

ASHBi

DISTINGUISHED SEMINAR

Decoding the mechanisms of human development and diseases by single cell genomics approaches

Lecturer: **Dr. Fuchou Tang**

Professor, BIOPIC, College of Life Sciences, Peking University
Associate Director, Beijing Advanced Innovation Center for Genomics (ICG)



Date: **Tuesday, 6th April 2021**

Time: **15:30 ~ 17:00**

Venue: **Zoom Online** Register via the right QR code



Eligibility: **Researchers and Students in Kyoto University**

Profile

Dr. Fuchou Tang is Professor at BIOPIC, College of Life Sciences, Peking University. He is also Associate Director of Beijing Advanced Innovation Center for Genomics (ICG). He set up his own lab as a principal investigator at Peking University in 2010. Dr. Fuchou Tang's lab focuses on the epigenetic regulation of gene expression network during human early embryonic development and germline development. His lab pioneered the single cell sequencing field and has systematically developed a serial of single cell functional genomic sequencing technologies. His work has been cited for more than 10,000 times. He has been invited to give presentations at AGBT, ISSCR, ICHG, Gordon Conferences, HCA, etc. He organized the Cold Spring Harbor Asia conference of Frontiers in Single Cell Genomics in 2016, 2018 and 2020.

Abstract

Human germline cells are crucial for maintenance of the species. Our understanding of these cell types is limited by the difficulty of analyzing the precious and heterogeneous germline tissue samples. The rapid development of single-cell omics sequencing technologies provides a chance for comprehensive profiling of the omics dynamics of human germline development. I will discuss progress in analyzing the development of human germline cells, including preimplantation and implantation embryos, fetal germ cells (FGCs), and adult spermatogenesis by single-cell omics sequencing technologies. I will also discuss progress in analyzing the critical molecular features of colorectal cancer.

[NOTE] The lecturer will also cover Chinese regulations surrounding the research use of fetal tissues and how they are obtained for research.

Organizer : Prof. Misao Fujita, Prof. Mitinori Saitou

[E-mail] uehiro-contact@cira.kyoto-u.ac.jp

Hosted by Institute for the Advanced Study of Human Biology (WPI-ASHBi)

Co-organized by Uehiro Research Division for iPS Cell Ethics at CiRA

