

# **Chiral Forces Organize Left-Right Patterning in *C.elegans* by Uncoupling Midline and Anteroposterior Axis**

Left and right asymmetries play an important role in the development process. To analyze the LR patterning in *C. elegans*, they systematically track embryogenesis. Firstly, they find that ABa/ABp spindle skew results in asymmetric bilateral body plan. Then they use a plasma membrane marker which fused to mCherry and analyze the time series image of embryos. They find that rearrangement of cells reproduces the LR asymmetric behavior temporally, which formed a protrusion and collective cell movement. In order to understand the dynamic protrusion forming, they imaged F-actin to analyze actomyosin dynamics. Finally, they use RNAi method to confirm that non-canonical Wnt pathway can activate the actomyosin cortex and chiral morphogenesis permissively.