)
			15.45 - 16.15	Shape morphing biomaterials for additive manufacturing	Tina Vermonden (Utrecht University)
			16.15 - 17.00	Advanced technologies for bioprinting at organ-scale cell density	Yu Shrike Zhang (Harvard University, USA)
17.00 - 17.15	Explaining assignments				
<b>Tuesday</b>	<b>14-Jul</b>	<b>University of Applied Science Location: Padualaan 99</b>			
<b>Workshop 3D Printing</b>	9.00 – 9.30		Introduction fablab	Joris van Tubergen	
	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		<b>Lunch with lecture about scanning for prostheses</b>		
	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			
<b>Wednesday</b>	<b>15-Jul</b>	<b>UMC Heidelberglaan 100 Blue college room</b>			
<b>Applications of 3D biofabrication</b>	08.30 - 09.00		Introduction to Regenerative Medicine & Stem Cells	Bernard Roelen (Utrecht University, Netherlands)	
	09.00 - 09.45		From biomedical bioprinting to biotechnology and towards space...	Michael Gelinsky (TU Dresden, Germany)	
	09.45 - 10.00		<b>Coffee break</b>		
	10.00 - 10.30		Multiphoton lithography for high definition biofabrication	Aleks Ovsianikov (TU Wien, Austria)	
	10.30 - 11.15		Soft robotics and biofabrication	Simone Schürle (ETH Zurich, Switzerland)	
	11.15 - 11.45		Electrowriting in tissue engineering and biofabrication	Tomasz Juengst (Wuerzburg University, Germany)	
	11.45 - 13.00		<b>Meet the expert - Lunch</b>		
	13.00 - 13.45		Microfluidic-assisted biofabrication	Utrecht Advanced in Vitro Models team	
	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	Utrecht Advanced in Vitro Models team	
	14.45 - 15.00		<b>Coffee break</b>		
15.00 - 16.00		Advances and perspectives in biofabrication	Juergen Groll (Wuerzburg University, Germany)		
16.00 - 17.30		Work on assignment			
<b>Thursday</b>	<b>16-Jul</b>	<b>Hubrecht / RMCU Uppsalaalaan 8  Auditorium 08.30 -12.45</b>			
<b>Applications of 3D biofabrication</b>	8.45 - 09.15		Volumetric Bioprinting for Fabrication of Highly Complex Living Structures	Paulina Nunez Bernal (UMCU, Netherlands)	
	09.15 - 9.45		Taming Multi-material Biofabrication to Influence Stem Cell Activity	Lorenzo Moroni (MERLN, Netherlands)	
	9.45 - 10.00		<b>Coffee break</b>		
			Printing cartilage	Jos Malda (UMCU, Netherlands)	
	10.00 - 10.30		Biofabrication with microgels	Laura de Laporte (Aachen, Germany)	
	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	Joost Sluijter (UMCU, Netherlands)	
	11.30 - 12.00		Building the kidney – from design to function	Anne Metje van Genderen (Utrecht University, Netherlands)	
	12.00 - 12.45		Perspectives in the biofabrication industry	Jasper van Hoorik (BioINX), Fabien Guillemot (Poietis), Maaiké Brahm (ICAT), Anke de Leeuw (regenHu)	
	12.45 - 14.00		<b>Lunch (included)</b>		
	14.00 - 17.15		Laboratory tour and 3D bioprinting workshop		
			Station 1 - Extrusion printing technologies	Paulina Nunez Bernal (UMCU, Netherlands)	
			Station 2 - Melt Electrowriting	Georgia van der Linden (UMCU, Netherlands)	
			Station 3 - Volumetric printing	Sammy Florczak (Utrecht University, Netherlands)	
		Station 4 - LIFT printing	Fabien Guillemot (Poietis)		
		Station 5 - Microfluidics and Organ-on-a-chip	Gaja Zaroni (UMCU, Netherlands)		
		Station 6 - Meet the Industry	all industry partners		
	17.15 - 18.00		Work on assignment		
<b>Friday</b>	<b>17-Jul</b>	<b>UMC Heidelberglaan 100 Blue college room</b>			
<b>Presentations Assignments Wrap up</b>	9.00 - 9.30		Key collection		
	9.30 - 10.30		Learning from nature: inspired by regenerative axolotls	Sarah Heilshorn (Stanford University, USA)	
	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		<b>Class Lunch (included)</b>		