



# 11<sup>th</sup> International Meeting 2023

May 16–17, Eurogress, Aachen, Germany

Stem Cell Network North Rhine-Westphalia

## Program Tuesday, May 16, 2023

8:00	<b>Registration</b>	
09:00 –09:30	<b>Opening of the Meeting</b>	
9:00	<b>Welcome from the Ministry</b>	<b>Ina Brandes</b> <i>Ministry of Culture and Science of the German State of North Rhine-Westphalia</i>
9:15	<b>Opening Remarks</b>	<b>Oliver Brüstle</b> <i>University of Bonn School of Medicine &amp; University Hospital Bonn, Germany</i>
09:30 –10:45	<b>Session I - How will stem cells contribute to patient treatment?</b>	<i>Chairs: Alessandro Prigione, Bert Heinrichs</i>
9:30	<b>Characterization and functional analysis of cardiovascular derivatives of human pluripotent stem cells</b>	<b>Christine Mummery</b> <i>Leiden University, The Netherlands</i>
10:00	<b>Ethical issues in the use of stem cell technology in patient treatment</b>	<b>Eline Bunnik</b> <i>University Medical Center Rotterdam, The Netherlands</i>
10:30	<b>The Big BAG3 Theory: Insights from hiPSC models for BAG3P209L – myofibrillar myopathy</b>	<b>Kerstin Filippi</b> <i>University of Bonn, Germany</i>
10:45 –11:15	<b>Coffeebreak &amp; Industry Exhibition</b>	
11:15 –12:30	<b>Session II - How to build an organ</b>	<i>Chair: Sandra Blaess</i>
11:15	<b>Deconstructing human musculo-skeletal development in vitro</b>	<b>Olivier Pourquié</b> <i>Harvard Medical School, United States of America</i>
11:45	<b>Genome-wide screens reveal essential roles for HOX-genes and imprinted genes during neuronal differentiation of human embryonic stem cells</b>	<b>Atilgan Yilmaz</b> <i>KU Leuven, Belgium</i>
12:00	<b>Placental organoids for the study of maternal-fetal interactions in human pregnancy</b>	<b>Margherita Y. Turco</b> <i>Friedrich Miescher Institute for Biomedical Research, Switzerland</i>
12:30 –13:45	<b>Lunch Break &amp; Industry Exhibition</b>	

12:30 –12:45	<b>Meet the Speaker</b>	
13:45 –15:00	<b>Session III – Effective and non-effective tissue regeneration</b>	<i>Chair: Thomas Dittmar</i>
13:45	<b>To regenerate or not to regenerate, is that a question?</b>	<b>Ludovic Vallier</b> <i>Berlin Institute of Health, Germany</i>
14:15	<b>Identification of cancer stem cells in Richter's transformation via single-cell RNA sequencing leveraging gene expression signatures and RNA velocity</b>	<b>Stuart Blakemore</b> <i>University Hospital Cologne, Germany</i>
14:30	<b>Regulation of hematopoietic stem cell dormancy</b>	<b>Nina Cabezas-Wallscheid</b> <i>Max-Planck-Institut für Immunbiologie und Epigenetik, Freiburg, Germany</i>
15:00 –15:15	<b>Coffeebreak &amp; Industry Exhibition</b>	
15:15 –16:15	<b>Industry Talks Session Day 1</b>	
15:15	<b>Adaptive Control Software Enabling the Automated iPSC, iMSC, iCHO, and EV Production at Scale</b>	<b>Fraunhofer Institute for Production Technology</b>
15:30	<b>LIFE &amp; BRAIN integrated services: Molecular karyotyping for cost-effective quality control of stem cell systems</b>	<b>Life&amp;Brain</b>
15:45	<b>The need to overcome a 3D in-vitro model to mimic the human reality</b>	<b>IVTech</b>
16:00	<b>Intelligent innovations in live-cell imaging</b>	<b>Leica Microsystems</b>
15:15 –17:00	<b>Poster Presentations Day 1</b>	
17:00 –18:15	<b>Session IV – How to untangle stem cell complexity</b>	<i>Chair: Holm Zähres</i>
17:00	<b>Mechanistic neuropsychiatry at scale: translating brain organoids endophenotypes into preclinical</b>	<b>Giuseppe Testa</b> <i>Human Technopole and University of Milan, Italy</i>
17:30	<b>Extrinsic regulation of hematopoietic stem cells in the normal and leukemic bone marrow</b>	<b>Marc H.G.P. Raaijmakers</b> <i>Erasmus MC Cancer Institute, Rotterdam, The Netherlands</i>
18:00	<b>Metabolic enhancement of mammalian developmental pausing</b>	<b>Vera van der Weijden</b> <i>Max Planck Institute for Molecular Genetics, Berlin, Germany</i>
18:30	<b>Networking Event at „Stadtpalais“</b>	<i>Get-together with food &amp; drinks</i>

# 11<sup>th</sup> International Meeting 2023

May 16–17, Eurogress, Aachen, Germany

Stem Cell Network North Rhine-Westphalia

## Program Wednesday, May 17, 2023

8:00	<b>Registration</b>	
09:00 –10:15	<b>Session V – How to house stem cells – recreating niches</b> <i>Chair: Sabine Neuß-Stein</i>	
9:00	<b>Engineering Organoid Development</b>	<b>Matthias Lutolf</b> <i>École Polytechnique Fédérale de Lausanne, Switzerland</i>
9:30	<b>Kinome-wide Screen Identifies Raf-MAPK Pathway as a Regulator of Hair Follicle Stem Cell Plasticity</b>	<b>Leah Biggs</b> <i>Max Planck Institute for Molecular Biomedicine, Germany</i>
9:45	<b>Control of tissue formation through topography-induced changes in the secretory profiles of cells</b>	<b>Jan de Boer</b> <i>Eindhoven University of Technology, the Netherlands</i>
10:15 –10:45	<b>Coffeebreak &amp; Industry Exhibition</b>	
10:45 –11:45	<b>Industry Talks Session Day 2</b>	
10:45	<b>Patient-specific iPSC toolbox to model MPN bone marrow fibrosis</b>	<b>Peprotech</b>
11:00	<b>Moving Towards Animal-Free Cell Culture Media: Human Platelet Lysate, an Innovative Solution for FBS</b>	<b>PL Bioscience</b>
11:15	<b>How to build a robust genomic stability Quality Control strategy using advanced technologies</b>	<b>Stem Genomics</b>
11:30	<b>PSC Quality: It All Starts with the Right Tools</b>	<b>STEMCELL Technologies</b>
10:45 –12:30	<b>Poster Presentations Day 2</b>	
12:30 –13:45	<b>Lunch Break &amp; Industry Exhibition</b>	

13:45 –15:00	<b>Session VI – From bench to bedside - challenges in upscaling, production and vigilance</b> <i>Chair: Niels König</i>	
13:45	<b>Manufacturing of CAR effector cells: Pushing the boundaries in cancer treatment and immune mediated diseases</b>	<b>Ulrike Köhl</b> <i>Fraunhofer Institute of Cell Therapy and Immunology, Leipzig, Germany</i>
14:15	<b>Automated bioprocessing and manufacturing strategies for the production of human stem cells</b>	<b>Quasim Rafiq</b> <i>University College London, United Kingdom</i>
14:45	<b>Clonal Immortalized Mesenchymal Stromal Cells: an ideal cell source for a reproducible and standardized production of therapeutic extracellular vesicles.</b>	<b>Yanis Mouloud</b> <i>University Hospital Essen, Germany</i>
15:00 –15:30	<b>Coffeebreak &amp; Industry Exhibition</b>	
15:30 –16:45	<b>Session VII - The patients are waiting – clinical application of stem cells</b> <i>7\Ujf. &lt;UbbYg? 'i a d</i>	
15:30	<b>Collaborative Ethics: a bridge, not a roadblock</b>	<b>Jeantine E. Lunshof</b> <i>Harvard Wyss Institute for Biologically Inspired Engineering, United States of America</i>
16:00	<b>Reprogramming-driven drug discovery identifies an efficacious repurposing candidate for Leigh Syndrome</b>	<b>Annika Zink</b> <i>Heinrich Heine University/University Hospital Düsseldorf, Germany</i>
16:15	<b>Cultured stem cells meet the patients</b>	<b>Graziella Pellegrini</b> <i>University of Modena and Reggio Emilia, Italy</i>
16:45	<b>Award Ceremony Poster Award and Closing Remarks</b>	

