

53rd WPI IIS Seminar

“Neural cell regulation of hematopoietic stem cell and bone marrow niche”

Hematopoietic stem cells (HSCs) are clonogenic cells that retain both self-renewal and multilineage potential giving rise to all lineages of blood cells. In adult mouse bone marrow (BM), most HSCs remain in the quiescent (Go) phase of the cell cycle in close contact with the supporting cells known as "niches". This seminar will highlight the recent progress in understanding the interactions between HSCs and their niche. Among niche signals examined, we found that TGF- β receptor deficiency causes reduced phosphorylation of Smads and impairs repopulating activity of HSCs, suggesting a significant role for TGF- β signaling in hematopoiesis. Furthermore, We identified the BM neural cells regulating hematopoietic homeostasis.



Speaker: Dr. Satoshi Yamazaki

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Date: Tuesday, February 17, 2015

Time: 12:00-13:00

Venue: Room #402, 4F, Health and Medical Science Innovation Laboratory, University of Tsukuba

★Light refreshments will be served.



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