



NBTE
Netherlands society for
Biomaterials and Tissue Engineering

Program 30th Annual Meeting, 9 & 10 December 2021
 at
 Conference center De Werelt

Thursday, 9 December

09.00-10.00	Conference assembly
10.00	Opening
10.10 – 10.45	Opening Keynote Lecture: Biomaterials and Tissue Engineering in the Netherlands

11.00 – 12.30 (10+2 min)	Oral Presentations Session 1 <i>Supramolecular & Smart Polymeric Biomaterials</i>	Oral Presentations Session 2 <i>Nanobiomaterials in Regenerative Medicine & Tissue Engineering</i>
Topic Keynote	Julieta Paez (Twente)	Sabine van Rijt (Maastricht)
01 / 02	Laura Rijns Eindhoven University of Technology <i>Who wins? Synthetic supramolecular matrices based on the ureido- pyrimidinone (UPy) and benzene-1,3,5- tricarboxamide (BTA) motif</i>	Margo Terpstra UMC Utrecht <i>Bioink with cartilage ECM microfibers enables spatial control of capillary formation in 3D bioprinted constructs</i>
03 / 04	Celien Jacobs Eindhoven University of Technology <i>Osteoconductivity of UHMWPE fabric for a cervical artificial intervertebral disc - in vitro analysis</i>	Shivesh Anand MERLN - Maastricht University <i>Chitin Nanofibrils Modulate Mechanical and Inflammatory Response in Tympanic Membrane Scaffolds</i>
05 / 06	Martyna Nikody MERLN - Maastricht University <i>hMSCs response to polymer-calcium phosphate composite scaffolds containing zinc produced using additive manufacturing</i>	Lea Andrée Radboudumc, Nijmegen <i>The Effect of Surface Charge of Gelatin Nanoparticles on Cellular Internalization and Colloidal Gel Formation</i>

07 / 08	Marjan Hagelaars Eindhoven University of Technology <i>Directing Kidney Tubulogenesis Using Tunable Synthetic Matrices</i>	Ke Song MERLN - Maastricht University <i>Poly(lactic acid)Nano-hydroxyapatite Microcomposites for Bottom-Up Engineering of Bone Tissue</i>
09 / 10	Marc Falandt Utrecht University <i>Development of a thiol-ene gelatin-based bioresin for volumetric bioprinting</i>	Cansu Karakaya Eindhoven University of Technology <i>Mechanosensitive Notch Signaling is a Regulator of Strain-Mediated Changes in Vascular Smooth Muscle Cell Phenotype</i>

12.30 – 13.30	Lunch	
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13.30 – 15.00	OPEN SCIENCE SESSION	NBTE STAFF REUNION

14.45 – 15.15	Coffee	
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15.15 – 16.45 (10+2 min)	Oral Presentations Session 5 <i>Biofabrication & Added manufacturing in Biomaterials & Tissue Engineering</i>	Oral Presentations Session 6 <i>Enabling Technologies for Tissue Engineering & Regenerative Medicine</i>
Topic Keynote	Gosia Wlodarczyk-Biegun (RuG)	Burcu Gumuscu Sefunc (Eindhoven)
11 / 12	Alicia Damen Eindhoven University of Technology <i>Friction Reducing Ability of a Poly-L-Lysine and Dopamine Modified Hyaluronan Coating for Cartilage Resurfacing Implants</i>	Carlos Peniche Silva MERLN - Maastricht University <i>Establishment of a Rat Model for Enthesis Regeneration Studies</i>
13 / 14	Pedro Díaz Payno Delft University of Technology & Erasmus MC, Rotterdam <i>4D bioprinting of curved scaffolds for cartilage tissue engineering applications</i>	Prasanna Padmanaban University of Twente <i>Revisiting ImageJ Automated quantification of vasculature properties using machine learning tools</i>
15 / 16	Paulina Núñez Bernal UMC Utrecht <i>Shaping hepatic organoids into functional metabolic biofactories through high-speed volumetric bioprinting</i>	Phanikrishna Sudarsanam Eindhoven University of Technology <i>High-throughput screening of topographies to mitigate fibrosis in glaucoma filtration surgery devices</i>
17 / 18	Magdalena Gladysz University of Groningen <i>Melt Electrowritten Artificial Trabecular Meshwork for Glaucoma Treatment</i>	Piotr Zielinski University of Groningen <i>Melt Electrowritten Scaffolds with Tunable Mechanical Properties for Interface Tissue Engineering</i>
19 / 20	Li Menghong University of Amsterdam <i>Biomimetic Calcium Phosphate coating on stainless steel</i>	Pardis Farjam University of Twente <i>Biomimetic Calcium Phosphate Coatings applied to poly(carbonate urethane) substrates</i>

17.00 – 17.10	<i>NBTE awards - PhD thesis</i>
17.10 – 18.00	<i>General Assembly</i>
18.15 – 20.00	<i>Dinner</i>

20.00 – 21.00	Evening lecture
Prof. Mark Post, MD PhD CULTURED MEAT	

21.00 – 22.00 <h1 style="margin: 0;">Pub-Quiz</h1>

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Friday, 10 December

07.00 – 09.00	Breakfast & Post mounting
09.00 – 09.45	Keynote Lecture: Dr. Britta Trappmann Max Planck Institute for Biomolecular Medicine Bioactive Biomaterials

09.45 – 11.15	<i>Poster Session</i>
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11.15 – 12.30 (10+2 min)	Oral Presentations Session 7 <i>In vitro models in tissue engineering</i>	Oral Presentations Session 8 <i>Biomaterials in Drug Delivery</i>
Topic Keynote	Silvia Mihaila (UU)	Daniela Wilson (RU)
21 / 22	Esther Cramer Eindhoven University of Technology <i>Osteoclastic Differentiation in Human Osteochondral Explants cultured Ex Vivo</i>	Claudia Del Toro Runzer MERLN - Maastricht University <i>Cellular Uptake and Activity of cmRNA and pDNA Lipid Complexes - Prospects for Gene Therapy and Tissue Engineering</i>
23 / 24	Mike Broeders Erasmus MC, Rotterdam <i>Generation of a disease model for cartilage pathology in MPS VI</i>	Zhule Wang Radboudumc, Nijmegen <i>Dual-functional Porous Polymethylmethacrylate Cement Loaded with Cisplatin for Reconstruction of Segmental Bone Defect Kills Bone Tumor Cells</i>
25 / 26	Encheng Ji Erasmus MC, Rotterdam <i>Investigating The Effect Of Cartilage Maturation And Mineralisation On Angiogenesis In The Context Of Endochondral Ossification</i>	Jietao Xu Erasmus MC, Rotterdam <i>Delivery of Bone Morphogenetic Protein 2 and Platelet-Derived Growth Factor to improve the osteogenic properties of a collagenMagnesium-hydroxyapatite osteochondral scaffold</i>
27 / 28	Maria José Eischen-Loges MERLN - Maastricht University <i>Screening Osteogenic Properties of Calcium Phosphate Biomaterials with Inorganic Additives using a Multiplex Protein-Based Assay</i>	Claire Polain MERLN - Maastricht University <i>Innervation In Bone Tissue Engineering Using Chemically Modified RNA</i>

12.30 – 13.30	Lunch
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13.30 – 14.30	SESSION FOR OPEN SCIENCE DEBATE

14.30 – 15.00	Coffee
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15.00 – 16.30 (10+2 min)	Oral Presentations Session 9 <i>Biomaterials associated infections and host response</i>	Oral Presentations Session 10 <i>Small technologies, small tissues</i>
Topic Keynote	Martijn Riool (AMC)	Massimo Mastrangeli (TUD)
29 / 30	Leanne de Silva UMC Utrecht & Utrecht University <i>A Close Examination of the Bone Formation and Immune Response from a Devitalized Callus Mimetic</i>	Meike Kleuskens Eindhoven University of Technology <i>Integration of Organoid- and Cell-filled Chondral Implants in Human Osteochondral Explants</i>
31 / 32	Jing Han Radboudumc, Nijmegen <i>Electrophoretic Deposition of Cu-doped Mesoporous Bioactive GlassChitosan Composite Coatings for Improved Sot Tissue Integration of Oral Implants</i>	Bas van Loo University of Twente <i>Ultra-High Throughput Production of Embryoid Bodies and Human Cardiac Organoids using In-Air Microfluidic generated Hollow Core-Shell Microcapsules</i>
33 / 34	Flurina Staubli UMC Utrecht & Utrecht University <i>Effect of immune response on endochondral bone regeneration using partially mismatched allogeneic MSCs</i>	Michelle Vis Eindhoven University of Technology <i>Towards bone-remodeling-on-a-chip</i>
35 / 36	Rald Groven MERLN - Maastricht University <i>Profiling the microRNA fingerprint of the human fracture hematoma</i>	Anika Schumacher MERLN - Maastricht University <i>Culture of stem cell-derived kidney organoids in physiological oxygen enhances amount and patterning of the endothelial network</i>
37 / 38	Devlina Ghosh University of Groningen <i>A universal nanogel-based coating approach for medical implants</i>	Niels Willemen University of Twente <i>Biochemical and biophysical tunable smart microbuilding blocks to instruct engineered living tissues</i>
16.30-17:00	Awards session & Closure of the meeting	

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