Downstream components of Wnt signaling that control the maintenance of retinal stem cells in the ciliary marginal zone

Summary
In many vertebrates, retinal stem cells are located in ciliary marginal zone (CMZ), a region between the neural retina and ciliary epithelium. Wnt2b is expressed in the marginal pigment epithelium adjacent to the CMZ, and in vitro and in vivo evidences suggest that it functions as a stem cell factor that inhibits differentiation of marginal progenitor cells and promotes their prolonged proliferation. In this talk, I will summarize recent progress in dissecting downstream components of Wnt signaling in the marginal stem cells, especially focusing on the role of HES1/c-hairy1 regulated in a manner independent of Notch.