

CDB SEMINAR

DiJiang The Sars International Centre for Marine Molecular Biology

Monday, February 17, 2014 16:00~17:00 A7F Seminar Room

The cell biology and biophysics of Ciona notochord morphogenesis, from an actomyosin perspective

Summary

A general presentation on the cell biology of Ciona notochord morphogenesis will be given in the beginning of the talk. Next I will present a novel mechanism of cell shape change: the co-option of a cytokinesis machinery to achieve cell elongation in the absence of cell division. Our latest work is revealing the cryptic and polarised properties of this highly dynamic equatorial actomyosin contractile machinery. Finally, I will present data on how myosin contraction and actin dynamics at a later time regulate the proper kinetics of lumen expansion, which is essential for the formation of a functional notochord tube.

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