



THE SHAPING A
TECHMED HEALTHY
EVENT FUTURE

Organ-on-a-chip: Better Designs, Better Health | Andries van der Meer

Technical Innovation - Clinical biomedical research as alternative for animal testing

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UNIVERSITY
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Organ-on-Chip
Center Twente

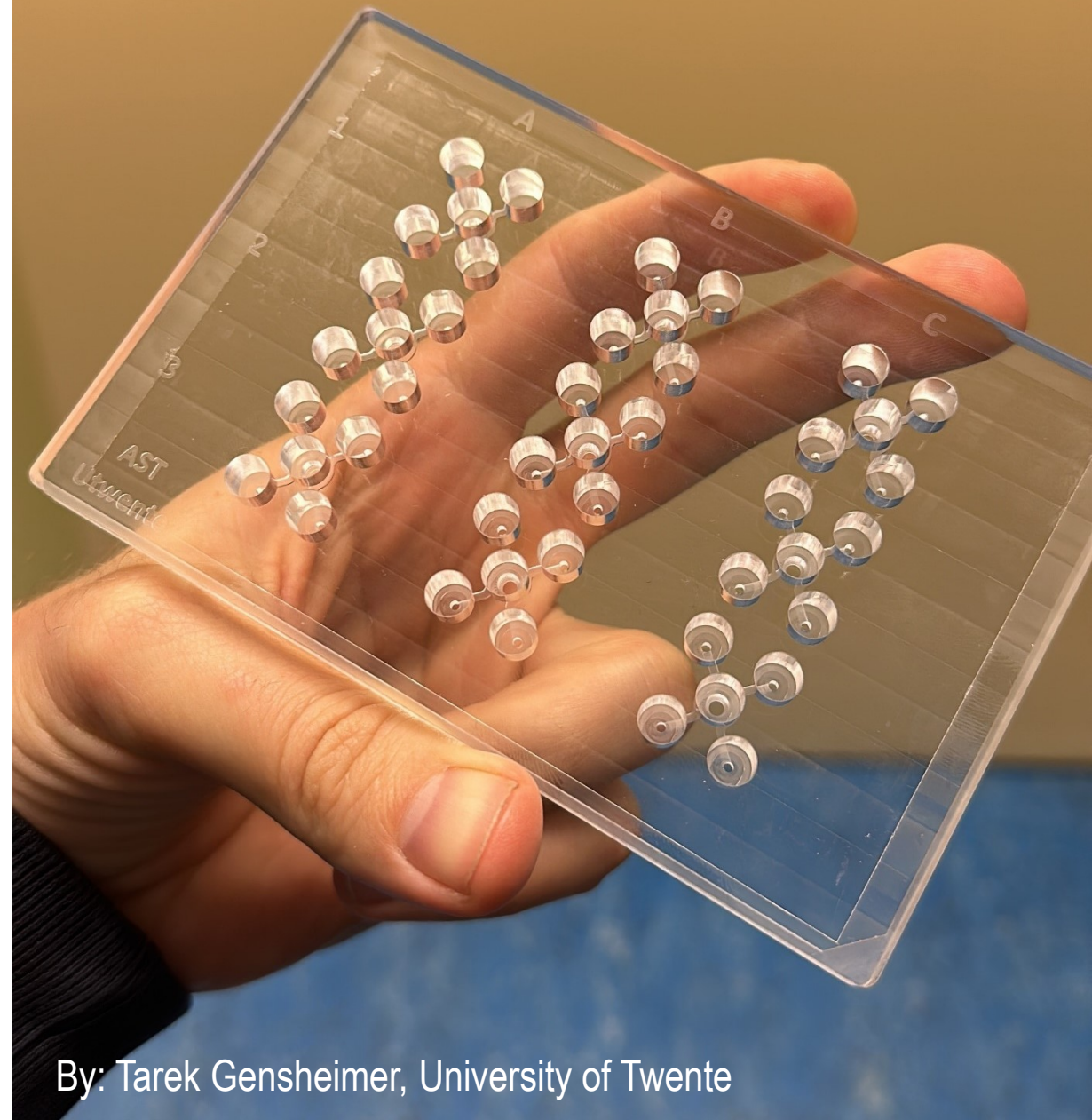
DISCLOSURE SLIDE

No disclosures



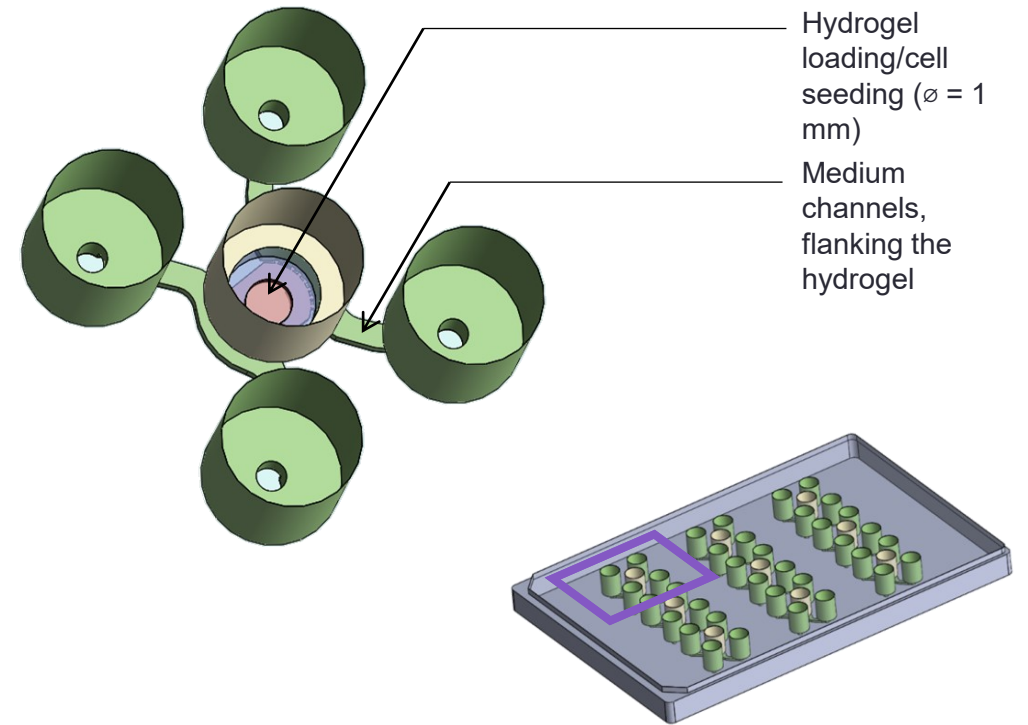
Microfluidic cell culture plate

- Micromilled acrylic with micropatterned compartments
- Footprint of existing laboratory cultureware



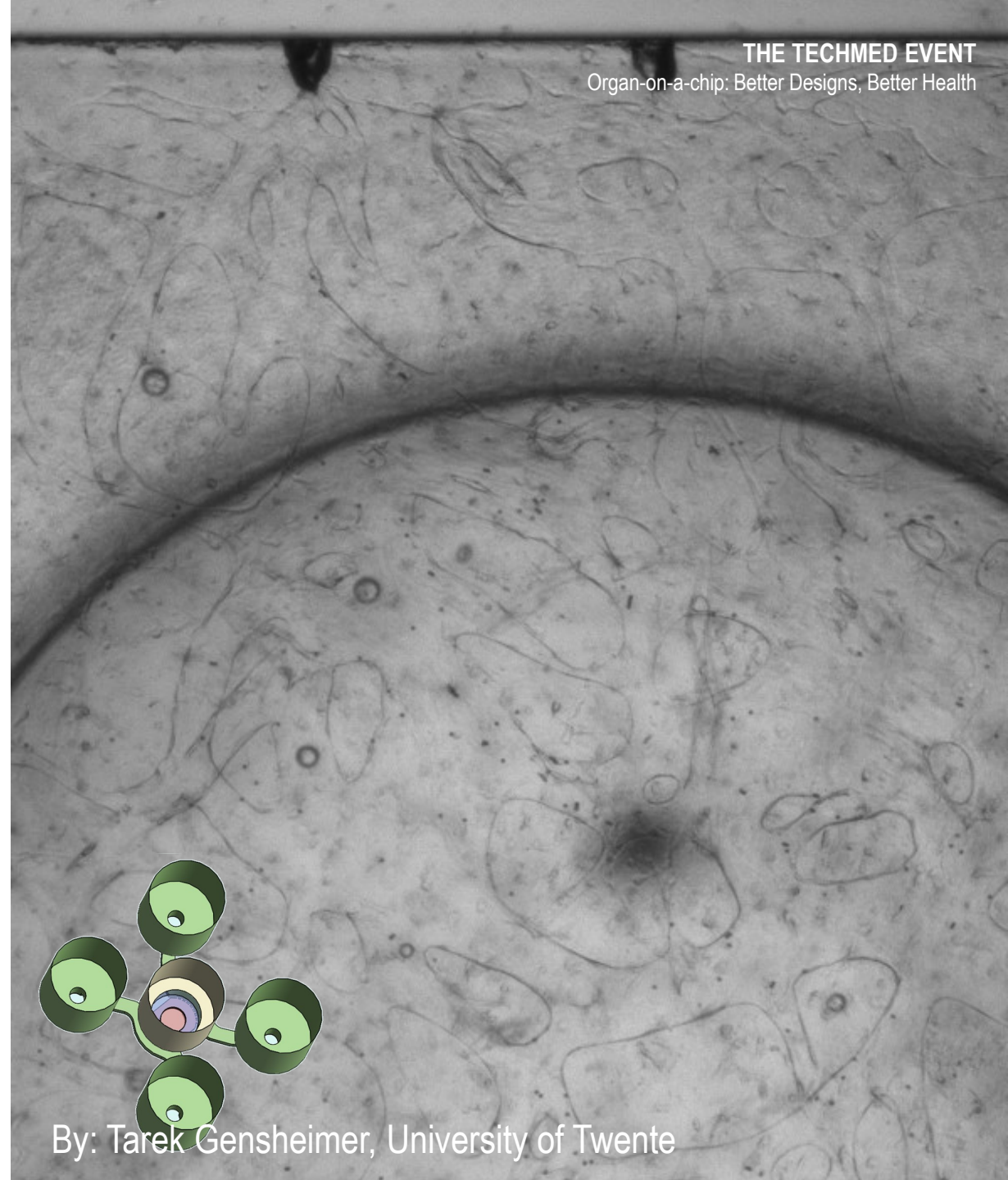
Micropatterned cell culture compartment

- Blood vessel hydrogel compartment
- Lung epithelium open top compartment
- Two flanking channels for nutrients



Microvascular networks

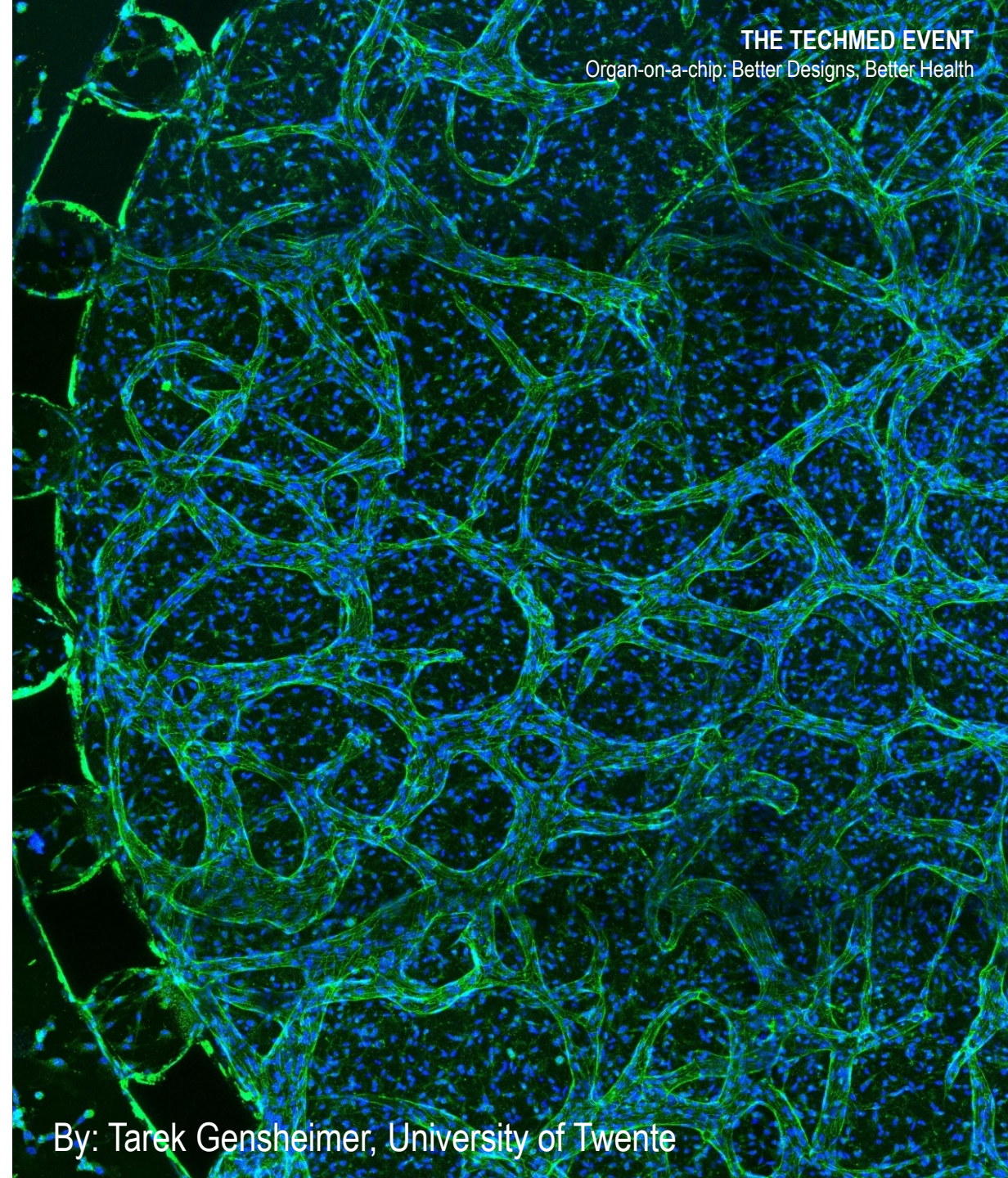
- Self-organized microvascular networks
- Human vascular cell derived cultures



By: Tarek Gensheimer, University of Twente

Microvascular networks

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