



CDB SEMINAR

Yukiko Gotoh

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Tuesday, March 13, 2018

16:00-17:00 A7F Seminar Room

Regulation of embryonic and adult neural stem cell fate

* This seminar is a part of the Epigenetics Seminar Series 2017-2018.

Summary

One of the fundamental questions in understanding tissue development is how multipotent progenitors/tissue stem cells give rise to various cell types to achieve appropriate tissue organization. Neural stem/progenitor cells (NPCs) in the mammalian brain give rise to neuronal and glial cell types in a region and developmental-stage dependent manner with striking precision. We have previously shown that polycomb group (PcG) complex and high mobility group A (HMGA) proteins play pivotal roles in driving fate switches of NSCs during neocortical development. I would like to talk first about how these and other proteins control the fate of NPCs. Second, in contrast to embryonic NPCs, adult neural stem cells (NSCs) maintain their differentiation potentials for a long time to continue neurogenesis throughout life. So, I would also like to discuss the mechanisms underlying long-term maintenance of adult NSCs and emergence of these cells during development.

Host:

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