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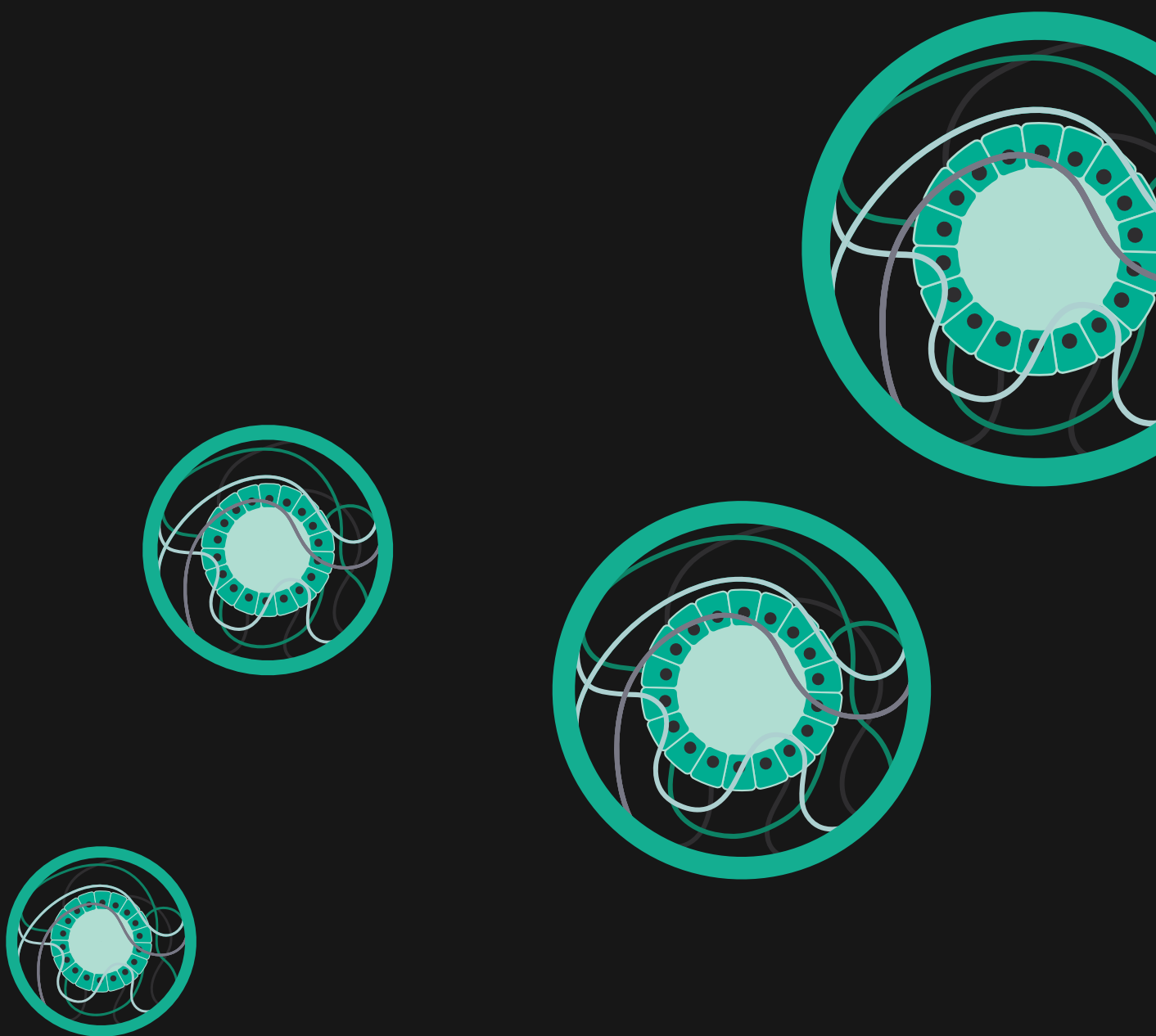
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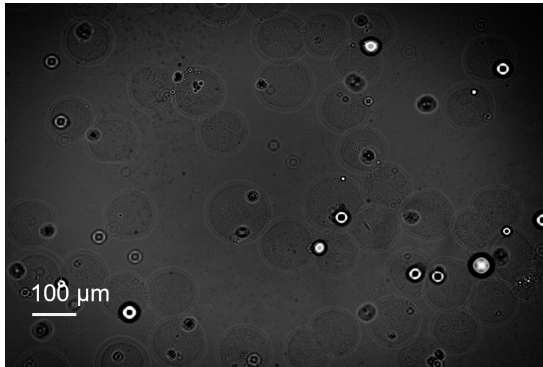
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# nadia3D

A standardized and streamlined kit for 3D  
culture workflows



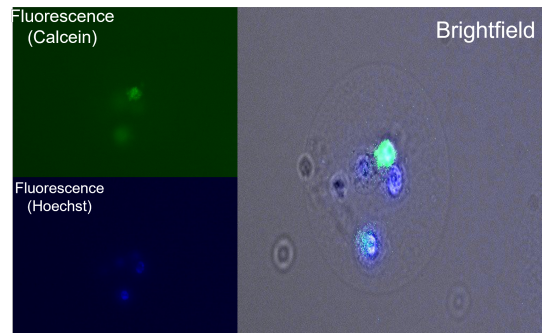
# High-Throughput Solution



## High Throughput

Collagen-based scaffolds can be reliably produced on up to 8 Nadia chips in parallel for high-throughput operation

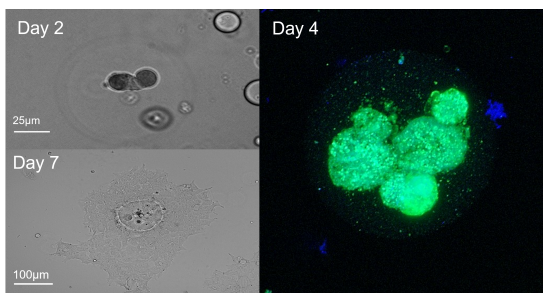
The average scaffold size is ~ 80μm



## Single or Multiplets Cell Encapsulation

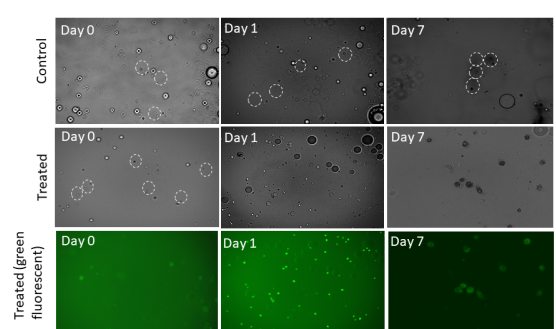
Dependent on initial cell concentration which is adjustable by the user, more than one cell can be encapsulated in one scaffold

Shown above: co-encapsulation of two differentially-stained cell populations



## 3D Cell Culture

The collagen-based scaffolds promote cell growth in a 3D physiologically relevant manner.



## Cell Release

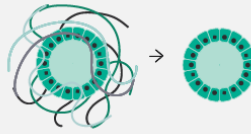
Viable cells could be released and kept alive for several days after release

Encapsulated cells were cultured and observed over a period of 7 days. Treatment with collagenase led to the digestion of the scaffolds while preserving cell viability.

# Kit Benefits



**Ideal for 3D culture:** the cell physiology is more analogous to that of cells within a living tissue



**Compatible with cell release:** the nadia3D kit produces collagen-based scaffolds that can be later digested to release cells



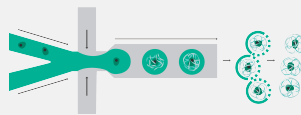
**No cross-contamination:** the nadia3D kit utilizes plastic, single-use cartridges



**Standard kit and instructions for making gel scaffolds:** no microfluidic knowledge is required



**Scalable:** choose to run 1, 2, 4 or 8 lanes at once



**High throughput encapsulation** of up to 1 million cells in one run


## First Steps for 3D Cell Culture

  
Sample preparation

1

  
Collagen-based scaffolds production on Nadia

2

  
Many options for example:  
3D Cell Culture  
Cell-cell Interaction  
Clonal selection and expansion

3

Following sample preparation, collagen-based scaffolds containing cells are produced on the Nadia using the nadia3D kit. The Nadia is an automated, microfluidic droplet-based platform for single cell research that encapsulates up to 8 samples, in parallel, in under 30 minutes and captures up to 1M cells in a single run.

The nadia3D kit creates collagen-based scaffolds, that have distinct advantages over 2D cultures for diverse cell and tissue types as they more closely mimic the natural environments of the cell. As the cell physiology is more analogous to that of cells within a living tissue, the results of assays performed in 3D conditions are more representative of the results you would expect from a living system.

## Get in touch

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