



Seminar/Talk

Using microfluidics for quantitative studies of post-embryonic development in *C. elegans*

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Host: Gasper Tkacik

The development of most metazoans can be divided in an early phase of embryogenesis and a subsequent phase of post-embryonic development. Developmental dynamics during the post-embryonic phase are generally much slower and often controlled by very different molecular mechanisms that, e.g., ensure tissue synchrony and integrate metabolic queues. However, obtaining long-term in-vivo quantitative imaging data post-embryonically with good statistical and cellular resolution has been highly challenging because animals must be allowed to grow, feed, and move in order to properly develop after embryogenesis. In this talk, I will discuss our recent progress in overcoming these challenges in the model organism *C. elegans*, using microfluidics technology. I will then outline two of our recent studies, in which quantitative in-vivo imaging data of post-embryonic development allows novel insights into mechanisms of cell-fate acquisition and the regulation of oscillatory gene expression in *C. elegans*.

Friday, March 20, 2020 03:00pm - 04:00pm

Mondi Seminar Room 2, Central Building



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