

CELL
Microsystems®

3D CAPABILITIES NOW AVAILABLE ON THE

CellRaft AIR[®] System

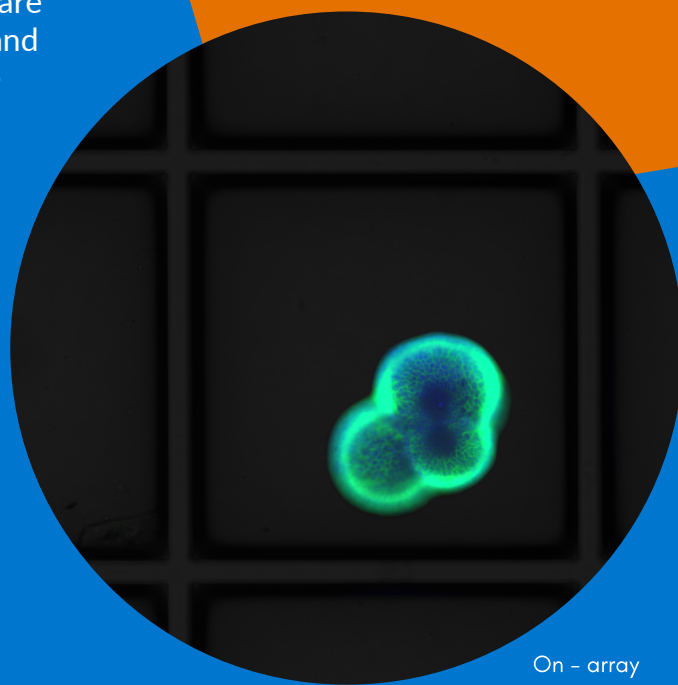
Image, Identify, and Isolate Organoids

*Introducing an update to the CellRaft AIR System.
Adding 3D capabilities while retaining the full
functionality of 2D cell culture.*

Welcome to the next generation of 3D cell culture. Typical organoid cultures produce structures that are overlapping, growing at different sizes and rates, and are often stuck in viscous extracellular matrix. The resulting structures require expensive imaging equipment, are difficult to retrieve, and generate uninterpretable data.

Cell Microsystems' AIR System with 3D capabilities enables a fully automated imaging and isolation workflow for organoid culture. In one system, users can:

- **Grow and maintain individual organoids**
- **Capture serial image in high resolution**
- **Perform on-array phenotypic assessment**
- **Achieve on-array Z-stack imaging**
- **Automatically isolate intact individual 3D structures at multiple time points**
- **Maintain a complete record of cells**

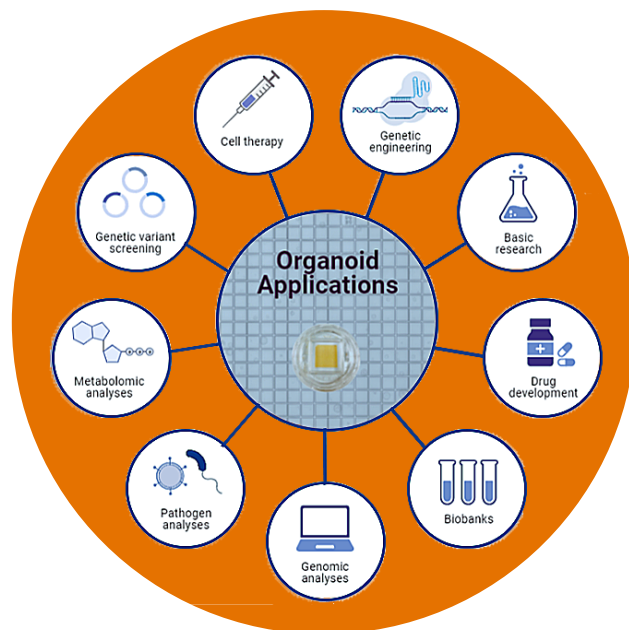


On - array
Z-stack imaging
of a single hepatic
organoid captured in
high-resolution
fluorescence

Unlock a universe of applications.

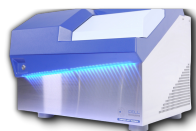
The CellRaft AIR System with 3D capabilities is the next evolution of tools for characterizing upstream cell lines to enable better knowledge of downstream data collection.

By deploying the AIR System workflow early in the discovery pipeline, users may eliminate non-viable compounds sooner than traditional methods, avoiding time-consuming manual manipulation and saving resources by reducing consumable and media use while accelerating discovery.



A FULLY AUTOMATED, ALL-IN-ONE SYSTEM

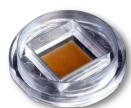
Users activate 3D capabilities with the combination of the CellRaft AIR System, 3D CytoSort Array, and software optimized for 3D structures.



CellRaft AIR® System with Image-based Isolation

Image, identify, and isolate 3D organoids, all on one machine

Our benchtop platform's optical system and camera resolution provides an effective magnification of 20x, releases rafts with the image-guided release needle, and plates cells on raft using a gentle magnetic wand.



3D CytoSort® Array

Reliably grow and maintain hundreds of single, segregated 3D structures on one consumable.

The 3D CytoSort Array has a large surface area, supporting individual organoid growth up to 1mm in diameter and over 2,000 CellRafts per array.



Image-Guided Release

Activate high throughput automated release of intact organoids without manipulation.

The updated concentric needle configuration allows for real-time, image-guided isolation enabling reliable release and transfer of 3D structures without physical or enzymatic perturbations.



3D-Enabled Software

Identify individual organoids, confirm clonality, and execute time course imaging in real time.

The software automatically scans and stores serial scans in a central database, maintaining a complete cell growth record, allowing users to conduct image analysis in real time or using the Off-the-AIR software.

Scan the QR Code below to request a demo



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