DISTINGUISHED LECTURE in BIOLOGICAL ENGINEERING

“Integrated Single-cell Analysis for Discovery and Development”

Monday, June 19, 2017 – 12h15
EPFL – room SV1717

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host: Prof. Hatice Altug

Abstract:
The advance of technologies that use nanoliter-scale volumes in microfabricated systems to isolate individual cells is enabling new capabilities for measuring multiple attributes of each, including genomic, phenotypic and functional characteristics. These technologies also provide an opportunity to examine intercellular interactions among discrete numbers of cells, allowing measurements of cooperativity and time-dependent activities. This talk will describe a technology platform based on arrays of subnanoliter wells, and associated methods, that allow integrated measurements of cellular traits. Applications of this platform to examine cellular phenotypes and interactions of immune cells will be discussed. The capabilities provide new approaches to the discovery of rare cells and novel biomarkers in disease.

Sandwiches will be provided

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