

# MICROFLUIDIC MULTI-WELL CELL CULTURE DEVICE

Tech ID: 28815 / UC Case 2018-010-0

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	<a href="#">11946035</a>	04/02/2024	2018-010
China	Issued Patent	111315485	05/23/2023	2018-010

Additional Patents Pending

## BRIEF DESCRIPTION

Modern biomedical research has long struggled with cumbersome and error-prone maintenance, inspection, and other manipulation of live cells cultures. Manual approaches demand excessive time and resources, while expensive robotic systems remain inaccessible to most laboratories. New approaches to enable the reliable, efficient monitoring and manipulation of live cells over a period of several weeks in a cost-effective format are therefore needed.

UC Berkeley researchers and others have developed a microfluidic-enabled multi-well cell culture system designed to transform the way living cells are grown, monitored and manipulated with precision and efficiency. The systems' tiered multi-well format seamlessly integrates microfluidics, sensing, and automated control, making it ideal for long-term cell culture. Compatible with ANSI/SLAS microplate standards, this miniaturized system fits effortlessly into existing laboratory workflows, offering flexibility for clinical, mobile, and point-of-care applications.

## SUGGESTED USES

- » Cell culture of living cells
- » Pre-clinical drug discovery

## ADVANTAGES

- » Reliable, efficient, cost-effective approach to cell culture methods
- » Automated media exchange and perfusion
- » Real-Time monitoring & closed-loop control - Adjust temperature, pH, and confluency dynamically
- » Scalable & Cost-Effective- supports 2D and 3D culture models, IPS cell reprogramming, and patient-derived sample testing
- » Designed for tabletop, mobile, and field settings

## CONTACT

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## INVENTORS

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## OTHER INFORMATION

### CATEGORIZED AS

- » **Biotechnology**
- » Other
- » **Medical**
- » Research Tools
- » Screening
- » **Research Tools**
- » Cell Lines
- » Screening Assays

### RELATED CASES

2018-010-0

