

Quantitative Physiology of the Cell

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Indicate in which axis your team relates to:

Axis 2: Emergence of spatial and temporal organization in living matter.

Axis 3: Information processing and dynamics of biological active matter.

Team expertise:

Cell biology of cell migration, growth and division

Biophysics of cell and nucleus size control
(volume and dry mass)

Nucleus mechanics and mecanosensing

Microfluidics, cell confinement, cell migration assays,
Measure of live cell dry mass and volume

Question of Interest and/or Collaboration wanted:

Theory of cell size control and other homeostatic mechanisms
(density, surface tension)

Physico-chemistry of the cytoplasm and nucleoplasm
(crowding, rheology, density, phase separation)

Biophysics of chromatin – at the nuclear scale