



MRS International Symposium 2026

Advancing Micro-Physiological Systems: Innovations and Applications in Biomedical Research

17–18 March 2026 | MHH Hannover | Lecture Hall R – Building J06

TUESDAY, MARCH 17 2026

- 13:00** (60') | **Registration & welcome coffee**
- 14:00** (30') | **R2N speaker & Lower Saxony Minister for Science and Culture**
| Welcome & Opening Remarks
- 14:30** (30'+15') | **Keynote**
| **Sina Bartfeld (TU Berlin)**
| *Infection, innate immune signaling and cancer in the gut – organoids as host model.*
- 15:15** (10'+5') | **Young scientist / invited talk**
| **Effie Tsihlia**
| *Tumoroid-driven angiogenesis and extracellular vesicles signaling shape angiogenic niches in a small-cell-lung-cancer-on-a-chip model*
- 15:30** (10'+5') | **Young scientist / invited talk**
| **Bettina Seeger**
| *Modeling Infection-Induced Neurodevelopmental Disruption in a Human Stem Cell-Based Brain Model*
- 15:45** (30') | **coffe-break**
| **scientific interaction / poster visits**
- 16:15** (30'+15') | **Keynote**
| **Prof. Josef Penninger (HZI Helmholtz)**
| *Tumoroid-driven angiogenesis and extracellular vesicles signalling shape angiogenic niches in a small-cell-lung-cancer-on-a-chip model*
- 17:00** (30'+15') | **Keynote**
| **Reyk Horland (TissUse)**
| *Bridging Biology and Technology: Enhancing Preclinical Predictivity through Multi-Organ-Chips*
- 17:45** (75') | **Panel discussion**
| **Horland, Penninger, Wagar, Gehart, Nawroth**
- 19:00** (2h30min) | **Get-together**
| **Scientific interaction / poster visits**



- 08:30** (30') | Welcome coffee
- 09:00** (30'+15') | **Keynote**
| **Lisa Wagar (UC Irvine)**
| *Predicting immunogenicity using human immune organoids.*
- 09:45** (10'+5') | **Young scientist / invited talk**
| **Valerie Schröder**
| *Beyond inflammation: Investigating pro-fibrotic responses in human intestinal tissue slices from patients with or without Crohn's disease ex vivo*
- 10:00** (10'+5') | **Young scientist / invited talk**
| **Felix Kleemiß**
| *Advancing and modulating human heart-forming organoids (HFOs) for drug testing*
- 10:15** (30'+15') | **Keynote**
| **Prof. Dr. Helmut Gehart (ETH Zürich)**
| *Modeling tumor cell heterogeneity and plasticity in organoids.*
- 11:00** (30') | **coffee-break**
| **scientific interaction / poster visits**
- 11:30** (30'+15') | **Keynote**
| **Dr. Dieter Groneberg (Fraunhofer ISC)**
| *From Simplicity to Complexity – Matching Skin Models to Research Question*
- 12:15** (10'+5') | **Young scientist / invited talk**
| **Elisa Mohr**
| *In vitro modelling of cardiovascular diseases utilizing multicellular human cardiac organoids*
- 12:30** (10'+5') | **Young scientist / invited talk**
| **Stefan Kallies**
| *Cellular nanosurgery and advanced imaging pipelines reveal regenerative pathways in organoids*
- 12:45** (30') | **Keynote**
| **Dr. Janna Nawroth (Helmholtz München)**
| *From AI to mucus fluidics: New approaches to probe the impact of environmental and metabolic factors on respiratory disease.*
- 13:15** (10'+5') | **Young scientist / invited talk**
| **Manasa Nandimandalam**
| *Gut-on-a-Chip with Caco2 Cells as an In Vitro Model for Infection and Inflammation Studies*
- 13:30** (10'+5') | **Young scientist / invited talk**
| **David Puertollano**
| *High throughput screening for compounds allowing readthrough of premature termination codons based on genetically engineered PCD patient specific hiPSCs*
- 13:45** (45') | **R2N speaker | Closing remarks**