

Qlife

Quantitative Biology Winter School Series

CELL DYNAMICS IN DEVELOPMENTAL SYSTEMS

FEBRUARY 8TH - 12TH, 2021 - PARIS

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Recent technological developments in sequencing, imaging and image analysis have granted access to unprecedented temporal and spatial resolution of gene expression, cell dynamics and morphological features.

The Qlife program in Quantitative Biology of the PSL University, in partnership with the Labex DEEP, organizes a winter school that will cover these emerging approaches through a series of lectures and digital workshops, using datasets from *Drosophila*, ascidians, mammals and plants. Dynamic, quantitative analysis of embryonic development will be performed through the combination of image analysis (segmentation, cell tracking, registration) with multiscale analysis of forces and modelling. These data will be integrated with the output of single cell, spatial and barcoding transcriptomic analyses to provide an unprecedented combined view of cell location, morphology, interactions, migration, expression pattern and fate.

Lunches and dinners with the speakers and instructors will foster informal discussions.

The winter school is limited to 20 participants. It is open to M2 students and PhD students, as well as postdocs, engineers and junior scientists, with backgrounds in life science, geoscience, physics, computer science or mathematics.

Basic experience in file manipulation under Unix/Linux and in Python or R programming is required.

Additional information is available on:

<https://www.enseignement.biologie.ens.fr/spip.php?article234>

APPLICATION DEADLINE DECEMBER 6TH, 2020

REGISTRATION FEES: 150 €*

- Register through the following link: <https://bit.ly/33zn290>
- In addition, provide a CV, a motivation letter (*including justification for travel grant if requested*) and a supporting letter from a supervisor with "Qlife CellDyn winter school 2021" as object to qlife.events@psl.eu

* Fees cover food and lodging from Monday morning to Friday afternoon. Some travel grants will be available.

