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16:00~17:00  A7F Conference Room

Cadherins as regulators of cell migration

Summary
Cadherins are best characterized as mediators of tissue integrity. However, less is known about their role in migrating cells. As model system to study cell migration we use the Xenopus embryo. Cadherin-11, a type II classical cadherin, is expressed in cranial neural crest cells regulating migration velocity. Its knockdown results in loss of filopodia and lamellipodia formation, inhibition of cell migration and switch in cell fate.

XPAPC, a protocadherin, is expressed in the Spemann Organizer at the onset of gastrulation. It coordinates and directs cell movements during convergent extension. XPAPC activates RhoA and inhibits Rac-1 and is linked to different Wnt-signaling pathways.