Publications

Recent Publications

2017

Ugolini, G. S., PAVESI, A., Rasponi, M., Fiore, G. B., Kamm, R., & Soncini, M. (2017).
Human cardiac fibroblasts adaptive responses to controlled combined mechanical strain and oxygen changes *in vitro*.
eLife, 6.

Adriani, G., Ma, D., PAVESI, A., Kamm, R. D., & Goh, E. L. K. (2017).
A 3D neurovascular microfluidic model consisting of neurons, astrocytes and cerebral endothelial cells as a blood-brain barrier.
Lab on a Chip, 17(3), 448–459.

Lim, S. H., & PAVESI, A. (2017).
Creating Multiple Organotypic Models on a Single 3D Cell Culture Platform.
BioTechniques, 62(3).

2016

Adriani, G., PAVESI, A., Tan, A. T., Bertoletti, A., Thiery, J. P., & Kamm, R. D. (2016).
Microfluidic models for adoptive cell-mediated cancer immunotherapies.
Drug Discovery Today, 21(9), 1472–1478.

PAVESI, A., Adriani, G., Tay, A., Warkiani, M. E., Yeap, W. H., Wong, S. C., & Kamm, R. D. (2016).
Engineering a 3D microfluidic culture platform for tumor-treating field application.
Scientific Reports, 6(1), 26584.

Tay, A., PAVESI, A., Yazdi, S. R., Lim, C. T., & Warkiani, M. E. (2016).
Advances in microfluidics in combating infectious diseases.
Biotechnology Advances, 34(4), 404–421.

Ugolini, G. S., Rasponi, M., PAVESI, A., Santoro, R., Kamm, R., Fiore, G. B., et al. (2016).
On-chip assessment of human primary cardiac fibroblasts proliferative responses to uniaxial cyclic mechanical strain.
Biotechnology and Bioengineering, 113(4), 859–869.

2015

PAVESI, A., Adriani, G., Rasponi, M., Zervantonakis, I. K., Fiore, G. B., & Kamm, R. D. (2015).
Controlled electromechanical cell stimulation on-a-chip.
Scientific Reports, 5, 11800.

S Koh, CYL Tham, AT Tanoto, A Pavesi, RD Kamm, A Bertoletti.
Engineered HBV-specific T cells: Disentangling antiviral from killing capacity.
Journal of Hepatology, 62, S188 (2015).

2014

Ochs, C. J., Kasuya, J., PAVESI, A., & Kamm, R. D. (2014).
Oxygen levels in thermoplastic microfluidic devices during cell culture.
Lab on a Chip, 14(3), 459–462.

Ochs, C. J., Kasuya, J., PAVESI, A., & Liebsch, G. (2014).
2D-Visualisierung des zellulären Sauerstoff verbrauchs in Mikrofluidiksystemen.
BIOspektrum, 20(7), 773–775.

Uzel, S. G. M., PAVESI, A., & Kamm, R. D. (2014).
Microfabrication and microfluidics for muscle tissue models.
Progress in Biophysics and Molecular Biology, 115(2-3), 279–293.

Pavesi, A., Soncini, M., Zamperone, A., Pietronave, S., Medico, E., Redaelli, A., et al. (2014).
Electrical conditioning of adipose-derived stem cells in a multi-chamber culture platform.
Biotechnology and Bioengineering, 111(7), 1452–1463.

Pietronave, S., Zamperone, A., Oltolina, F., Colangelo, D., Follenzi, A., Novelli, E., et al. (2014).
Monophasic and biphasic electrical stimulation induces a precardiac differentiation in progenitor cells isolated from human heart.
Stem Cells and Development, 23(8), 888–898.

2011

PAVESI, A., Piraino, F., Fiore, G. B., Farino, K. M., Moretti, M., & Rasponi, M. (2011).
How to embed three-dimensional flexible electrodes in microfluidic devices for cell culture applications.
Lab on a Chip, 11(9), 1593–1595.

Vismara, R., PAVESI, A., Votta, E., Taramasso, M., Maisano, F., & Fiore, G. B. (2011).
A pulsatile simulator for the in vitro analysis of the mitral valve with tri-axial papillary muscle displacement.
The International Journal of ***Artificial Organs***, 34(4), 383–391.

PATENTS:

"Blood Brain Barrier Model In A 3D Co-culture Microfluidic System"

(US Provisional Patent Application Filed) (2015)

A method to produce a microfluidic device having vertical electrodes and a device obtained from it (2011, March 29). Publication number WO2011121427A2; Application number PCT/IB2011/000677; US Patent Office.