



NBTE

Netherlands society for Biomaterials and Tissue Engineering

Program 30th Annual Meeting, 4 & 5 April 2022
at
Conference center De Werelt

Monday, 4th of April

Conference rooms: AIR (plenary) & FIRE (parallel)

09.00-9.50	<i>Conference assembly</i>
9.50-10.00	<i>Opening (room: AIR)</i>
10.00 – 10.45	<i>Good Morning NBTE with Rosanne Hertzberger (room: AIR) Panel discussion with NBTE pioneers and future authorities</i>

11.00 – 12.30 (10+2 min)	Oral Presentations Session 1 (AIR) <i>Supramolecular & Smart Polymeric Biomaterials Chair: Vasileios Trikalitis</i>	Oral Presentations Session 2 (FIRE) <i>Nanobiomaterials in Regenerative Medicine & Tissue Engineering Chair: Madison Ainsworth</i>
Topic Keynote (25+5 min)	Julieta Paez (University of Twente)	Sabine van Rijt (Maastricht University)
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 Signalling 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 (AIR) <i>For early-stage researchers (PhD students & early post-docs)</i>	NBTE STAFF REUNION & POLICY (FIRE) <i>From mid-stage researcher onwards (post-docs and staff (AP, AOP, Prof))</i>
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14.45 – 15.15	Coffee	
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15.15 – 16.45 (10+2 min)	Oral Presentations Session 5 (AIR) <i>Biofabrication & Added manufacturing in Biomaterials & Tissue Engineering</i> <i>Chair: Johanna Husch</i>	Oral Presentations Session 6 (FIRE) <i>Enabling Technologies for Tissue Engineering & Regenerative Medicine</i> <i>Chair: Adrián Seijas Gamardo</i>
Topic Keynote (25+5 min)	Gosia Wlodarczyk-Biegun (University of Groningen)	Burcu Gumuscu Sefunc (Joining digitally) (Eindhoven University of Technology)
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 Entesis Regeneration Studies</i>
13 / 14	Li Menghong University of Amsterdam <i>Biomimetic Calcium Phosphate coating on stainless steel</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	Malin Becker University of Twente <i>Aqueous Two-Phase Enabled Low Viscosity 3D (LoV3D) Bioprinting of Living Matter</i>	Pardis Farjam University of Twente <i>Biomimetic Calcium Phosphate Coatings applied to poly(carbonate urethane) substrates</i>
16.50 – 17.15	Sponsor presentation Optics 11 Life (AIR) Mechanics Matter in 3D Biology	

18.00 – 20.00	<i>Dinner</i>
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20.00 – 21.00	Evening lecture (AIR)
Dr. Arin Doğan (Mosa Meat) CULTURED MEAT	

21.00 – 22.00 (FIRE) <h1 style="margin: 0;">Pub-Quiz</h1>	
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Gold sponsor:



Silver sponsors:



Miltenyi Biotec



Tuesday, 5 April

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

09.45 – 11.00	<i>Poster Session (AIR & FIRE)</i>
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11.15 – 12.30 (10+2 min)	Oral Presentations Session 7 (AIR) <i>In vitro models in tissue engineering</i> <i>Chair: Lei Li</i>	Oral Presentations Session 8 (FIRE) <i>Biomaterials in Drug Delivery</i> <i>Chair: Sana Ansari</i>
Topic Keynote (25+5 min)	Silvia Mihaila (Utrecht University)	Daniela Wilson (Radboud University)
21 / 22	Esther Cramer Eindhoven University of Technology <i>Osteoclastic Differentiation in Human Osteochondral Explants cultured Ex Vivo</i>	Claire Polain MERLN - Maastricht University <i>Innervation In Bone Tissue Engineering Using Chemically Modified RNA</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>	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>

12.30 – 13.30	Lunch
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13.30 – 14.30	SESSION FOR OPEN SCIENCE DEBATE (AIR)
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14.30 – 15.00	Coffee	
15.00 – 16.30 (10+2 min)	Oral Presentations Session 9 (AIR) <i>Biomaterials associated infections and host response</i> <i>Chair: Esra Güben Kaçmaz</i>	Oral Presentations Session 10 (FIRE) <i>Small technologies, small tissues</i> <i>Chair: Melvin Gurian</i>
Topic Keynote (25+5 min)	Martijn Riool (Amsterdam UMC)	Massimo Mastrangeli (Delft University of Technology)
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>	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>
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 <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>	Meike Kleuskens Eindhoven University of Technology <i>Integration of Organoid- and Cell-filled Chondral Implants in Human Osteochondral Explants</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>
16.40-17:00	Awards session & Closure of the meeting (AIR)	

Bronze sponsors:

