



Contribution ID: 46

Type: **Invited Speaker / Conférencier invité**

Tracking the growth of cells using microfluidic sensors

Wednesday 18 June 2014 13:45 (30 minutes)

Monitoring the growth of cells is of fundamental interest in biology and biomedicine. Over the decades, various approaches have been developed to infer growth patterns, but different studies often reach irreconcilable conclusions due to a lack of resolution or to population averaging. In recent years, the integration of biosensors within microfluidic environments has yielded improved sensitivity and access to single cell growth kinetics. In monitoring cellular growth, it is important to track volume, mass and mass density, as these three quantities can change at different rates during the growth cycle. In this presentation, the design of a mass sensor and of a volume sensor, both integrated within a microfluidic architecture, will be discussed in the context of tracking cellular growth.

Author: GODIN, Michel

Presenter: GODIN, Michel

Session Classification: (W2-4) Biophysics/Soft Condensed Matter IV: Microfluidics & Driven Motion - DCMMP-DMBP / Biophysique et matière condensée molle 4: microfluidique et mouvement mené-DPMCM-DPMnB

Track Classification: Medical and Biological Physics / Physique médicale et biologique (DMBP-DPMB)