Society of Developmental Biologists Singapore

SDBS Seminar Series - Seminar (Virtual)

Biography:

Arjun Guha has trained as a cellular and developmental biologist with an emphasis on respiratory systems. The Guha laboratory is interested in the mechanisms that regulate the differentiated state of cells and its plasticity. His research focuses on the murine lung and the Drosophila respiratory system and utilizes genetic, cell biological and molecular approaches.

Speaker:

Dr. Arjun Guha

(Research Investigator, Institute for Stem Cell Science and Regenerative Medicine (inStem), Bangalore, India)

Date: **30 Sep 2021 (Thursday)**

Time: **4:00 - 5:00pm SGT (1:30pm-2:30pm IST)**

Host: **Dr. Sudipto Roy**

(Institute of Molecular and Cell Biology)

How cell cycle checkpoint proteins are co-opted during development to regulate cell fate

Abstract:

Development of the tracheal (respiratory) system of adult Drosophila is dependent in part on a population of Differentiated Progenitors (DPs). These are tracheal cells that remain arrested in G2 during larval stages while growing in size, and proliferate subsequently. We have discovered that the cell cycle checkpoint proteins ATR/Chk1, known to be activated upon DNA damage, play an integral role in this program. I will discuss how ATR/Chk1 are activated, without involvement of DNA damage response proteins, and how ATR/Chk1 regulate DP growth and proliferation.

Zoom Meeting ID:
https://nus-sg.zoom.us/my/sdbsseminar
Meeting ID: 929 765 4321
Passcode: 147086