

165th WPI-IIIS Seminar

Data-driven and technical approaches to understand spatial gene regulation

Gene expression is precisely regulated by transcription factors and chromatin structures, but their combinatorial actions for cell type-specific expression are not fully understood. Here, I developed a database designated ChIP-Atlas (<https://chip-atlas.org>), which integrates all of public ChIP-seq data (~120,000 experiments). Furthermore, I established a novel spatial genomics technology, named photo-isolation chemistry, which allows to isolate gene expression and epigenetic profiles only from photo-irradiated regions out of whole tissues. Combination of those data-driven and technical approaches will accelerate to gain deeper insight into spatial gene regulatory mechanisms.



Dr. Shinya Oki

Department of Developmental Biology,
Graduate School of Medical Sciences,
Kyushu University

Date: **Monday, January 20, 2020**

Time: **12:00 – 13:00**

Venue: **1F Auditorium, IIIS Building**



Contact: International Institute for Integrative Sleep Medicine, University of Tsukuba
029-853-5857 (ext. 5857) | wpi-iiis-alliance@ml.cc.tsukuba.ac.jp