

Society of Developmental Biologists Singapore

SDBS Seminar Series - Seminar (Virtual)



Biography:

Jean-Paul Vincent obtained his first degree in applied physics from the University of Louvain (Belgium) before doing a PhD in Biophysics at U.C. Berkeley (with George Oster and John Gerhart). He was then a post-doc at UCSF with Pat O'Farrell. JP started his own research group in 1993 at the Laboratory of Molecular Biology in Cambridge and then moved to the National Institute for Medical Research in Mill Hill in 1997. He is currently a senior group leader at the Francis Crick Institute in London.

Speaker:

Prof. Jean-Paul Vincent

(FMedSci FRS, Senior Group Leader, Francis Crick Institute)

Date: 11 Nov 2021
(Thursday)

Time: 4:00 - 5:00pm SGT
(8:00 - 9:00am GMT)

Host: Prof. David M. Virshup

(Duke-NUS Medical School)

Generation of morphogen gradients: the case for diffusion

Abstract:

Cells within developing tissues rely on morphogens to assess positional information. Passive diffusion is the most parsimonious transport model for long-range morphogen gradient formation. However, it is not clear how diffusion could account for the spread of lipidated morphogens, planar transport of soluble morphogens, or scaling and robustness. I will show that, these shortcomings can be overcome if one considers the effect of receptors on morphogen gradient.

Zoom Meeting ID:

<https://nus-sg.zoom.us/my/sdbsseminar>

Meeting ID: 929 765 4321

Passcode: 147087