Infectious Diseases Labs

ID LABS

ID LABS SEMINAR SERIES

Dr Karthi Narayanan

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Friday, 22nd October 2021
9am to 10am (SGT)

Join zoom meeting **here**
Meeting ID: 997 0625 0687
Passcode: 112224

Webinar is open to all
No registration required

Modeling Infectious Diseases with Stem Cells

Reprogramming of somatic cells into pluripotent state (iPSC) is one of the major discoveries of the last decade. Some of the key applications of iPSCs are to the study of human development, disease modelling and cell therapies. The iPSC derived cell types provide a platform for in vitro disease modelling especially to study developmental effects of the virus and developmental implications of antiviral drugs. My research for the past years have established several strategies to differentiate stem cells to various lineages. Now, I would like to extend my research expertise to explore virus induced developmental pathologies using pluripotent stem cells, which mimics the developmental stages in humans.

Dr Narayanan started research career as a biochemist, while learned other areas of biology such as cell biology, molecular biology and nano-biotechnology during several years of research at different laboratories. His interest on stem cell differentiation started during his tenure at University of Illinois at Chicago. His previous work explored how cellular microenvironment regulates stem cell differentiation. This unique strategy led to engineer functionally viable whole organ using decellularized organs. His current research interest is to explore application for stem cells in the area of infectious diseases modeling to study developmental effects. At present he is a Research Assistant Professor at University of Illinois. He worked with Profs Jackie Ying and Andrew Wan during his employment at Institute of Bioengineering and Nanotechnology (now IBB). He published over 50 research articles and holds 7 patent applications.