

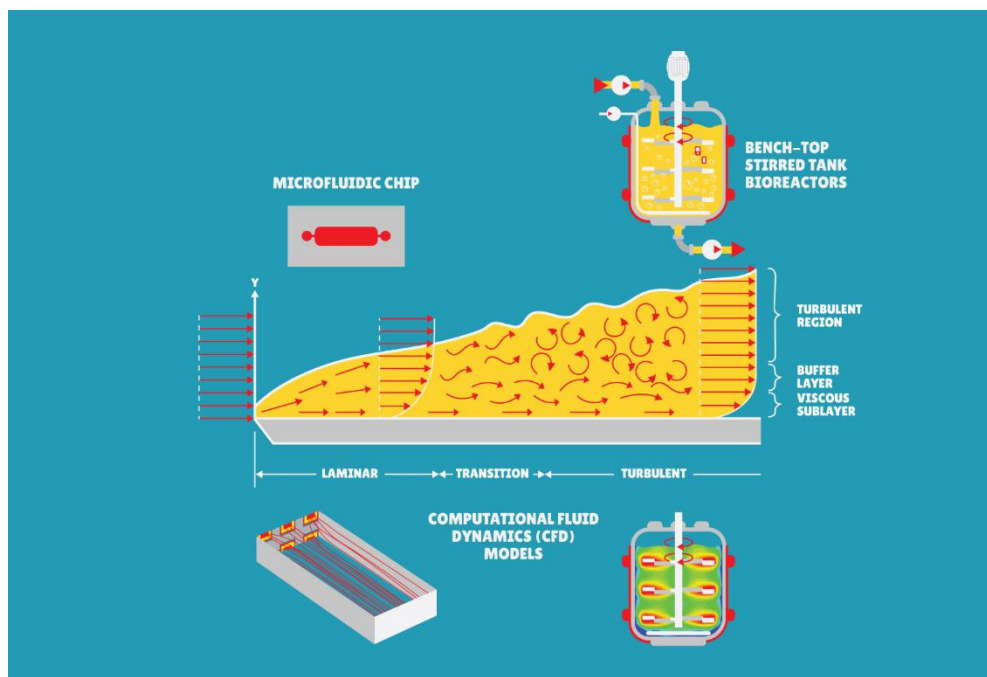
BIOSENSE INSTITUTE

Monitoring of cell culture parameters using sensors for biomass, nutrients, and metabolites in media –
Lab-on-a-chip approach – REALSENSE1

The Good Food Institute Project

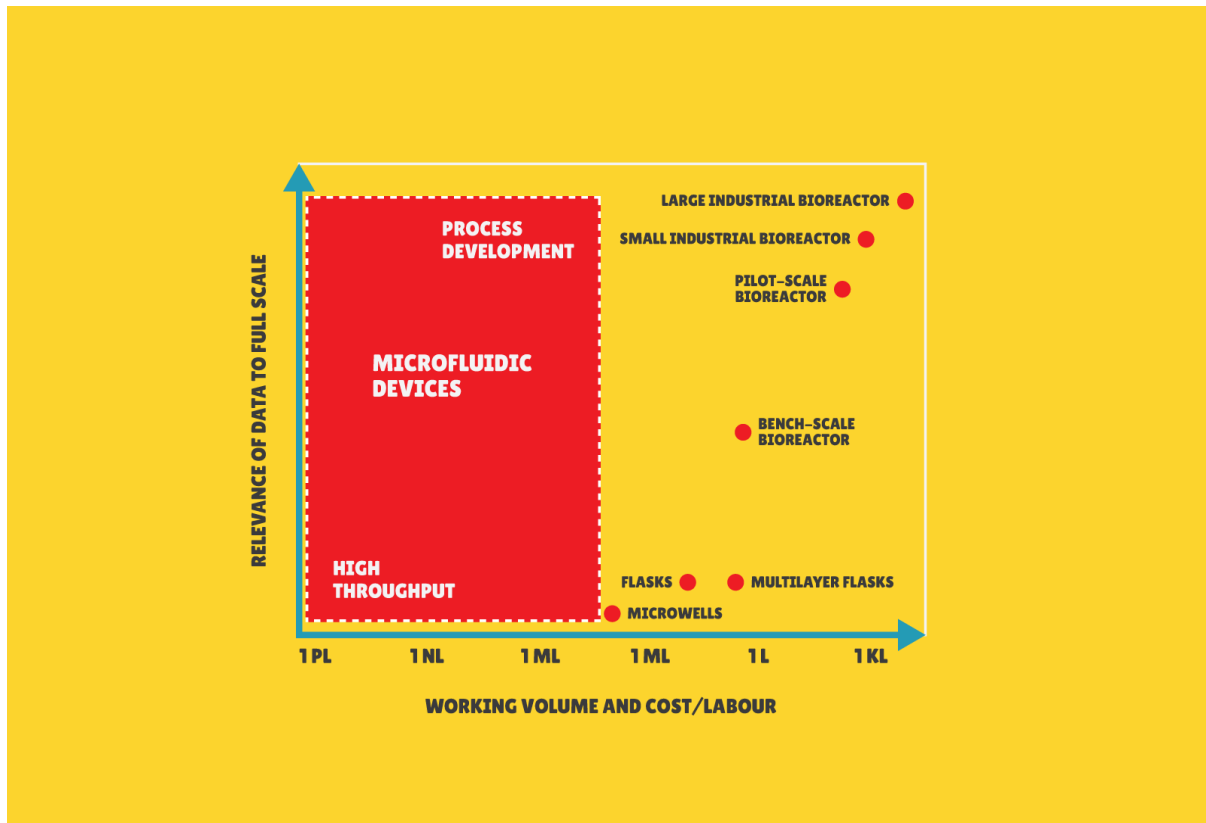
Dr. Ivana Gadjanski, senior researcher and assistant director for science

Nowadays, Cellular Agriculture is becoming one of the main scientific topics dealing with the problem of producing food sustainably, contributing to the reduction of climate change, and addressing other environmental challenges. Cultivated meat production and its distribution in supermarkets and on our tables is one of the promising solutions that scientists are dealing with for this purpose.



From 2019 BioSense Institute participates in this race of cultivated meat production, receiving The Good Food Institute competitive Grant - RealSense1, led by Dr. Ivana Gadjanski.

The main focus of the project is development and testing of the innovative low-cost sensors for monitoring of biomass and metabolites generated by the cells, that could potentially accumulate in the media and cause negative effects. REALSENSE1 utilises the lab-on-a-chip approach i.e. microfluidic bioreactors, which enable a significant reduction in time and cost of bioprocess development due to the high degree of control over process variables enabled by the laminar fluid flow in the microfluidic chips, as well as due to the small quantities of reagents needed for the microbioreactors.



More about the project: www.realsense.rs