

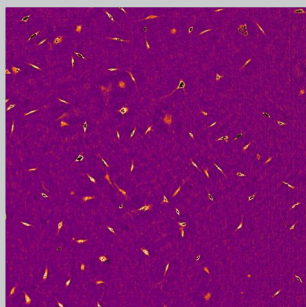
SENZA

Cell and culture monitoring inside the incubator

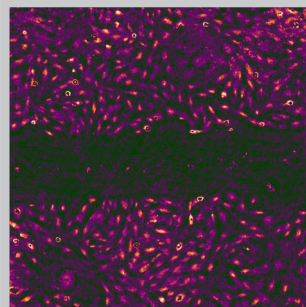
Analyse properties of single cells and cell cultures over time... inside the incubator!

- How do my cells (re)migrate in scratch assays or on different surfaces?
- Is my culture homogenous or heterogenic?
- How many cells pass through my microfluidic channel?

The Senza is engineered to enable **cell biologists** and **stem cell researchers** with an easy-to-use and low-footprint instrument that can **image cells and cell cultures over time**. Two modes of operation are possible: **intensity** and **phase** imaging, allowing the investigation of cells that normally are difficult to image, especially while they remain inside the incubator. Amongst the many applications possible, the Senza can be used for **culture monitoring, cell counting, quantitative phase imaging, cell migration monitoring in scratch assay's or on nanopatterned surfaces, track cell migration inside optically transparent scaffolds or media, monitor cells flowing through microchannels, monitoring tissue formation** and many more.



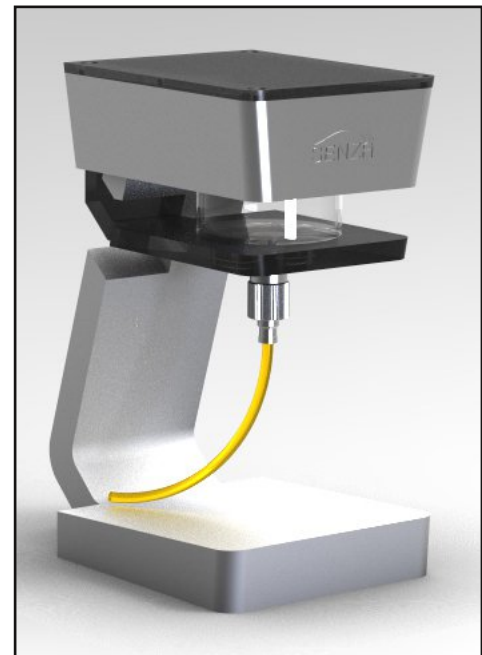
Monitoring cell migration in a co-culture of astrocytes and cortex microglial cells while inside the incubator.



Scratch assay of U373 cells: quantitative growth and migration information next to qualitative assay assessment.

Set up an experiment in a matter of minutes using the Senza's intuitive software program, or analyze data easily with the dataviewer program.

Also the Senza captures **both intensity and phase information** in a single snapshot. This enables focusing *a posteriori*, making focus drift a thing of the past!



Single Senza imaging unit which can be placed inside the incubator.

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Senza in a nutshell

Optical resolving power	< 800 nm
Field of view (full res.)	500 X 800 μm^2
Max. field of view	2 X 3 mm^2
Phase precision	~ 10 nm
Max. no. of imaging units	3
Operating temp. range	5 - 60 $^{\circ}\text{C}$
Optimal container height	~ 12 mm

As the Senza makes use of a single laser source, **multiple imaging units** can be set up inside an incubator and operate simultaneously, adding to the possibility to monitor a second or third cell culture or control cultures.



In case you would like to investigate what the Senza could mean your research, have a look at the Senza product page on www.optics11.com or contact us directly via info@optics11 or +31 (0)20 5987917

