



DAI LAB-CAFE

Date & Time: **December 13, 2019 (4:00 JST)**
Venue: Central 5-41 2F (Meeting Room #42& 43)

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Series - 44

Title: Development of stealth RNA vector (SRV) for innovative gene and cell therapy

Development of ideal gene delivery/expression system is a key for success in various biological sciences and in their clinical application (gene therapy and transcription factor-mediated cell reprogramming). In AIST, we have developed defective and persistent Sendai virus vector (SeVdp vector) (Nishimura, et al. 2011) capable of stable gene expression from RNA genome in the cytoplasm. SeVdp vector induces interferon only at low level, and this observation lead us to create "Stealth RNA vector (SRV)", a new generation RNA-based gene delivery/expression platform more suitable for clinical application. SRV was reconstructed from structure-optimized synthetic RNA, and we can express up to 10 cDNA (with total length up to 13,500 nt) stably and simultaneously, without interfering function of host cells. In this seminar, I would like to introduce basic science and application of SRV.



IIT-D, India



Manipal Univ. India



USJP, Sri Lanka



AIST, Japan



Brawijaya Univ.,
Indonesia

Thanks for participation !