Contact
Alexandra Fuchs, PhD, COO
afuchs@cytoo.com, +33 (0)4 38 88 47 07

Press Release

For Immediate Release
12th, March 2013

CYTOO's adhesive micropatterns are mentioned in more than 30 scientific papers

Grenoble, France, 12th March 2013 – CYTOO, a life science systems & tools company providing disruptive solutions for cell-based assays and High Content Screening (HCS) is proud to announce that CYTOO's adhesive micropatterns are mentioned in more than 30 publications, covering a wide range of research areas and in prestigious journals such as *Nature*, *Plos One*, *Developmental Cell* and *Journal of Cell Biology*. Two thesis mentioning CYTOO's technology have also been defended.

These publications are the first beacons of the considerable possibilities enabled by our 2D+ technology. By defining the 2D topology of cell adhesion, adhesive micropatterns enable fine control of the spreading and 3D shape of cultured cells in single- or multi-cellular configurations. This approach results in control of cell contractility, cell polarity, organelle positioning, and cell division axis. The 2D+ technology addresses a major concern with traditional 2D culture, in which cells spread and move in an uncontrolled manner, introducing a considerable but unnoticed variability in cell function.

Among major publications, some breakthroughs can be highlighted:

- **Monitoring drug effects: Kristine Schauer's Organelle Map, finalist of the SLAS 2013 Innovation Award.** She used the crossbow micropatterns to get reproducible shape and distribution of intracellular compartments and developed a mathematical algorithm to generate and compare probabilistic density maps of the different endosome compartments. This innovative approach is a powerful universal method to identify statistically relevant hits and drug effects in complex cell based assays.

- **Cancer research: Ved Sharma's study of tumor cell migration and pairing**. "Our 1D micropatterned substrate model more closely approximates the fibrillar nature of the in vivo tumor microenvironment and offers a simple and more appropriate substrate for detailed analyses of cell protrusion, cell-cell pairing and migration than conventional 2D substrates."

- **Ciliogenesis: Amandine Pitaval's fine control of primary cilia growth**. "Individual cells were sufficiently spatially confined on adhesive substrate (...) under these conditions, most cells assemble a primary cilium".

- **Mitochondria: Arnaud Chevrollier's approach of mitochondrial networks.** "The potential application of the methods proposed are illustrated here by the study of mitochondria affected by pathogenic mutations (…) The standardized quantitative analysis of the mitochondrial network and the description of mitochondrial subcellular distribution should lead to the establishment of better diagnostic criteria for mitochondrial diseases and yield new insights into these disorders."

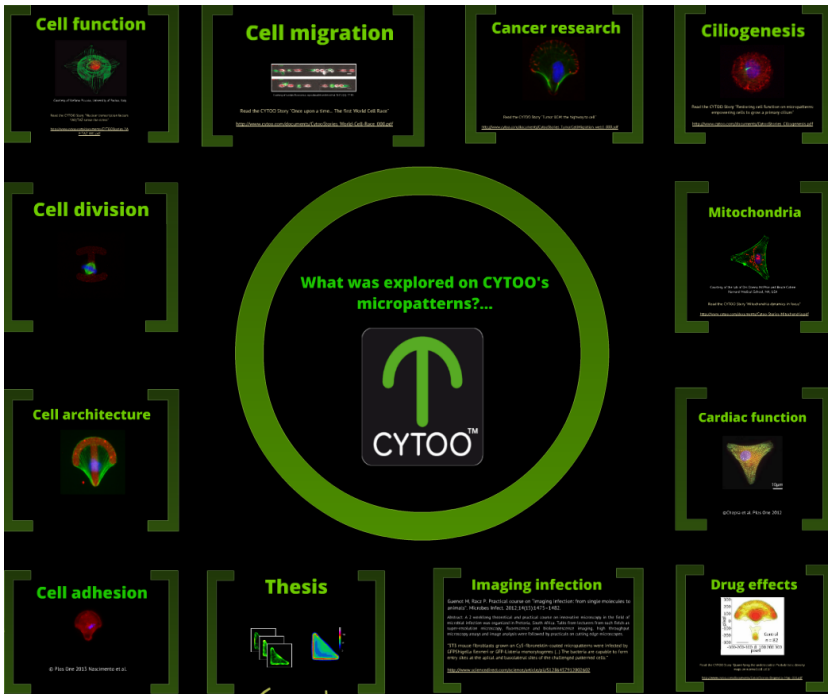
- **Cell architecture: Rodríguez-Fraticelli's study of epithelial morphogenesis**. "We characterized the role of cell confinement in lumen formation using a new methodology to analyze 3D epithelial morphogenesis in micropatterns. We found that cell confinement, which modifies the actomyosin II–mediated contractility, is able to regulate epithelial polarity and lumen formation and the positioning of the centrosome and the nucleus."

Contact
Alexandra Fuchs, PhD, COO
afuchs@cytoo.com, +33 (0)4 38 88 47 07

Press Release

Alexandra Fuchs, COO of CYTOO, says: “the whole CYTOO team is always delighted to discover their customers’ work, and with so many scientific publications, 2D+ can be considered as a key element for life science research and drug discovery! We are expecting soon new publications and discoveries in exciting fields such as stem cell fate, toxicology and oncology. Stay tuned on our social networks to learn more! ”

For more information, you can explore our new Prezi: click on the specific application you’re interested in, learn more about the related publications and go back to the homepage to explore another area. Or watch the full Prezi!



For more information, visit www.cytoo.com

About CYTOO S.A.

CYTOO is a distinctive life sciences systems & tools company offering disruptive solutions for cell-based assays and High Content Screening (HCS) that reinforce robustness, sensitivity and powerful quantification. The Company’s 2D+ Cell Culture Platform and Custom Solutions are based on adhesive micropatterns, offering control over the cells' microenvironment, leading to normalized cell morphology and behavior. The technology allows the optimization or resurrection of complex or difficult cell-based assays and enables innovative assay development.

For more information about the complete product portfolio, visit www.cytoo.com

Additional Contacts

cloiraud@cytoo.com

Follow us