



TARA

Life Science Center for Survival Dynamics
Tsukuba Advanced Research Alliance

TARA Seminar

13:00 ~ 14:00, Tue. Nov. 27th, 2018

Seminar room, Building A, TARA Center



Dr. Tudorita Tumber

Professor

Department of Molecular Biology and Genetics
Cornell University, USA

Molecular mechanisms of hair follicle stem cells function in normal homeostasis of adult skin

Prachi Jain, Sangjo Kang, Nina Li, Flora Eun, Catherine He, and Tudorita Tumber

Hair follicle stem cell function is governed by transcription factors, epigenetic mechanisms, and molecular cross-talking with the microenvironment. We found that the transcription factor Runx1 controls hair follicle stem cell activation and epithelial skin tumorigenesis. Recently, we found that Runx1 remodels the vasculature arrangements around the hair follicle during the hair adult homeostatic cycle, which in turn affects stem cell activation. Furthermore, we block hypomethylation of histone H3 methylation at lysines K4, K9, and K27 which we observed to occur during hair cycle. We demonstrate a critical stage-dependent role of this methylation in hair cycle and wound healing.

The seminar will be given in English.

Organizer; Dr. Aiko Sada <aisada@tara.tsukuba.ac.jp>

University of Tsukuba

