

Institut Jean-Pierre Bourgin

# Séminaire

Lundi 14 mai 2018, à 14h00

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## How many cells can you fit in a stem cell niche?

Plant shoots harbor stem cells throughout the life of the plant maintained via a gene regulatory feedback network. Perturbations to these regulatory genes lead to changes in the size and shape of the stem cell niche. Similar effects can be achieved by perturbing the cell walls and heterogeneous and anisotropic mechanical wall properties need to be regulated to generate correct form. We use a Computational Morphodynamics approach, combining live imaging and models of cell wall mechanics and gene networks, to understand how growth and differentiation is coordinated. In this talk I will discuss how mechanical patterning can overlap with gene expression patterns, and how cell size and tissue size can influence the maintenance of the stem cell niche.

[Henrik Jönsson Web page](#)

Invité par **Jasmine Burguet & Philippe Andrey**  
Ce séminaire aura lieu dans l'Amphithéâtre Bât. 10