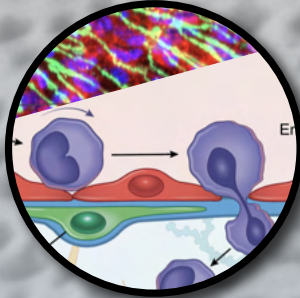


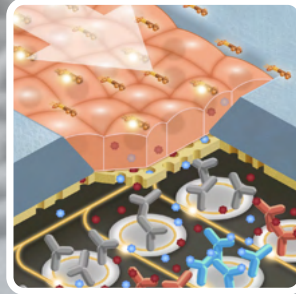
# 2023 MPS World Summit Workshop

## The Modular $\mu$ SiM as a Platform for Tissue Chip Development

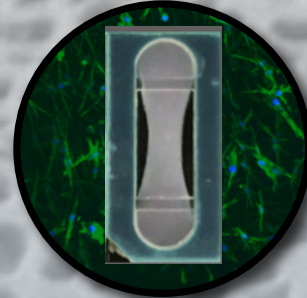
Sun. June 25: 1:30-4:30 PM  
Salons 4 & 5



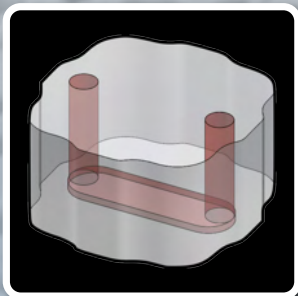
**Blood Brain Barrier**



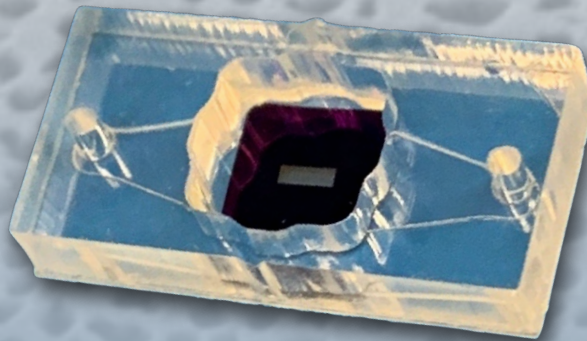
**Biosensors**



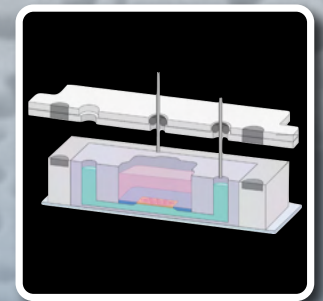
**Tendon on a Chip**



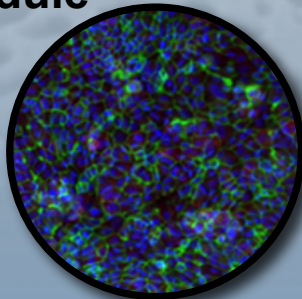
**Flow Module**



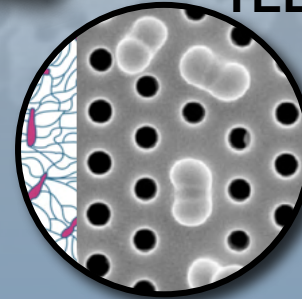
**The  $\mu$ SiM**



**TEER Module**



**Retinal Blood Barrier**



**Bone Infection**

- The diversity of tissue chips on display at the MPS World Summit makes clear that ideas for novel designs are limitless.
- Commercial systems are rarely optimized to test particular hypotheses or enable specific measurements.
- Custom academic solutions create bottlenecks because they are slow to manufacture and difficult to share.
- We developed the  $\mu$ SiM as a modular platform to build in vitro tissue models that can be easily customized.
- This workshop reviews the use of  $\mu$ SiM for the rapid design, customization, and distribution of tailored, application-specific tissue chip configurations.

Organizers: J. McGrath, V. Abhyankar, R. Ajalik, K. Ling, B. Miller, K. Webb Contact: [jmcgrath@ur.rochester.edu](mailto:jmcgrath@ur.rochester.edu)



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