



Program 25th Annual Meeting, 1 & 2 December 2016

at

“De Werelt congress center”, Westhofflaan 2, 6741 KH Lunteren

Thursday, 1 December

09.15 – 09.45	<i>Registration and coffee</i>
09.45 – 10.00	<i>Welcome</i>

10.00 – 11.20 (8+2 min)	Oral Presentations Chair: Mike Geven
01	Serdar Capar , ErasmusMC-Orthopaedics, Rotterdam. <i>The inflammatory phenotype of infrapatellar fat pad can be modulated by triamcinolone acetonide, probably via the residing macrophages</i>
02	Maurice van Dalen , UTwente-Nanobiophysics & Developmental BioEngineering, Enschede. <i>Amyloid Micronetworks for Cartilage Tissue Engineering</i>
03	Frances Bach , UU-Veterinary Medicine, Utrecht. <i>The Regenerative Effects of Notochordal Cell Matrix (NCM) on Canine and Human Nucleus Pulposus Cells</i>
04	Dafydd Visscher , VUMC-Plastic, Reconstructive & Hand Surgery, Amsterdam. <i>3D-printed Injectable Poly- ϵ-caprolactone Molds for Ear Cartilage Tissue Engineering</i>
05	Anna Tellegen , UU-Veterinary Medicine, Utrecht. <i>Controlled release of celecoxib from polyesteramide microparticles in a canine pre-clinical intervertebral disc degeneration model</i>
06	Maurits Olthof , UU-Veterinary Medicine, Utrecht. <i>Bone morphogenetic protein-2 release profile modulates bone formation in a novel phosphate modified oligo[(polyethylene glycol) fumarate] hydrogel</i>
07	Ana Maria Almonacid , UMCG-Pathology & Medical Biology, Groningen. <i>Nanostructured biomaterials for Skeletal Muscle Engineering</i>
08	Maike Werner , TU/e-Biomedical Engineering, Eindhoven. <i>Geometry-guided cell migration on competing length scales</i>

11.20 – 11.45	<i>Coffee break</i>
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11.45 – 12.55 (8+2 min)	Oral Presentations Chair: Marta Baroncelli
09	Ronald van Gaal , TU/e-Biomedical Engineering, Eindhoven. <i>Supramolecular polymer based living membrane for kidney tissue mimics</i>
10	Ilaria Geremia , UTwente-Biomaterials Science and Technology, Enschede. <i>Development of New Strategies for the Removal of Urea from the Dialysate</i>
11	Jeroen Buskermolen , ACTA-Oral Cell Biology, Amsterdam. <i>Response of Gingiva Equivalents to Commensal and Pathogenic Oral Microbiomes</i>
12	Bart Wullink , UMCG-Ophthalmology, Groningen. <i>Type VII Collagen in the Human Accommodation System: Expression in Ciliary Body, Zonules and Lens Capsule</i>
13	Jinlong Shao , RadboudUMC-Biomaterials, Nijmegen. <i>Evaluation of Silver Nanoparticles incorporated Chitosan-based Membranes as Antibacterial Wound Dressing</i>
14	Koen Dijkstra , UMCU-Orthopedics, Utrecht. <i>BioAirbrush: Arthroscopic airbrush technology for cell-based treatment of knee cartilage defects – a pre-clinical in vitro study</i>
15	Kavitha Sivasubramaniyan , ErasmusMC-Orthopedics, Rotterdam. <i>A novel real-time migration assay identifies stem cell migration in 3D matrices</i>

12.55 – 13.55	Lunch
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NVMB/NBTE Joint Symposium

13.55 – 15.10 (20+5 min)	NVMB/NBTE Joint symposium: Part 1 Chairs: Patricia Dankers, Reinout Stoop
Symp 1	Roeland Hanemaaijer , TNO-Metabolic Health Research, Leiden <i>All you always wanted to know about ELISAs but were afraid to ask, and things you thought you know, but don't</i>
Symp 2	Danny Duijsings , Baseclear-Head R&D, Leiden. <i>Next generation sequencing</i>
Symp 3	Andries van der Meer , UTwente-Applied Stem Cell Technologies, Enschede. <i>Organs on Chips</i>

15.10 – 15.20	Short Coffee Break
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15.20 – 16.35 (20+5 min)	NVMB/NBTE Joint symposium: Part 2 Chairs: Patricia Dankers, Reinout Stoop
Symp 4	Niels Geijsen , Hubrecht Laboratories-Geijsen group, Utrecht. <i>Crispr/Cas9: tailoring the genome on demand</i>
Symp 5	Beatriz Rocha , Maastricht University-Multimodal Molecular Imaging Institute, Maastricht. <i>A better view with mass spec imaging</i>

Symp 6	Patrick van Rijn , UMCG-Biomedical Engineering, Groningen <i>Surface topologies determine cell behavior, not a superficial topic</i>
16.35 – 16.55	Coffee Break

16.55 – 18.00	<i>NBTE members Annual Meeting</i>
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18.15 – 20.30	<i>Dinner</i>
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20.30 – 21.30	<p style="text-align: center;">Invited lecture</p> <p style="text-align: center;"><i>Title: Biomaterials and cocultures for vascularized tissue engineering</i></p> <p style="text-align: center;">James Kirkpatrick, MD, PhD, DSc</p> <p style="text-align: center;">Professor of Pathology, University Medical Center, Mainz, Germany, Fellow Royal College of Pathologists (FRCPath), London, Honorary, visiting professor in China, Singapore and Sweden.</p>
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21.30 –	<i>Party time!</i>
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Friday, 2 December

09.00 – 10.00 (8+2 min)	Oral Presentations Chair: Vincenzo Terlizzi
16	Renee Duijvelshoff , TU/e-Biomedical engineering, Eindhoven. <i>In vivo performance of a bilayered supramolecular scaffold for in situ vascular tissue engineering</i>
17	Aysun Guney , UTwente-Biomaterials Science and Technology, Enschede. <i>Melt processable polymeric composites for additive manufacturing based on extrusion</i>
18	Chella Hagmeijer , UMCU-Orthopedics, Utrecht. <i>Development of a One-Stage Cell Therapy for Meniscus Regeneration Using a Combination of Meniscus Cells, Mesenchymal Stromal Cells and the Collagen Meniscus Implant</i>
19	Tatiana Patricio , FUJIFILM Europe BV/ErasmusMC-Orthopedics, Rotterdam. <i>Bone-like magnetic microspheres obtained by bio-inspired synthesis, for controlled release of BMP-2 in bone tissue engineering</i>
20	Nathan Kucko , RadboudUMC-Biomaterials, Nijmegen <i>Towards load-bearing bioceramics: polymeric micro-fiber reinforcement of calcium phosphate bone cements</i>
21	Philipp Kühn , UMCG-Biomedical Engineering, Groningen. <i>Double Linear Gradient Biointerfaces for Determining Two-Parameter Dependent Stem Cell Behavior</i>

10.00 – 10.20	Coffee break
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10.20 – 11.00	Rapid fire Poster Presentations (1 min sharp, one slide) Chair: Angad Malhotra
P1-P35	<p>Chris Arts, MUMC-Orthopaedic Surgery, Maastricht. David Barata, MUMC/MERLN-Instructive Biomaterials Engineering, Maastricht. Valentina Bonito, TU/e-Biomedical engineering, Eindhoven. Maike Braham, UMCU-Orthopedics, Utrecht. Michiel Croes, UMCU-Orthopedis, Utrecht. Luuk van Dijk, Xpand Biotechnology BV, Bilthoven. Rongquan Duan, UTwente-Biomaterials Science and Technology, Enschede. Rachel Elzes, UTwente-Biomaterials Science and Technology, Enschede. Shorouk Fahmy-Garcia, ErasmusMC-Orthopedics, Rotterdam. Yao Fu, UTwente-Developmental Bioengineering, Enschede. João Pedro Garcia, UMCU-Orthopedics, Utrecht. Mike Geven, UTwente-Biomaterials Science and Technology, Enschede. Hatice Imran Güngördü, RadboudUMC-Biomaterials, Nijmegen Zhengchao Guo, UTwente-Biomaterials Science and Technology, Enschede. Dennie Hebels, MERLN-Cell Biology-Inspired Tissue Engineering (cBITE), Maastricht.</p>

	<p>Jan Hendriks, UTwente-Developmental Bioengineering, Enschede. Bastiaan Ippel, TU/e-Biomedical Engineering, Eindhoven. Lisanne Karbaat, UTwente-Developmental Bioengineering, Enschede. Caoimhe Kiernan, ErasmusMC-Oral & Maxillofacial Surgery, Rotterdam. Anne Leferink, UTwente-BIOS Lab on a chip group, Enschede. Kaizheng Liu, RIMLS-Urology, Nijmegen. Alessia Longoni, UMCU-Oral and Maxillofacial Surgery and Special Dental Care, Utrecht. Giulia Marchioli, TU/e-Biomedical Engineering, Eindhoven. Roel op 't Veld, RadboudUMC-Biomaterials, Nijmegen. Iris Pennings, UMCU-Oral and Maxillofacial Surgery and Special Dental Care, Utrecht. Daniela Petre, RadboudUMC-Biomaterials, Nijmegen. Stefan Remmers, TU/e-Biomedical Engineering, Eindhoven. Carl Schuurmans, UU-Pharmaceutical Sciences, Utrecht. Vincenzo Terlizzi, UMCG-Pathology and Medical Biology, Groningen. Patrycja Trepa, UTwente-Biomaterials Science and Technology, Enschede. Lizette Utomo, ErasmusMC-Orthopedics, Rotterdam. Steven Vermeulen, MERLN-Cell Biology-Inspired Tissue Engineering, Maastricht. Tamar Wissing, TU/e-Biomedical Engineering, Eindhoven. Dan Jing Wu, TU/e-Biomedical Engineering, Eindhoven. Yang Zhang, RadboudUMC-Biomaterials, Utrecht.</p>
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11.00 – 12.30	<i>Poster presentations and drinks</i>
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12.30 – 13.30	<i>Lunch Break</i>
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13.30 – 14.30 (8+2 min)	Oral Presentations Chair: Maïke Braham
22	Gabriel Linguori , UMCG-Medical Biology, Groningen. <i>Nano and Micro Directional Topographies Oppositely Influence Adipose Derived Stem Cells Differentiation to Smooth Muscle Cells</i>
23	Taraneh Mokabber , UMCG-Advanced Production engineering, Groningen. <i>Adhesion of cells on synthesized hydroxyapatite coatings with different morphologies</i>
24	Yasaman Zamani , ACTA-Oral Cell Biology, Amsterdam. <i>Surface Modification of 3D-Printed Polycaprolactone Scaffolds by Functional Carboxyl and Hydroxyl Groups Enhances MC3T3-E1 Pre-osteoblast Proliferation and Matrix Production</i>
25	Matthijs Suijkerbuijk , ErasmusMC-Orthopedics, Rotterdam. <i>Modulating JAK-STAT Signaling Pathways in Macrophages to Improve Tissue Regeneration</i>
26	Sergio Spaans , TU/e-Biomedical Engineering, Eindhoven. <i>Catechol-functionalized UPy-based biomaterials improve cardiomyocyte progenitor cell adhesion</i>
27	Pia Kröger , UTwente-Biomaterials Science and Technology, Enschede. <i>Single-chain nanoparticles: a new class of drug carriers</i>

14.30 – 14.50	Coffee break
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14.50 – 16.00 (8+2 min)	Oral Presentations Chair: Bastiaan Ippel
28	Eline van Haften , TU/e-Soft Tissue Biomechanics and Tissue Engineering, Eindhoven. <i>An in-vitro platform to culture vascular grafts under combined shear stress and circumferential stretch</i>
29	Imke Jansen , UMCU- Orthopedics, Utrecht. <i>Local Delivery of Triamcinolone Acetonide in an ACLT Model of Osteoarthritis Impairs Joint Regeneration, possibly by Inhibition of Wound Healing</i>
30	Didem Mumcuoglu , FUJIFILM Europe BV/ErasmusMC-Orthopedics, Rotterdam. <i>Development of Injectable BMP-2 Delivery Materials Using Collagen-I Based Recombinant Peptide</i>
31	Thijs Pasman , UTwente-Biomaterials Science and Technology, Enschede. <i>Fabrication of porous poly(trimethylene carbonate) membranes for lungs-on-chips using phase separation techniques</i>
32	Qihui Zhou , UMCG-Biomedical Engineering, Groningen. <i>High-throughput Screening of Cell Contact Guidance on Directional Micro/nanotopographical Gradients</i>
33	Barbara Klotz , UMCU-Oral and Maxillofacial Surgery & Special Dental Care, Utrecht. <i>Tailoring Gelatin-Transglutaminase Hydrogels for Pre-Vascularized Bone Analogs</i>

15.50	Announcement of the chair, poster and presentation awards
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16.00	Closure of the meeting
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