

Lab on a Chip

Devices and applications at the micro- and nanoscale
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See Raehyun Kim, Jong Hwan Sung *et al.*, pp. 2609–2619.
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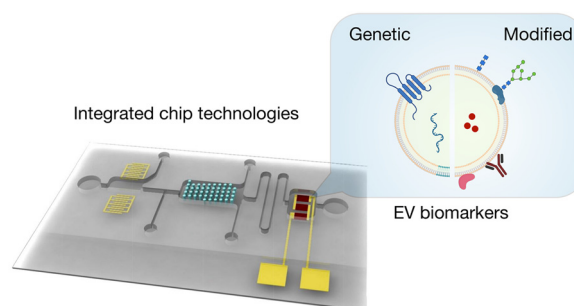
Inside cover
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CRITICAL REVIEWS

2504

Integrated technologies for molecular profiling of genetic and modified biomarkers in extracellular vesicles

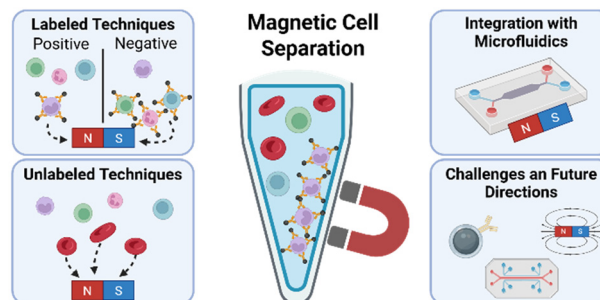
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Fundamental questions
Elemental answers

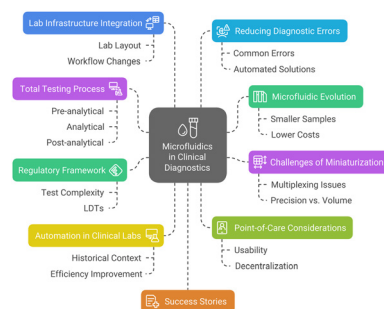


CRITICAL REVIEWS

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From Lab-on-a-Chip to Lab-on-a-Chip-in-the-Lab: a perspective of clinical laboratory medicine for the microtechnologist

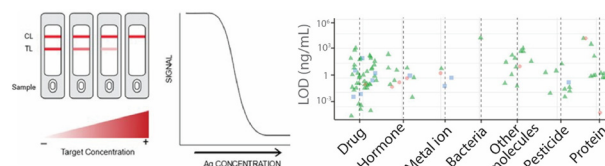
Kirby Fibben, Evelyn Kendall Williams, John D. Roback, Wilbur A. Lam* and David N. Alter*



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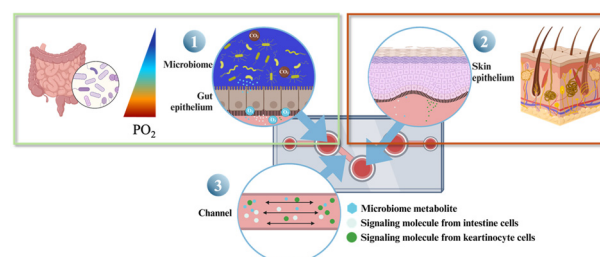


PAPERS

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

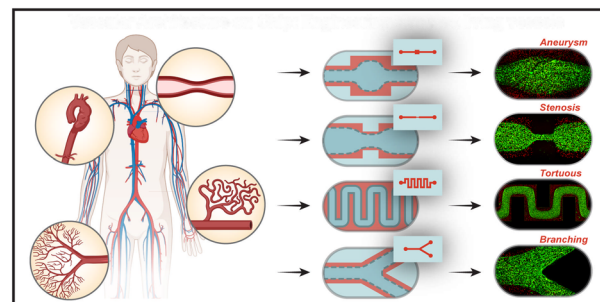
Byungho Ko, Jimin Son, Jong In Won, Bo Mi Kang, Chong Won Choi, Raehyun Kim* and Jong Hwan Sung*

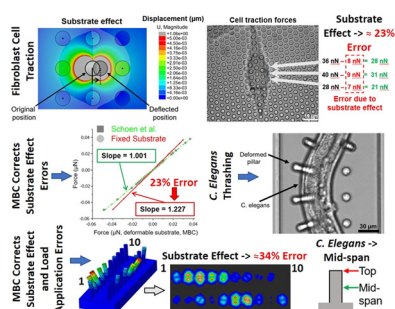


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Vascular architecture-on-chip: engineering complex blood vessels for reproducing physiological and heterogeneous hemodynamics and endothelial function

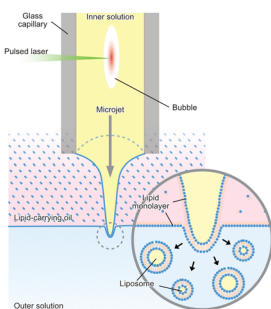
Jennifer D. Lee, Ankit Kumar, Tanmay Mathur* and Abhishek Jain*





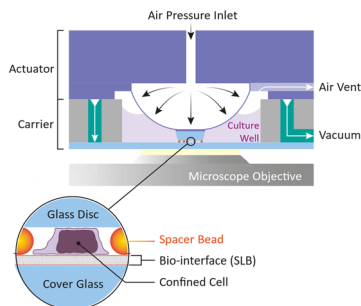
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Navajit S. Baban, Christopher J. Stubbs and Yong-Ak Song*



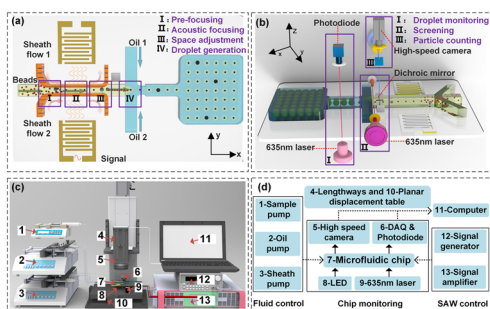
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Jiajue Ji, Shuma Kawai, Rina Takagi, Keiichiro Koiwai, Ryuji Kawano* and Yoshiyuki Tagawa*



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

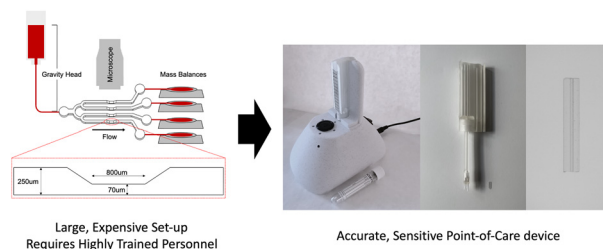
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Development of a novel point-of-care device to monitor arterial thrombosis

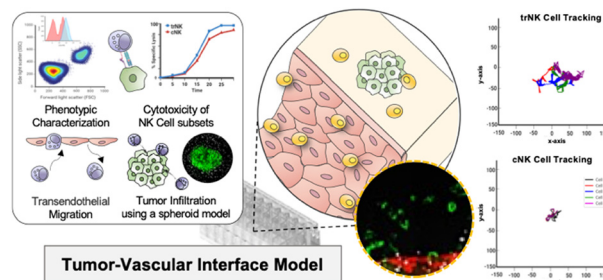
Christopher A. Bresette,* Viviana Claveria and David N. Ku*



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Evaluating migration and cytotoxicity of tissue-resident and conventional NK cells in a 3D microphysiological system using live-cell imaging

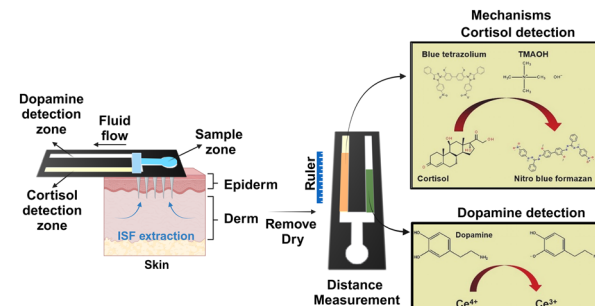
Hyeri Choi, June Ho Shin, Hyeonsu Jo, John B. Sunwoo* and Nool Li Jeon*



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Microneedle-integrated distance-based paper device for simultaneous transdermal detection of cortisol and dopamine

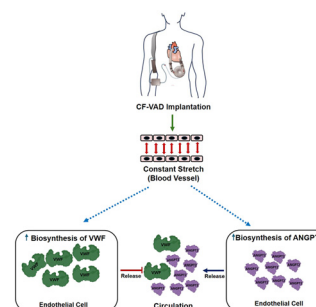
Danilo Martins dos Santos, Kawin Khachornsakkul and Sameer Sonkusale*



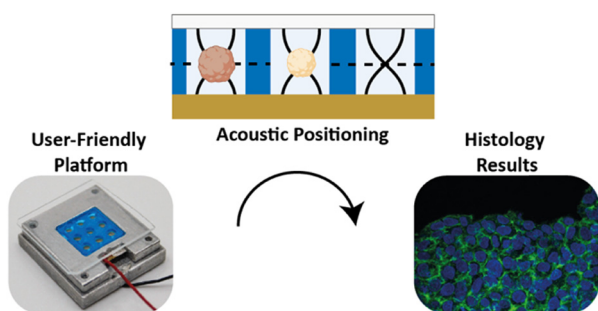
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Understanding the role of vascular stretch on modulation of VWF and ANGPT-2 in continuous flow left ventricular assist device (CF-VAD) patients

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*



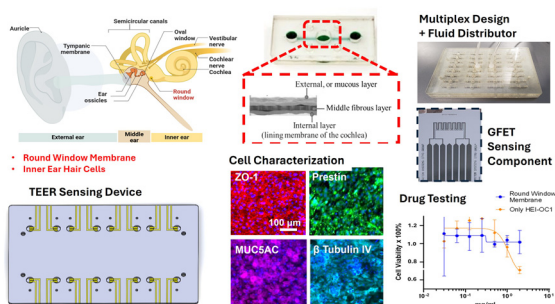
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Emilie Vuille-dit-Bille, Céline Loussert Fonta, Sarah Heub, Stéphanie Boder-Pasche, Mahmut Selman Sakar* and Gilles Weder*

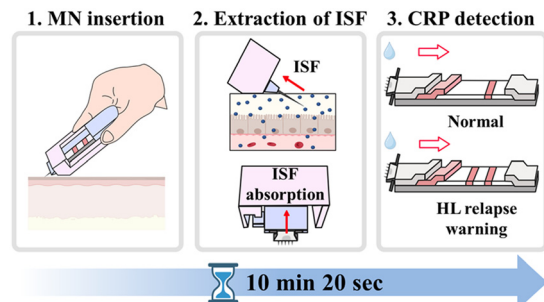
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An integrative round window membrane/cochlear microphysiological system with sensing components for the study of real-time drug response

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

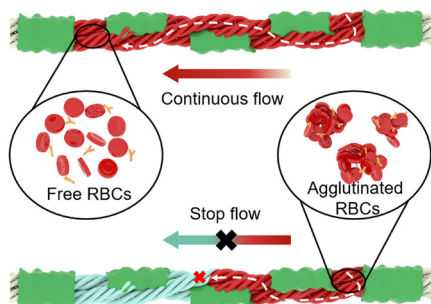
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Development of a high-performance sliding microneedle-lateral flow immunoassay strip device for ultra-rapid point-of-care diagnosis

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*

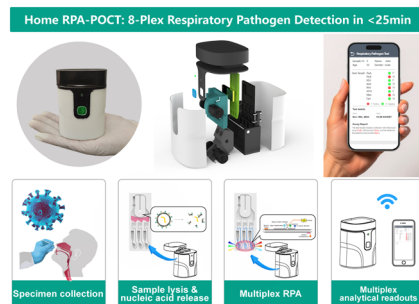


PAPERS

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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



CORRECTION

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Correction: The effect of cyclic fluid perfusion on the proinflammatory tissue environment in osteoarthritis using equine joint-on-a-chip models

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

