

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Phase field model simulating the collective behaviour of 3 FCs in contact with nurse cells. The central cell is developing a relatively higher affinity.

File Name: Supplementary Movie 2

Description: Phase field model simulating the collective behaviour of 3 FCs as a function of their affinity to the germline. The gradient in affinity is based on Eya levels quantified in wild type egg chambers.

File Name: Supplementary Movie 3

Description: Phase field model simulating the collective behaviour of FCs as a function of their affinity to the germline representing the wild type condition. The gradient in affinity is based on Eya levels quantified in wild type egg chambers.

File Name: Supplementary Movie 4

Description: Phase field model simulating the collective behaviour of FCs as a function of their affinity to the germline. No affinity gradient in AFCs. High-affinity dynamic of cell 1 was assigned to all 6 AFCs.

File Name: Supplementary Movie 5

Description: Phase field model simulating the collective behaviour of FCs as a function of their affinity to the germline. AFC row 3 has reduced affinity.

File Name: Supplementary Movie 6

Description: Phase field model simulating the collective behaviour of FCs as a function of their affinity to the germline. Ectopic affinity assigned to rows 6-8.

File Name: Supplementary Movie 7

Description: Phase field model simulating the collective behaviour of the oocyte and the nurse cell compartment as a function of their effective affinities for the follicle epithelium, simulated by changing the boundary affinity. Boundary affinities were based on Eya levels and the AP-positions of rows 1-7 in wild type egg chambers.

File Name: Supplementary Movie 8

Description: Phase field model simulating the collective behaviour of the oocyte and the nurse cell compartment as a function of their effective affinities for the follicle epithelium, simulated by changing the boundary affinity. Boundary affinities induce premature effective oocyte affinity during phase 1.

File Name: Supplementary Movie 9

Description: Phase field model simulating the collective behaviour of the oocyte and the nurse cell compartment as a function of their effective affinities for the follicle epithelium, simulated by changing the boundary affinity. Boundary affinities induce effective nurse cell affinity along 80% of the boundary (representing AFCs + MBFCs) after phase 1.

File Name: Supplementary Movie 10

Description: Phase field model simulating the collective behaviour of the oocyte and the nurse cell compartment as a function of their effective affinities for the follicle epithelium, simulated by changing the boundary affinity. Boundary affinities induce effective oocyte affinity along 100% of the boundary after phase 1.