

# Life Science Innovation

## Trends in Single Cell Analysis #8

Single Cell Technologies and their Fields of Application  
(Tumor Cells)



Wednesday, March 6<sup>th</sup> 2024  
4 p.m.–6 p.m.

Hybrid Meeting

Conference Center  
of the Life Science Center,  
Merowingerplatz 1

Registration  
online until  
March 5<sup>th</sup>:



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# Life Science Innovation

## Trends in Single Cell Analysis #8

With 'Trends in Single Cell Analysis #8' we will continue our event format 'Life Science Innovation', which provides insights into innovative research topics and current developments in Duesseldorf, NRW and beyond.

This time, we want to go into a single cell and learn how we can investigate its intracellular contents. To this aim we have invited **Prof. Cornelia Monzel** from the Department of Experimental Physics at the Heinrich-Heine University Duesseldorf. She will present an overview on how to use magnetogenetics to manipulate signalling pathways in single cells.

Then, **Dr. Orane Guillaume-Gentil** from the École Polytechnique Fédérale de Lausanne will show Fluidic Force Microscopy (FluidFM) use in live-cell biology, followed by **Dr. Tamás Gerecsei** who will present how Cytosurge's FluidFM adaptation enables further single-cell experiments.

## Programme

**Welcoming speech:** Dr. Thomas Heck, Life Science Center Duesseldorf  
Prof. Dr. Hans Neubauer, PhD, University Hospital Duesseldorf

### > Academia

**Moderation:** Prof. Dr. Hans Neubauer, PhD, University Hospital Duesseldorf

- **Probing and Manipulating Signalling Pathways in Single Cells with Magnetogenetics**

Cornelia Monzel, PhD, Experimental Medical Physics,  
Heinrich-Heine University Duesseldorf, Duesseldorf, Germany

**Moderation:** Prof. Dr. Nikolas Stoecklein, MD, University Hospital Duesseldorf

- **FluidFM in Live Cell Biology:  
From Biomechanics to Single-Cell Omic Profiling**

Orane Guillaume-Gentil, PhD, Laboratory of Systems Biology and Genetics,  
École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

### > Companies

**Moderation:** Dr. Dieter Niederacher, PhD, University Hospital Duesseldorf

- **The FluidFM Omnium Platform and how it enables Single Cell Manipulations**

Tamás Gerecsei, PhD, Application Scientist, CYTOSURGE AG, Glattbrugg,  
Switzerland

**Organizer:** LifeScienceNet Duesseldorf and the Liquid Biopsy Center Duesseldorf (LBCD) of the University Hospital Duesseldorf | c/o Life Science Center Duesseldorf | Merowingerplatz 1a | 40225 Duesseldorf | [www.lifescience-dus.de](http://www.lifescience-dus.de)

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