



Department of Biotechnology
Ministry of Science and Technology
Government of India

DBT



National Institute of
Advanced Industrial Science
and Technology

AIST

DBT - AIST International Laboratory
for Advanced Biomedicine

DAIILAB

Classroom for Advanced & Frontier Education

CAFE

DAILAB-CAFE

Series - 27

Date and Time – May 02, 2018 (12:00~13:00 IST)

Venue – Committee Room, DAILAB @ IIT Delhi

Speaker – Ritu KULSHRESHTHA

Affiliation - Department of Biochemical Engineering and Biotechnology, DAILAB @ IIT Delhi, India

E-mail: ritu@dbeb.iitd.ac.in



Title : Hypoxia-regulated oncomiRs as attractive targets for cancer therapy

Hypoxia is a regular feature of the tumor microenvironment and correlated to increased tumor proliferation, migration, invasion and therapy resistance thus, leading to poor prognosis. The molecular mechanisms responsible for the hypoxic survival of neoplastic cells are not well characterized, however it is widely agreed that a better understanding of this process may lead to novel approaches for pharmacological intervention. Our work shows that hypoxia induces a specific set of microRNAs in HIF dependent manner in cancer cells. A vast majority of hypoxia-induced microRNAs is also overexpressed in several cancers indicating their probable role in cancer initiation or progression. Select members of this group seem to affect important processes such as apoptosis, proliferation, differentiation or DNA repair in a hypoxic environment and also target genes of critical importance for tumor biology. We show a critical roles of hypoxia-inducible miR-210 and miR-191 in cancer progression and suggest that their inhibition may offer a novel therapy for select tumors.

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Speaker: Ritu KULSHRESHTHA

Topic: Hypoxia-regulated oncomiRs as attractive targets for cancer therapy

Date: 2nd May., 2018
(15:30-16:30 h JST)

Host:
DAILAB@IIT-Delhi,
India



National Institute of Advanced Industrial Science & Technology, Japan



IIT-Delhi, India



University of Sri
Jayewardenepura, Sri Lanka



Brawijaya Univ., Indonesia



Peking University, China



Manipal University, India



Guru Nanak Dev University, India

Thanks for participation!