

# Lab on a Chip

## Devices and applications at the micro- and nanoscale rsc.li/loc

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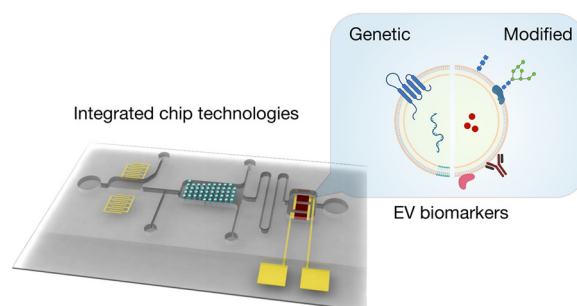
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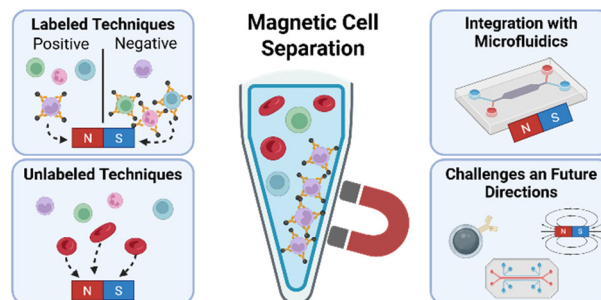
Li Zhang, Chi Yan Wong and Huilin Shao\*



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# RSC Applied Interfaces

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Fundamental questions  
Elemental answers

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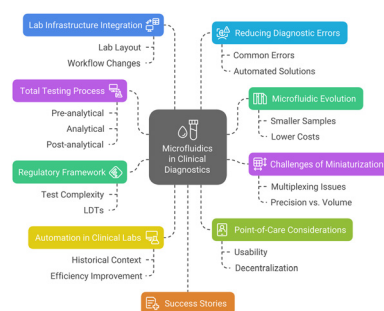


## CRITICAL REVIEWS

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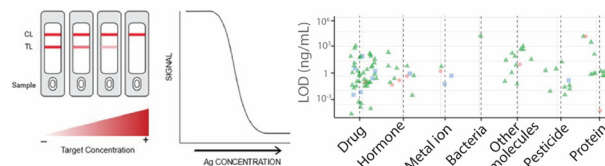
Kirby Fibben, Evelyn Kendall Williams, John D. Roback, Wilbur A. Lam\* and David N. Alter\*



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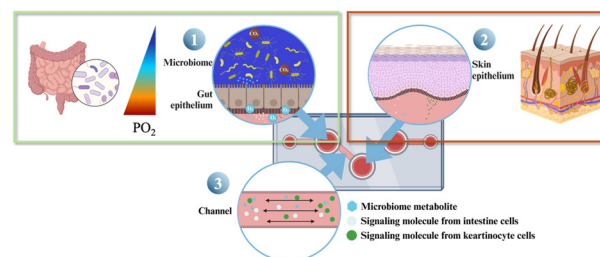


## PAPERS

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## Gut microbe-skin axis on a chip for reproducing the inflammatory crosstalk

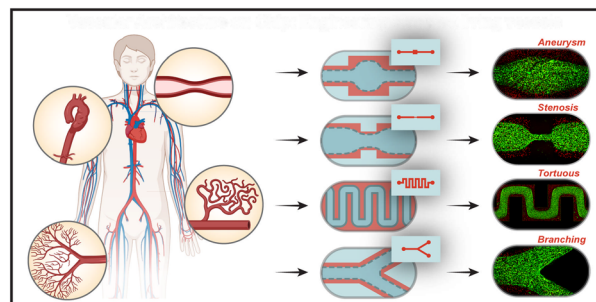
Byungho Ko, Jimin Son, Jong In Won, Bo Mi Kang, Chong Won Choi, Raehyun Kim\* and Jong Hwan Sung\*

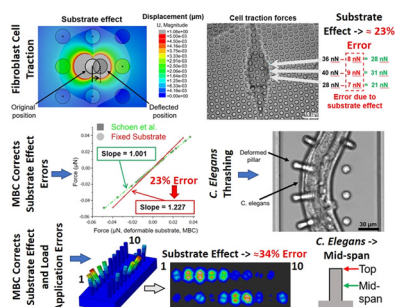


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## Vascular architecture-on-chip: engineering complex blood vessels for reproducing physiological and heterogeneous hemodynamics and endothelial function

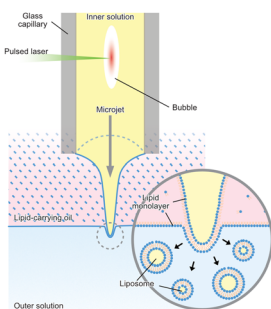
Jennifer D. Lee, Ankit Kumar, Tanmay Mathur\* and Abhishek Jain\*





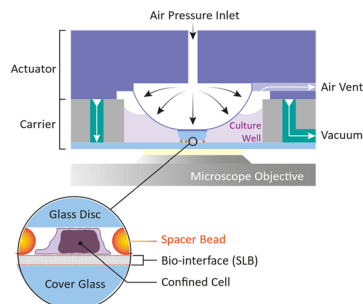
## MechanoBioCAD: a generalized semi-automated computational tool for mechanobiological studies

Navajit S. Baban, Christopher J. Stubbs and Yong-Ak Song\*



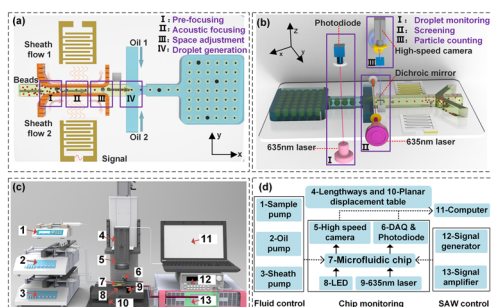
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Jiajue Ji, Shuma Kawai, Rina Takagi, Keiichiro Koiwai, Ryuji Kawano\* and Yoshiyuki Tagawa\*



## Microdevice for confinement of T-cells on functionalized bio-interfaces

Christoph Trenzinger,\* Caroline Kopittke, Barbora Kalousková, Nemanja Šikanić, Marina Bishara, Gerhard J. Schütz and Mario Brameshuber\*



## Elevating single-particle encapsulation in droplet microfluidics by utilizing surface acoustic wave and flow control

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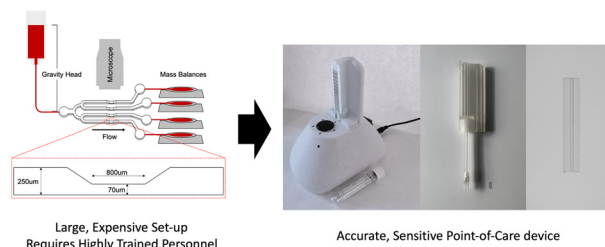


## PAPERS

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## Development of a novel point-of-care device to monitor arterial thrombosis

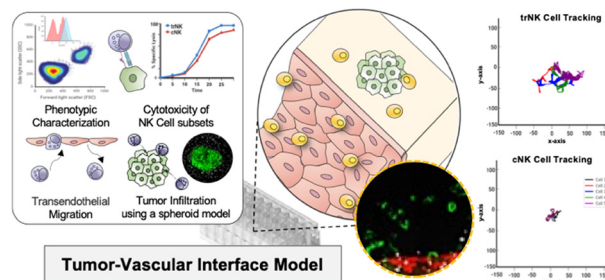
Christopher A. Bresette,\* Viviana Claveria and David N. Ku\*



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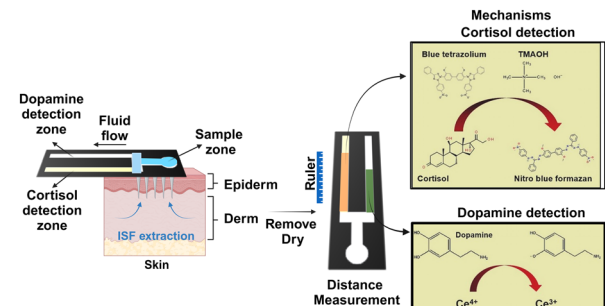
Hyeri Choi, June Ho Shin, Hyeonsu Jo, John B. Sunwoo\* and Nool Li Jeon\*



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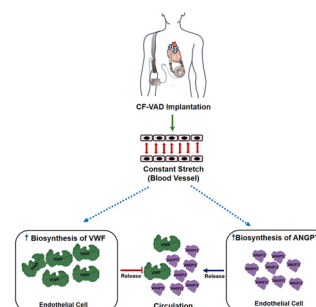
Danilo Martins dos Santos, Kawin Khachornsakkul and Sameer Sonkusale\*



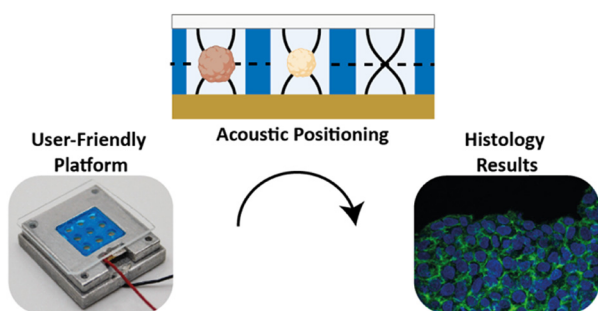
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## Understanding the role of vascular stretch on modulation of VWF and ANGPT-2 in continuous flow left ventricular assist device (CF-VAD) patients

Jay Prakash Sah, Javier E. Dominguez De Leon, Ian C. Berg, Braden L. Cornelius, Daniel B. Dekle, Esraa Ismail, Xuanhong Cheng, Guruprasad A. Giridharan and Palaniappan Sethu\*



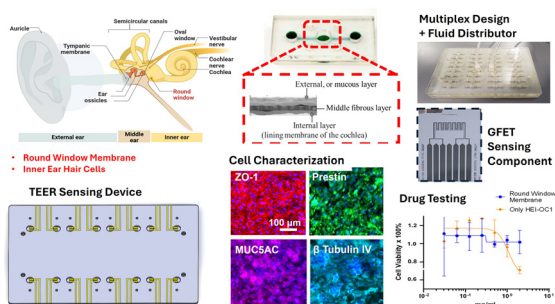
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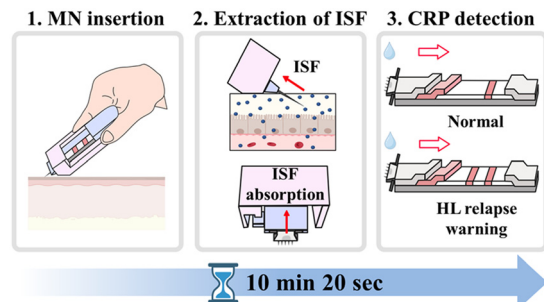
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Jing Bai,\* Olurotimi Bolonduro, Pavlo Gordiichuk, R. Madison Green, Henry Hung-Li Chung, Ken Mahmud and Dmitry Shvartsman

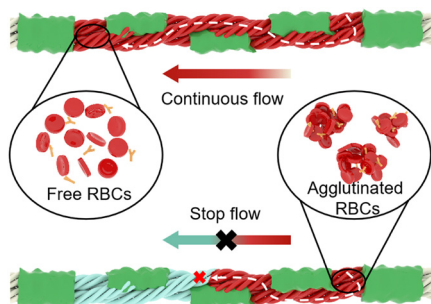
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Soo-bin Yu and Jae Hwan Jung\*

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### 3D microfluidic analytical device on a single thread for smart point-of-care blood typing

Tonghuan Zhan, Hui Niu, Yange Huang, Shuqiang Min, Xianchang Wu, Heng Wang and Bing Xu\*

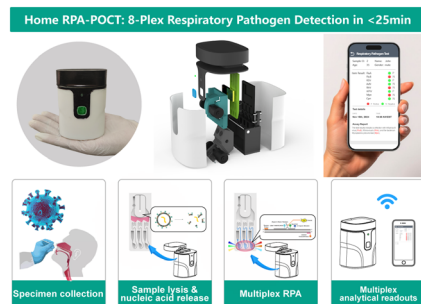


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# Handheld RPA-based molecular POCT system for rapid, low-cost 8-plexed detection of respiratory pathogens at home

Yunfeng Zai, Chao Min, Zunliang Wang,\* Yongjun Ding, Enben Su\* and Nongyue He



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Johannes Heidenberger, Eva I. Reihs, Jonathan Strauss, Martin Frauenlob, Sinan Gültekin, Iris Gerner, Stefan Toegel, Peter Ertl, Reinhard Windhager, Florian Jenner and Mario Rothbauer\*

