

# You control your cells, not the other way around



AVATAR - The next level in cellular research



#### Date:

4th of April, 2018, 09:00

#### Place:

Małopolskie Centrum Biotechnologii at Jagiellonian University, Gronostajowa 7a Seminary room

### Topic:

Influence of different hypoxia and hydrostatic pressure in the field of stem cells, immunology and oncology research

## Registration:

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Accelerate your biomedical research

#### Abstract:

During the years of research it has been proven that **oxygen and pressure** have distinct physilogical effects and both play important but idependent roles in the cellular microenvironment. Under hypoxia and pressurized cultuing conditions, changes are seen in cell morphology, gene and protein expression. Modulation of atmospheric pressure affect the mechanobiology of cell function during culture, and has profound effects on cell homestatis and metabolism.



The **AVATAR Cell Control System** lets you generate your cells of interest in a microenvironment array and optimize to a growth rate, functional activity or phenotypic change of interest. You'll also be able to transfect cells with better efficiency, expand them faster and derive just the cells you need, exactly when you need them.

Throughout seminar, examples will be presented how to:

- Increase transfection efficiency up to 5X with high cell viability even with difficult to transfect cells
- **Expand challenging cell types** easily and reproducibly for a broad range of primary cells and cut reagent costs in the process
- **Target the cell population** you want tune your cell's microenvironment to control differentiation or maintain current state reliably and precisely
- Work with immune cells, stem cells, tumor cells, organoids and even rare, precious
  cells you've never been able to expand before

